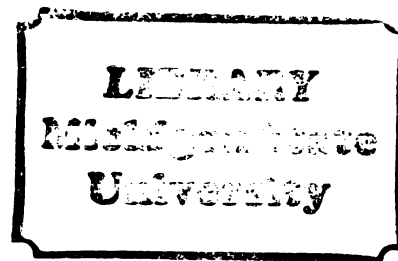


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THE SANDSTONE ARCHITECTURE OF
THE LAKE SUPERIOR REGION

By

Kathryn Bishop Eckert

A DISSERTATION

Submitted to
Michigan State University
in partial fulfillment of the requirements
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ABSTRACT

THE SANDSTONE ARCHITECTURE OF THE LAKE SUPERIOR REGION

by

Kathryn Bishop Eckert

Red sandstone architecture gives the rugged landscape of the Lake Superior Region a distinct identity. From 1870 to 1910 the prosperity of its mining, lumbering, and shipping industries created a need for all kinds of buildings and architects, builders, and clients preferred the sedimentary rock from the Jacobsville formation and the Bayfield group which lie in a 400-mile-long belt from Sault Ste. Marie, Michigan, to Duluth, Minnesota.

Field inspections and searches of geological and mineral records identified nearly fifty quarry sites clustered at Marquette, Portage Entry, and Bayfield, and scattered along the lakeshore. These were developed, owned, and operated by some seventy companies based in large midwestern and local cities. Surveys of extant buildings and historic photographs identified hundreds of buildings built wholly or largely of stone in more than a dozen towns within the boundaries of the formations. Examination of public and private records and newspapers established the reasons people chose this building material over others.

Clients commissioned trained architects to design in the prevailing cultivated, high style using the finest stone. Thus, William Scott of Detroit designed the Marquette prison in the Richardsonian Romanesque manner and others eagerly followed his lead. Concurrently, craftsmen and stone masons worked in sandstone in the vernacular tradition, as exemplified by Paul P. Roehm's house at Laurium. In Marquette, in Houghton, Hancock, and Calumet, in Bayfield, Washburn, and Ashland, and in Superior sandstone was employed for furnaces and banks, cottages and mansions, churches and cathedrals, jails and prisons, town halls and court houses. People chose sandstone for practical and for romantic reasons: it was easily extracted in large blocks, cheaply shipped by water, carvable, durable, and aggressively promoted; and it symbolized solidity, security, stability, permanence, and success.

Red sandstone fell from favor with the renewed interest in Neo-classicism precipitated by the World's Columbian Exposition of 1893 in Chicago which called for white, smooth-cut stone, and with the promotion of clay products by brick manufacturers. This distinctively regional red sandstone architecture stands as testimony to the confidence and anxiety of that time and place.

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1982

ACKNOWLEDGMENTS

My fascination for the Upper Peninsula and for magenta and turquoise--the colors of Lake Superior Country building materials, that is, of red Lake Superior sandstone, Huron Mountain slate, and oxidized copper, derives perhaps from my childhood association with the neighboring Richard Delbridge family. The father had been a second generation Cornish miner in Hancock, Michigan. Thus, when confronted with the Lake Superior region as an adult, I knew intuitively that the regional identity of the place lay in large part with its native red sandstone buildings.

In writing this dissertation I was aided by many individuals and institutions in Michigan and Wisconsin, and I want to acknowledge their help and cooperation. First I want to acknowledge the assistance of the members of my doctoral committee. My greatest thanks goes to Professor Leonard K. Eaton of the College of Architecture and Urban Planning, the University of Michigan, who directed the dissertation. When I proposed the topic to Professor Eaton he proclaimed immediately that the red sandstone architecture of the Lake Superior area is among the most regionally distinctive in the United States. At his suggestion I expanded the study from one of the sandstone architecture of the Upper Peninsula to one that includes the buildings of Bayfield stone in northern Wisconsin. Under his

gentle guidance and calling on his wide breadth of knowledge, I completed the study. Professors Sadayoshi Omoto, Richard White, Russel Nye, and Victor Howard of Michigan State University, the other members of the committee, willingly gave their time and expertise to see that my dissertation was brought to completion.

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Several geologists furthered my understanding of the scientific aspects of the sandstone and the formations. Robert C. Reed of the Geological Survey Division of the Michigan Department of Natural Resources platted the aerial extent of the Jacobsville formation and pointed out similarities and differences between the Jacobsville, Freda, and Bayfield sandstones. Harry O. Sorensen, Paul Daniels, and Steve Wilson of the same division, Rod Cranson of Lansing Community College, M. G. Mundry of the Wisconsin Geological and Natural History Survey, and Richard W. Ojakangas of the Geology Department at the University of Minnesota-Duluth also cooperated.

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building of St. Paul's Episcopal Church. Alden Clark, owner of the Harlow Block, showed me the drawings of that fine building. Russell Bergh of Jacobsville accompanied me on a tour of several quarry sites at Jacobsville. Catherine Des Rochers of Houghton County clarified the location of quarry sites at Arnheim. John Chapple of the Ashland Daily Press furnished information on the Knight Block.

Several institutions permitted me to illustrate this dissertation with copies of photographs from their collections. I owe the following credits: Marquette County Historical Society, Figures 11, 12, 13, 18, and 19; Michigan Department of Corrections, Figure 17; Michigan History Division, Figures 10 and 23; Michigan Technological University Archives and Copper Country Collections, Figures 2, 3, 4, 5, 6, 7, and 24; and Sarah Sargent Paine Memorial Library, Inc., Figure 33. Figures 38 and 47 are from the Superior Leader for 26 February 1893, and Figure 41 from the Ashland Press. Sherman K. Hollander prepared Figure 1.

TABLE OF CONTENTS

	Page
LIST OF FIGURES	x
 Chapter	
I. INTRODUCTION	1
II. LAKE SUPERIOR SANDSTONE: THE JACOBSTOWN FORMATION AND THE BAYFIELD GROUP	8
Introduction	8
Geological Aspects	11
Historical Aspects	14
Extracting and Finishing	21
Suitability as a Building Material	24
Promoting and Marketing	34
Quarries	41
Alger County, Michigan	42
Marquette County, Michigan	47
Keweenaw Bay: L'Anse and Portage Entry (Baraga, Houghton and Keweenaw Counties, Michigan)	56
Bayfield and Douglas Counties, Wisconsin	66
Conclusion	75
III. THE SANDSTONE ARCHITECTURE OF MARQUETTE	102
IV. THE SANDSTONE ARCHITECTURE OF THE COPPER COUNTRY	194
V. THE SANDSTONE ARCHITECTURE OF THE CHEQUAMEGON BAY AREA AND SUPERIOR	291
VI. CONCLUSION	392
APPENDICES	405
A1. SIGNIFICANT QUARRY COMPANIES IN THE JACOBSTOWN FORMATION AND THE BAYFIELD GROUP	407

	Page
A2. STOCKHOLDERS (INVESTORS) IN SIGNIFICANT QUARRY COMPANIES IN THE JACOBSTOWN FORMATION AND THE BAYFIELD GROUP	413
B. CHECK LIST OF SANDSTONE BUILDINGS IN THE LAKE SUPERIOR REGION	419
BIBLIOGRAPHY	487

LIST OF FIGURES

Figure	Page
1. Map Showing the Distribution of Quarries in the Jacobsville Formation and the Bayfield Group . . .	9
2. Quarriers and Tramcar, Portage Entry Quarries Company, Jacobsville, ca. 1895	84
3. Quarriers and Channeling Machine, Portage Entry Quarries Company, Jacobsville, ca. 1895	85
4. Derricks, Portage Entry Quarries Company, Jacobsville, ca. 1895	86
5. Quarriers, Kerber-Jacobs Redstone Company, Red Rock, ca. 1895	87
6. Dimension Stone, Portage Entry Redstone Company, Jacobsville, ca. 1891	88
7. Dock, Portage Entry Quarries Company, Jacobsville, ca. 1895	89
8. Bay Furnace, Onoto, 1869, destroyed 1877	108
9. John Burt House, Marquette, ca. 1860	108
10. Roundhouse, Marquette and Ontonagon Railroad Company, Marquette, 1868, destroyed	114
11. Henry Lord Gay, Superior Block, Marquette, 1871-73, destroyed 1885	114
12. Hampson Gregory, Superior Block, Marquette, 1885, destroyed	120
13. Carl F. Struck, High School, Marquette, 1874-75, destroyed 1900	120
14. Gordon W. Lloyd, St. Paul's Episcopal Church, Marquette, 1874-75	129

Figure	Page
15. Hampson Gregory, Daniel H. Merritt House, Marquette, 1880	129
16. Hampson Gregory, Harlow Block, Marquette, 1887 . . .	136
17. William Scott & Company, Upper Peninsula Branch Prison and House of Correction, Marquette, 1885-89 . . .	136
18. Demetrius Frederick Charlton, John Munro Longyear House, Marquette, 1890-92, moved to Brookline 1903-1904	152
19. Longyear House	152
20. Barber & Barber, Marquette County Savings Bank, Marquette, 1891-92	155
21. Marquette County Savings Bank	165
22. Lovejoy & Demar, Marquette City Hall, Marquette, 1893-94	165
23. Patton & Miller, Peter White Library, Marquette, 1902	176
24. John Scott & Company, Michigan Mining School, Houghton, 1887-89, destroyed 1968	210
25. C. Archibald Pearce, Suomi College, Hancock, 1898- 1900	210
26. Charlton, Gilbert & Demar, Hancock Town Hall and Fire Hall, Hancock, 1898-99	223
27. Henry L. Ottenheimer, Shelden-Dee Block, Houghton, 1899	243
28. Paul P. Roehm House, Laurium, 1895-96	243
29. Charles K. Shand, Red Jacket Fire Station, Calumet, 1898-99	247
30. Charles K. Shand, Red Jacket Town Hall and Opera House, Calumet, 1899-1900	247
31. Demetrius Frederick Charlton, Ste. Anne's Church, Calumet, 1899-1901	261

Figure	Page
32. Ste. Anne's Church	264
33. Alexander C. Eschweiler, Sarah Sargent Paine Memorial Library, 1902-1903, destroyed 1964	272
34. John Nader, Old Bayfield County Court House, Bayfield, 1883-84	305
35. First National Bank, Bayfield, 1905	305
36. Conover & Porter, Washburn State Bank, Washburn, 1889-90	318
37. T. Dudley Allen, Walker School, Washburn, 1893, destroyed 1947	318
38. Palmer & Hall, Duluth High School, Duluth, 1891-92 .	323
39. Orff & Joralemon, Bayfield County Court House, Washburn, 1894-95	323
40. Henry E. Wildhagen, Free Public Library, Washburn, 1904-1905	344
41. Union Passenger Depot of the Wisconsin Central Railroad, Ashland, 1889	344
42. Conover & Porter, Knight Block, Ashland, 1890, destroyed 1974	347
43. Willoughby J. Edbrooke, Ashland Post Office, Ashland, 1892-94	351
44. Charles C. Haight, Minnesota Block, Superior, 1891-92	365
45. T. W. Marble Double House, Superior, 1891	369
46. Clarence H. Johnston, Board of Trade and Commerce Building, Superior, 1890	371
47. Board of Trade and Commerce Building	373

CHAPTER I

INTRODUCTION

No one can think of the architecture of the American Southwest without thinking of adobe. No one can think of the seventeenth century architecture of New England without thinking of wood. Similarly, no one can think of the architecture of the Lake Superior region without thinking of red Lake Superior sandstone.

Red sandstone is an integral part of the wild, rugged landscape of the Lake Superior region, an area of severe winter climate, rocky terrain, densely timbered forests, and ice-cold lakes and streams. Red Lake Superior sandstone is a sedimentary rock made up of sand-sized grains of quartz cemented together with iron oxide, calcite, authigenic quartz, and silica to form rock. These reddish brown rocks comprise several geological formations--the Jacobsville formation and the Bayfield group of formations. They occur in a belt that underlies the land and the lake for nearly four hundred miles from Sault Ste. Marie, Michigan, to Duluth, Minnesota, and they crop out from Munising, Michigan, to the head of the lake. For forty years red Lake Superior sandstone enjoyed prestige as a building material among architects, builders, and clients--people responsible for forging a technological society in this wilderness--because this stone could be removed in large blocks, was easily

carved, symbolized economic prosperity and social success, and harmonized with its environment.

Scores of quarries along the lakeshore in Alger, Marquette, Baraga, Houghton, and Keweenaw counties, Michigan, and in Bayfield and Douglas counties, Wisconsin, but centered at Marquette and Portage Entry, Michigan, and Bayfield and Washburn, Wisconsin, provided stone which was easily and cheaply shipped by water to the region's most important commercial and industrial centers. The quarries were developed and operated by companies organized by investors residing in large midwestern cities, primarily Chicago, Detroit, and Milwaukee, and in the cities of the Lake Superior region, mostly Marquette, Superior, Ashland, Duluth, Bayfield, and Houghton. A. P. Swineford, publisher of newspapers and mineral histories throughout northern Michigan, Wisconsin, and Minnesota, and then publisher of the Marquette Mining Journal, commented in 1872 on the prominence of the newly introduced building stone from quarries at Marquette, Portage Entry, and Bayfield and its importance to the region economically:

In fact, all along the south shore of the lake are situated beds of this brown stone of the very finest quality, which in years to come will be developed and made to yield the material for the building up in a more substantial manner our great lakes cities. Indeed, such is the acknowledged value of our Lake Superior brown sandstone as a building material, that we may confidently expect our quarries, in a few years, to become one of the most important elements of substantial wealth.¹

A later observer of the sandstone industry in the Upper Peninsula noted optimistically the economic value of stone as a resource to be exploited in the name of progress:

It is impossible to describe accurately these stone formations without at the same time making mention of special quarries and companies, and it is not intended to be understood that the wonderful sandstone formation of the upper peninsula is confined to places mentioned [Portage Entry, Marquette, and Rock River].

It is confidently asserted that the richness, variety and extent of hidden formations is untested and unknown. Each year develops some hidden deposit far beyond even the suspicion of its existence. Neither was it intended that any one person should hold a master key to all the hidden recesses of nature's great storehouse.

The upper peninsula is one of nature's great banking houses, whose capital stock is its deposits, subject to be drawn only by the pick and shovel; with no exacting cashier to count, no identification required, no security asked; simply locate the funds; open the doors; help yourself.²

Sandstone from the quarries in the Jacobsville formation and the Bayfield group was shipped to the Great Lakes ports of Duluth, Chicago, and Buffalo and inland to such points as St. Paul, Minneapolis, Kansas City, St. Louis, Philadelphia, and New York City. But it was used extensively in the public and private architecture of the Lake Superior region.

From 1870 until 1910 the economic prosperity and social success of the copper and iron mining, lumbering, shipping, and land speculation boom in the Lake Superior region created a demand for solid substantial public and private buildings faced with Lake Superior sandstone. From the quarries of the Jacobsville formation arose city halls, churches, a prison, schools, commercial blocks, banks, and houses in Marquette and in Negaunee and Ishpeming in the Marquette Iron Range, and in Houghton, Hancock, and Calumet in the Copper Range. From the quarries of the Bayfield group sprang

sandstone for a federal building, county court houses, libraries, schools, banks, and commercial buildings in the lumbering and shipping centers of Ashland, Washburn, Bayfield, and Superior. These masonry structures reached a height of popularity between 1880 and 1900 as they replaced earlier wooden buildings, creating a sense of permanence and place in the once-frontier communities.

This study places the sandstone architecture of the Lake Superior region in a total cultural perspective. It identifies and describes the native red sandstone architecture of the portion of the Lake Superior region of northern Michigan and Wisconsin that lies within the boundaries of the geological formations from which the red sandstone was extracted. It analyzes the historic and environmental forces that interacted to produce a distinctively regional architecture. The land contains copper, iron, and sandstone deposits; eastern and urban investors, who speculated in land, resources, and industries, brought their attitudes and values to the region; immigrant groups, who provided a labor force, brought their various native cultural attitudes and skills; and a rush of activity in copper and iron mining, shipping, and land speculation created the need for all kinds of buildings.

A preliminary survey of the architecture of the Upper Peninsula of Michigan, which I organized and directed for the Michigan History Division of the Michigan Department of State in collaboration with Professor Sadayoshi Omoto of the Art Department, Michigan State University, in the summers of 1975 and 1976, identified over 1,100 structures in the fourteen counties. Among these

structures were those which seemed to express the character of the Upper Peninsula better than anything else--the native red sandstone buildings. In the fall of 1976 I assessed this data and investigated further the sandstone architecture of the Upper Peninsula as the subject of an independent study directed by Professor Leonard K. Eaton of the College of Architecture and Urban Planning at the University of Michigan and arranged through the Committee on Institutional Cooperation. In this project I identified many architects, contractors, clients, and quarries through such various primary sources as newspapers and company records. Subsequently I expanded the scope of the study to include not only the region defined by the Jacobsville formation but also the region defined by the Bayfield group, since the two are integrally related.

Extensive fieldwork investigating the quarry sites, now covered with nearly one hundred years of overgrowth, and inspecting the impressive stone buildings in all seasons of the year reinforced my belief in the unique characteristics of the red sandstone architecture of the Lake Superior region. Newspaper accounts identified and revealed the activities of many quarry companies, clients, architects, and contractors, and expressed the pride of local residents towards this native material in the building up of villages and cities. Minutes of meetings of boards of commissioners, and village and city councils, church vestries, and boards of governors; minutes of meetings of building committees; and correspondence between private clients and their architects made known the wishes, dreams, and fears of those imposing a civilization on this

wilderness and demonstrated the role of native red sandstone in expressing these feelings. Professional geological accounts and interviews with geologists at the Michigan and Wisconsin Geological surveys and regional universities clarified many of the scientific aspects of the stone and the formations including the aerial extent of the formations, the physical properties of the stones and the similarities and differences between them, and the suitability of the stone as a building material. Company records and mineral statistics pinpointed the locations of quarry sites, identified investors, and offered some information on production. These research sources recreated the phases of the building of the Lake Superior region in native red sandstone as they unfolded. This dissertation will have succeeded if this grand architecture in the heart of America is understood by everyone.

FOOTNOTES--CHAPTER I

¹A. P. Swineford, History of the Lake Superior Iron District Being a Review of its Mines and Furnaces for 1873 (Marquette: Mining Journal Office, 1872), p. 79. Also in Marquette Mining Journal, 21 September 1872.

²Michigan and Its Resources, John W. Jochim, compl. (Lansing: Robert Smith and Co., State Printers and Binders, 1893), p. 81.

CHAPTER II

LAKE SUPERIOR SANDSTONE: THE JACOBSTOWN FORMATION AND THE BAYFIELD GROUP

Introduction

The reddish brown sandstones which crop out along the southern shore of Lake Superior from Munising, Michigan to Duluth, Minnesota are comprised of the Jacobstown formation and three formations with similar properties (Figure 1). These are the Orienta, the Devil's Island, and the Chequamegon formations which together are known as the Bayfield group. The Jacobstown formation occurs in northern Michigan on the Keweenaw Peninsula, southeast of the Keweenaw fault. It extends eastward along the shore of Lake Superior to Sault Ste. Marie and Sugar Island and probably constitutes the bedrock over much of the bottom of Lake Superior in that area.¹ Jacobstown sandstone, named after the village at the entry to the Portage River on the Keweenaw Peninsula, some fourteen miles northeast of Houghton, where red sandstone was quarried, is well exposed along the southern shore of Lake Superior from the tip of the Keweenaw Peninsula to Grand Island. Jacobstown, the village, was named after John Henry Jacobs (1847-1934), a pioneer in the development of the Lake Superior sandstone industry. From Munising to Beaver Lake, the formation is completely below water

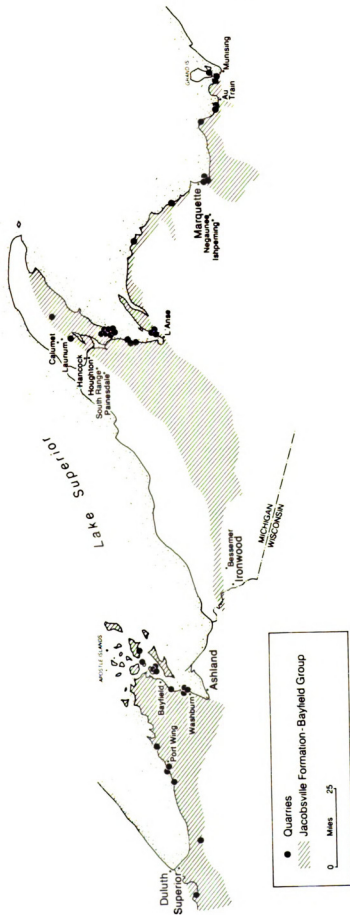


Figure 1.--Map Showing the Distribution of Quarries in the Jacobsville Formation and the Bayfield Group.

and is overlaid by the Munising formation, a light grayish white sandstone.

The Bayfield group, named after the village on the mainland opposite the Apostle Islands, twenty miles north of Ashland, produced brownish red sandstone.² This group of three formations occurs in northern Wisconsin and extends westward from the mouth of Fish Creek at the head of Chequamegon Bay, including the Apostle Islands, to the St. Louis River which forms the border between Superior, Wisconsin, and Duluth, Minnesota, then southwestward into Minnesota. The sandstones of the Bayfield group underlie the lower ground along the entire lakeshore and form the basement rock of all the Apostle Islands. The exposures of Lake Superior sandstone are restricted almost entirely to the shores of the lake on the mainland and the Apostle Islands.³

The Chequamegon formation underlies all the Apostle Islands southeast of a line from Sand Point to Devil's Island and is exposed at Houghton Point and on the shore cliffs south of Washburn. The Devil's Island formation, named for the island which displays exposures of the formation, underlies the Chequamegon formation. The Orienta formation, named for the quarry town on the Iron River thirty-five miles east of Superior, underlies the Devil's Island sandstone and the Western Plain from the line of outcrop of the Devil's Island formation, all along the south shore of Lake Superior north of the Douglas Range and into Minnesota.⁴

Until the early twentieth century the reddish brown sandstone of the Lake Superior region was generally and popularly

called Lake Superior sandstone, brownstone, or redstone, and prefixed specifically by the name of the place in which it was quarried, as Bayfield, Portage Entry, and Marquette sandstone.⁵

Geological Aspects

The sandstone of the Jacobsville formation was formed after Early Cambrian streams flowing northward deposited sand and gravel sediment along the lowlands which lay along the present lakeshore at the northern edge of the Upper Peninsula of Michigan and at the northern edge of Wisconsin. Streams flowing northward from the Northern Michigan Highlands, remnants of mountains initially formed during an episode of igneous intrusion and crustal deformation known as the Precambrian Penokean Orogeny, and extending in a belt from Ontario on the east across the central and southern part of the Upper Peninsula and into Wisconsin, carried sand and gravel down to the lowlands that lay along the south shore of Lake Superior. On reaching gentler lowland slopes, the early Cambrian streams slowed down and dropped their load of sediment in shifting channelways or in local lakes. The coarse sand and gravel deposits and inter-bedded shales that resulted included fragments of many rocks and minerals eroded from preexisting rocks of the source area in the Northern Michigan Highlands. These deposits formed the sandstone of the Jacobsville formation. Because of the highly irregular Precambrian surface on which it was deposited, the Jacobsville formation varies from 46 to 1,100 feet in thickness.⁶ The thickness of the Bayfield group is estimated to be 4,300 feet in the Lake Superior syncline.

The Jacobsville formation and the Bayfield group appear to be related to each other. Heavy mineral suites, bulk mineralogy, sedimentary features, and paleomagnetic measurements demonstrate their great similarity. They probably are of late Keweenaw in age, that is, more than 600 million years old.⁷

The physical properties and uses of sandstones depend on the mineralogy of the sand grains and the material which cements them together. Common cementing agents are clays, iron oxides, calcite, and silica. The type of cement and the degree of cementing influences the durability, strength, and, ultimately, the use of sandstones in building.⁸ The sandstones of the Jacobsville formation and the Bayfield group are quartz sandstones cemented with iron oxide, calcite, and, in the case of the former, authigenic quartz, and, in the case of the latter, silica.⁹ Their physical appearance and properties are similar. Typically, sandstone is composed of sand-sized grains, 1/16 to 2 millimeters in size, that are cemented together to form the rock. The grains of the sandstones of the Jacobsville formation and Bayfield group are 1/4 to 1/2 millimeter in size, but may range from shale to conglomerate.¹⁰ The small grains probably were responsible for the fine-grained appearance of the top grade sandstone quarried in the Portage Entry vicinity, which was said to have a "liver texture."¹¹

The major constituents of Orienta sandstone, one of three formations within the Bayfield group, vary regionally, but based on

an average of fifty-two samples are non-undulatory quartz (33.3 percent) and undulatory quartz (29.7 percent). Also present are potassium feldspar (17.3 percent), silicic volcanic clasts (9.4 percent), mafic volcanic fragments (1.6 percent), polycrystalline quartz (3.9 percent), opaques (2.3 percent), metamorphic (0.9 percent), sedimentary (0.7 percent), and plagioclase (0.4 percent).¹²

The major constituents of Jacobsville sandstone based on an average of samples collected in Marquette and Alger counties are non-undulatory quartz (27.4 percent) and undulatory quartz (27.0 percent). Also present are potassium feldspar (23.0 percent), silicic volcanic (12.3 percent), polycrystalline quartz (3.8 percent), metamorphic (2.4 percent), sedimentary (1.4 percent), opaques (1.3 percent), mafic volcanic (0.8 percent), and plagioclase (0.1 percent).¹³

The heavy mineral suite of the Orienta sandstone of the Bayfield group is ilmenite (78 percent), leucoxene (13 percent), apatite (3-4 percent), zircon (3 percent), garnet (2 percent), and tourmaline (1 percent).¹⁴ The heavy mineral suite of the Jacobsville sandstone is ilmenite (84 percent), leucoxene (4-5 percent), garnet (4 percent), apatite (3 percent), zircon (3 percent), and tourmaline (1 percent).¹⁵

Small quantities of iron oxides give the rocks of the Jacobsville formation and Bayfield group their striking color. Red and reddish brown predominate, but the color ranges from bright brick red to brownish red or purplish red, and the basic red may be mottled with white streaks, blotches, and circular spots.

Spherical light spots caused by leaching and bleaching are common features of the sandstones of the Jacobsville formation and the Bayfield group. The boundary between the red and white colors is sharp and well defined, showing little or no gradation. Generally shale beds and fine-grained sandstone units possess the greatest intensity of red coloration and the least amount of white mottling. Massive coarse-grained units are white or light pink mottled with red streaks. Leaching of the red color follows planes of cross-bedding in places and produces alternating red and white streaks parallel to the stratification.¹⁶ The color of the "massive sandstone facies," that is the part of the formation which is distinguished by massive and relatively persistent bedding, in most outcrops of the Jacobsville formation and the Bayfield group is light red, reddish brown, pink, or white. Solid colors predominate but the conspicuous white mottling so striking in the lenticular sandstone facies is lacking in many exposures. Some beds are dark purple with minor white mottling.¹⁷

Historical Aspects

Explorers, travelers, artists, and scientists long have demonstrated romantic and practical interests in the sandstones of the southern shore of Lake Superior, assigning them various names and ages, describing their infinite variety and beauty, and predicting their economic value as a building material.¹⁸ Before the quarries were opened in the early part of the nineteenth century, scientists who conducted surveys and explorations financed

and organized by federal and state governments for the purpose of furnishing accurate information about the unfamiliar environment of the Lake Superior region noted the reddish brown Lake Superior sandstone. The reports prepared by these geologists and land surveyors described the physical characteristics of the sandstones, gave their location, analyzed their suitability as a building material, forecast their marketability and importance to the economic development of the region, and alluded to their usefulness locally in building up the towns of the region. This group of scientists, the first to describe the sandstone and the prospects for quarrying them, forecast the economic value of the building stone before the actual opening of the quarries. The reports of Houghton, Hubbard, and Foster and Whitney exemplify the thoughts of these scientists on the coming activity.

Before these reports were available, two men who were not trained scientists had recognized the value of Michigan's mineral resources. Lewis Cass (1782-1866), the territorial governor of Michigan, and Henry Rowe Schoolcraft (1793-1846), authority on the North American Indian, scientist, and writer, as early as 1819, during exploratory expeditions under the authority of the secretary of war, hastily noted various physiographic and geologic features along the southern shore of Lake Superior. Indians' gifts of copper specimens, travelers' accounts of the Ontonagon Boulder, and his own observations of metallic copper masses along the borders of the lake first called to Schoolcraft's attention the presence of these resources, and made apparent the need for

scientific investigation and accurate information. Schoolcraft argued that federally sponsored surveys would "augment our sources of profitable industry" and "promote our commercial independence."¹⁹

Douglass Houghton (1809-1845), the first geologist to study systematically the rocks of the Lake Superior region, published his findings in his 1841 report which attracted the attention of geologists worldwide interested in the region's Precambrian iron and copper. He observed that the Lake Superior sandstones were comprised of a Lower Red Sandstone and an Upper Gray Sandstone, thus, first applying the name red sandstone to the chief sedimentary rock that is visible on the south shore of Lake Superior from Grand Island west to the head of the lake. He noted the apparent location and depth of the formation and the composition of the rocks. He discussed the economic value of the rocks for building materials and concluded that no portion of the Lake Superior region lacked a supply, whether syenites and syenite granites, greenstones, or red sandstone. In regard to the Lake Superior red sandstone he wrote:

A very good building stone may be obtained from many portions of the lower, or red sandstone formation, and though the cement of this rock is usually not very perfect, yet, frequently, such changes have taken place in the rock, that it has almost taken on the character of granular quartz rock, in which cases, its durability is very much increased. The strata of this rock are usually of a convenient thickness to admit of being easily quarried, and they are so regular that the stone will require but little dressing.²⁰

Bela Hubbard (1814-1896), assistant state geologist who accompanied Houghton in the expedition to survey the geology of

the Upper Peninsula in 1840, predicted the value and the suitability of the sandstones of the Lake Superior region as a building material in a paper that recalled the region as it was in 1840 but was presented nearly thirty years later, in 1874. He stated that

there is in its building stones a wealth that is hardly yet begun to be realized. No more beautiful and serviceable material than the easily worked and variously-tinted sandstones is found in the West; and her granites, already broken by natural forces into convenient blocks, and as yet untried, will command a market in the time coming, when the solid and durable shall be regarded as chief requisites to good architecture.²¹

John Wells Foster (1815-1873) and Josiah D. Whitney (1819-1896), United States geologists, studied the geology of the Lake Superior region in 1850 and expanded on the earlier ideas of Houghton and Hubbard. Their two-volume report contained not only factual scientific descriptions of the sedimentary rocks of the copper and iron regions which they equated to the Potsdam group of New York, but also predictions of the economic value of the stones as a building material, and romantic descriptions of their beauty and likeness to the ruins of antiquity. Foster and Whitney concluded that only the sandstones near the trappean belts would furnish good building materials because here the stones are cemented with ferruginous matter, and appeared to contain fewer impurities that would cause crumbling or discoloration from weathering. They noted that the two-to-three-foot-thick bedding and transverse jointing of some of these sandstones would facilitate greatly their extraction into convenient-sized blocks for building.²² In particular they observed the bold cliffs that line the shore for several

miles above the Portage Entry on the Keweenaw Peninsula and that would become the region's major quarry center.

About a mile above the Portage, a good opportunity is afforded for examination. Here commence a series of bold cliffs, which line the coast for several miles. They are composed of strata of unequal thickness and induration. Some of the strata consist of silex, with thin plates of mica interspersed, while others contain portions of alumine, colored red by oxide of iron. The silicious strata afford excellent building materials, and the supply is inexhaustible. Slabs varying from two inches to two feet in thickness, and exposing perfectly level surfaces of forty or fifty superficial feet, can readily be procured. The rock is sufficiently indurated to give it strength, and is little affected by atmospheric agents. The water is of sufficient depth to permit vessels to approach within a few rods of the shore.²³

The two geologists wove into their report an awe and reverence for the majesty of this wild landscape. They lamented that "none of our artists have visited this region, and given to the world representations of scenery so striking."²⁴ They illustrated profusely their own work with tinted lithographs printed by Ackerman of New York depicting such natural sandstone landmarks as Monument Arch on Isle Royale, and Miner's Castle, Sail Rock, the Amphitheatre, the Grand Portal, and the Chapel at Pictured Rocks. They noted that the action of the waves had caused the cliffs north of Portage Entry to assume fantastic shapes and used picturesque descriptive terms--cornices, caverns, gothic doorways, towers, walls, arches, gateways. But the nearly horizontal stratification of the rocks, their brick red color varied with occasional bands of a lighter tint, and the intersection of numerous vertical fissures gave them the appearance of man-made masonry walls.

The cliffs above Portage Entry, they said, resembled "a miniature representation of the Pictured Rocks."²⁵

Even the scientist, Hubbard, was not immune to romanticizing. During a two month expedition along the southern shore of Lake Superior, Hubbard observed what he called evidence of "respectable antiquity" in the Pictured Rocks near Munising. He attributed their gray color that ranges from light to dark and rusty, to staining by iron and copper oxides. Their shapes and forms reminded him of elements of ancient architecture--buttresses, columns, arches, a dilapidated tower of a time-worn Gothic castle. He noted the wearing effect of the waves on the cliffs and the coloration in bands of brilliant hues on their surfaces.²⁶

Throughout the nineteenth century, artists and writers described in pictures and in literature the wild picturesqueness of the rocky cliffs along the south shore of Lake Superior. The resemblance of these natural phenomena to noble architecture fascinated the romantic impulses of authors before and after people had tamed and settled this wild area and had begun to exploit its resources.

Charles Lanman (1819-1895), writer, explorer, and artist, toured the Great Lakes basin in the 1840s and wrote in the 1850s about the difference between the eastern and western sandstones which he had observed in the rocky bluffs at the Pictured Rocks and in the sandstone cliffs that extend for two miles on the mainland just west of the Apostle Islands. The former, "solid walls of whitish sandstone," he observed, have been "striped with

various colors by mineral drippings." The latter "are composed of a deep red sandstone." He described their wild and rugged picturesqueness and their resemblance to arches, doorways, and caverns.

A cluster of rocks similar to the above [Pictured Rocks] is found westward of the Apostle Islands. These, however, are composed of a deep red sandstone, and are only about one hundred feet high, extending along the shore for about two miles. The arches here are almost numberless, and exceedingly picturesque and almost singular, and you may wind your way among them in a canoe without the least danger provided you have a steady hand and sufficient nerve.²⁷

Forty years after Lanman's romantic accounts, Sam S. Fifield of Ashland described in much the same manner the rocky features of the islands in Chequamegon Bay. He wrote of "nature pictures" carved by the action of waves on the sandstone cliffs of the Apostle Islands in these words:

In these sandstone layers there are wonderful caverns shaped by the ceaseless waves that during centuries have carved them into magnificent grottoes and halls, connected and supported by grand arches and columns, requiring but a slight stretch of the imagination [sic] to transform into the ruins of some of the grand old cathedrals of the old world . . . vaulted chambers, supported by numerous pillars and arches, fine specimens of Nature's masonry, lighted by circular and gothic windows, cut through walls of variegated stone. Truly some of the carved columns it is hard to believe Nature's work, so much do they resemble the work of man.²⁸

Fifield explained that the brownstone is seen best on the east and northeast end of Presque Isle.

For fully four miles the shore presents a high wall of solid brownstone cut and carved into fantastic shapes, with caves and grottoes, arches and columns, and wide rifts into which the sea rushes like a maelstrom during stormy weather.

Fifield said that prominent features include Lobster Point, Trip-hammer Point, Lone Rock, The Sphinx, The Anvil, Hammer of Thor, and Split Rock. He noted, "This upheaval of sandstone is undoubtedly the greatest on the south shore; certainly the most interesting."²⁹

Extracting and Finishing

Companies quarried Lake Superior sandstone as dimension or mill stone, ton stone, and rubble stone. Of these the most marketable and the most costly was dimension stone. Dimension stone was removed in blocks that typically measured eight feet by four feet by two feet in size. The blocks were sawn or scabbled and sold by the cubic foot to builders and contractors who cut them into the shapes and sizes specified by their intended position in a particular building. Sometimes companies operated sawmills that cut the stone into architectural components. Thus, in 1873 the Erickson Manufacturing Company installed at Marquette a gang of stone saws for the purpose of sawing into different shapes the brown sandstone taken from the quarries in Marquette. Stone sawmills enabled quarries to furnish to order ashlar, window sills, and the like. Previously all stone from Lake Superior quarries had been shipped in the rough.³⁰ Ton stone was broken out in rough, angular, irregular blocks and sold by the ton in pieces weighing from one-half to three tons. Rubble stone was created in removing dimension stone and was sold cheaply by the cord in pieces manageable by one or two men, used in building cribs, or discarded altogether.

In order to remove stone reasonably dry without excess moisture or frost, and thereby ensure good weathering, the quarries operated seasonally from April to November. Before quarrying could begin, however, unskilled workers removed the glacial drift and shale rock which covers most sandstone beds up to a thickness of fifty feet. The cost of removing this overburden was a decisive factor in the practicality of opening a quarry at a particular site. It varied with the extent and nature of the overburden and the facilities available for its disposal. Once the quarry had been stripped of the overburden, workers drilled or, after the 1880s cut with a steam-powered channeling machine, two parallel channels, about four feet apart, and parallel to the depth of the bed on the side that the quarry was to be opened. Then they broke out a portion of the stone between the two channels and removed a key so as to create a space in which to move other stones as they were broken apart. Quarrymen blasted this break or wedged it out with plugs and feathers. That is, either they drilled deep holes, larger at the bottom than at the top, and charged them with heavy blasts of powder to break the stone apart and move it slightly on its bed, or they drilled two or three holes at right angles to the channels and to the depth of the bed and then cracked or loosened the stone with plugs and feathers. A derrick lifted out the key.

Quarrymen removed free-bedded stone by cutting channels transversely to the face, drilling a series of holes parallel to the face, and then cracking it out in the same manner in which they had removed the key. The large blocks freed from the quarry

were broken into sized blocks. Workers placed a series of iron wedges in a lengthwise groove where a break was desired and struck them repeatedly with sledgehammers.³¹ Tramcars carried the stone to the dock where each block was numbered and measured. This information was inscribed on the block and noted in a memorandum.³²

In 1883 John H. Jacobs invented a blasting system that employed a power drill capable of boring any shape hole. Manufactured by the Rand Drill Company in Tarrytown, New York, the "Jacobs BB" drill reduced from thirty or forty to two or three the work force needed to blast out stone. Jacobs described how the system, in his opinion "the most perfect quarrying system ever known," worked:

We take a block of stone sixty feet or more long, twenty feet wide and ten feet thick and bore a row of holes eight feet apart cutting the corners on the line drawn to break off the twenty foot piece and using about half a pound of powder in the bottom of each hole and putting in the exploders with electric connections and using a blasting battery to set them all off at once, this body of stone could be moved any distance from three or four inches to a foot or more, as you please, by the slightest little amount of powder and by corking the hole two feet from the top by tamping solid to hold the gas and powder until the full strain on that filled the vacuum of the hole. Then it cut the rock in an air line and made a perfect break as directed and the process was a great saving in quarrying the rock.³³

Skillful quarriers took advantage of the systems of natural planes, seams or cracks that transverse and divide the rocks. Although joints vary in distinction, in stratified rocks such as sandstones they usually run nearly perpendicular to the planes of bedding and descend vertically at similar distances so

that the portions of rock between them appear like "so many wall-like masses." They tend to intersect in two directions. The first, called "dip joints" or "end joints," runs with the direction the strata is inclined from the horizon or the dip or inclination of the rock. The second, called "strike joints" or "back joints," runs transversely at a right angle and conforms in direction to the strike of the rift. Aided by the natural joints of the rock, quarrymen could wedge large blocks off easily. The stone was then finished by hand implements to the desired textured finish.³⁴

Most commonly they gave sandstone a rock-faced finish, which is the natural face of the rock just as broken from the quarry or slightly trimmed down by a pitching tool, or they gave it a sawed-face finish. Often they finished sandstone with hand implements that textured the surface into finishes known as pointed face, ax-hammered face, patent hammered, brush hammered, square drove, and tooth chiseled.³⁵

Suitability as a Building Material

Lake Superior sandstone possessed the strength, durability, and beauty necessary to meet the construction requirements of substantial architecture. It resisted the effects of fire better than most stones and the effects of freezing and thawing as well as most sandstones. It withstood the extreme temperature changes of the northern climate, retaining solar heat in the winter and insulating against it in the summer. Rich in color and homogeneous in structure, it was easily worked, easily adapted to required

dimensions, and easily dressed and carved in any fashion. Builders used Lake Superior red sandstone in all kinds of rubble and ashlar masonry and in all parts of buildings, but found it particularly suited to coursed ashlar walling and rock-faced work. Like other stones, Lake Superior sandstone was a noble building material capable of projecting symbolic meaning. Lake Superior sandstone locally quarried and used projected special meanings about the place and the people who built with it. The stone was obtainable in large quantities at low cost, and was transported cheaply by water. Its primary liability was in the presence of gray spots and the seamy nature of inferior stone when not carefully selected.³⁶

The advantages of local sandstone for a building material received the attention of even a small town newspaper in the quarry district of northern Wisconsin. The Ashland Daily Press noted:

Building stone that combines strength, durability and beauty is eagerly sought for by contractors and builders. Ashland brownstone is famed throughout the United States. Its like is found nowhere in Uncle Sam's domain of a rich, brownish red color, indestructable [sic] and unchangeable in all kinds of weather, qualities for building purposes equalled by no other stone. Public buildings in Brooklyn, New York, and Milwaukee and other prominent cities are evidences of the estimate in which it is held, while the Ashland government building, the Knight Block, the Wisconsin Central depot and local buildings are standing monuments of its popularity at home.³⁷

A Michigan newspaper reporting on the sandstone from the quarries of the Marquette Brownstone Company, formerly of the Wolf and Son Company, stated:

It is well known that the mass of most quarries from which building stone is obtained--and especially sandstone and granite--is interseamed with thin stratas of limestone, trap, conglomerate, semi-limestone, clayslate, and other substances which detract greatly from the uniformity of the material taken out. But the stone which has of late been taken out of the Wolf quarry, is as uniform in quality and as easily manipulated in a mass of any size--to an especial pattern if desirable--as if moulded out of soap, aside from the trifle of additional labor required to work the harder substance. This may seem like an exaggeration, but operations on the ground, at the quarry, show that by the usual method of trenching and underseaming any size of stone may be taken out in as perfect a form as it is possible to obtain it without the use of the saw and chisel. Then it is easily worked, so easy in fact that the most experienced stone-cutters decide that from twenty to fifty per cent can be saved in carving it to occupy any place which may be desired in a building. And last of all, it is found that as it is exposed to the atmosphere and the moisture is evaporated it becomes harder than any other stone in use, and when held up in a wall in the same horizontal position it was taken from the quarry, it will not scale, crack or expand, as is the case with much stone used for building purposes.³⁸

Again, in commenting on the brownstone from the quarries on Basswood Island and in Marquette, the Marquette Mining Journal said:

Its fire-proof qualities were thoroughly tested in the great Chicago fire, where Lake Superior brownstone walls, among them those of the Tribune building, stood intact, without a crack, scale or blemish being caused by the great heat under the influence of which marble fronts crumbled and fell to the ground. No more beautiful buildings can be imagined than those in this city, the walls of which have been constructed with material from our own quarries; and when we take into consideration its sterling fire-proof qualities, its beautiful color, and the ease and readiness with which it yields to the manipulations of the artisan and builder, the conclusion that it must steadily grow in favor among those who desire, in the construction of buildings, to combine beauty with durability, is inevitable. We

regard the sandstone interests of Lake Superior as destined, ere long, to become one of the greatest sources of wealth to the district not only but to those who invest their surplus means in its development.³⁹

Thus, local opinion expressed in the newspapers of the Lake Superior region extolled the virtues of the native brownstone.

Strong and durable stone withstands mechanical disintegration and chemical decomposition. Temperature changes, the mechanical abrasion of water and wind, growing organisms, and faulty methods of working and handling stone can weaken the adhesion between the particles and make it crumble. Water, sulphurous acids, carbon dioxide, and organic acids can break up the minerals into other compounds and destroy the identity of the particles. The ability of a particular stone to resist mechanical and chemical changes depends on its mineralogical composition, texture, hardness, strength, and structure.

Federal and state governments, urged by men and organizations interested in promoting commerce and business, published for popular use by quarrymen, builders, architects, suppliers of building materials, and architectural clients, handbooks and statements prepared by scientists that described the physical properties of rocks and their suitability as a building material, the quarries from which they were obtained, and the means available for transporting them. Two comprehensive works of national scope were the 1880 report and statistics on building stones and the quarry industry published by the Tenth Census, and George P. Merrill's previously cited handbook

and catalog on building and ornamental stones published by the Smithsonian Institution in 1886 and later revised and updated.⁴⁰ Building Stones of the United States, and Statistics of the Quarry Industry for 1880 prepared for the Tenth Census by many eminent geologists, contained descriptions of the microscopic structure and chemical analyses of building stones, methods of quarrying them, descriptions of quarries and quarry regions, stone construction in cities, and the durability of building stones in New York City and vicinity. The Collection of Building and Ornamental Stones in the U.S. National Museum: A Handbook and Catalogue catalogued the approximately 2,900 mineral specimens collected for the Centennial Exposition in 1876 at Philadelphia and was the standard work on stones for building and decoration. In the third edition of 1903 Merrill noted that since his first edition the output from and investment in America's quarries had doubled, technology had advanced, and the taste and prosperity of Americans had improved.

Allan D. Conover, professor of civil engineering at the University of Wisconsin, special agent on building stones and the quarry industry for the census, and designer of sandstone structures in Ashland and Washburn in the 1890s, described the quarries of Michigan and Wisconsin. His reports appeared in both of the above-mentioned works. He noted that "the Potsdam sandstone is likely to furnish the largest quantity and the best building material found within the state [Michigan]." Conover described the most desirable of the Lake Superior sandstone as "a rather coarse grained, homogeneous, siliceous sandstone, rather soft when first

quarried, easily hewn, but hardening on exposure." When uniformly reddish brown he regarded it "a very handsome material for exterior and ornamental work." Even the mottled white or yellowish white and red brown colored stone, usually rejected, but used in some buildings at Marquette, in Conover's view, presented "a rather handsome, picturesque appearance." The reddish brown and variegated stones seemed equally durable and reliable when free of the clay pockets that occur occasionally. He noted that stones in the vicinity of the Laughing Whitefish River were "very hard, compact, reddish or speckled," split readily to required thicknesses, and were suited to heavy masonry but too hard for use in ornamental work. The Potsdam sandstone of northern Wisconsin also furnished "a handsome building stone." Conover described the composition as of "siliceous grains, medium to somewhat coarse, held together by a cement usually either ferruginous or argillaceous in its character, and . . . generally stained from yellow to deep brown by the ferruginous matter." Like the Marquette stone, the Bayfield stone was plagued with clay pockets that could pit the finished surface or spoil a nearly finished ornamental carving. Bayfield stones, however, lacked the color variations sometimes troublesome in the Marquette stone. Conover reported both stones obtainable in large masses of any size required and easily shipped by water.⁴¹

The Minnesota and Wisconsin Geological surveys prepared works of statewide application: W. H. Winchell's preliminary report on building stones of Minnesota, and Ernest Robertson Buckley's 1898 bulletin on the building and ornamental stones of

Wisconsin. Michigan lacked comparable handbooks but state geologists included remarks on building stones in their geological survey and mining reports. In his report, Winchell urged architects and builders to examine rock in its natural bed to ascertain its resistance to changes resulting from alternating heat and cold, moisture and dryness, and to observe the natural outcrop of the rock to determine its permanence of color. Most importantly he called for the use of locally quarried rather than imported stone because of its appropriateness to the environment. Winchell claimed that after a few years of exposure in the cities white Ohio stone would become dirty, dusty, dingy, and disagreeable, "while a brown sandstone maintains its color and always gives an impression of solidity and durability, while under the bright and cloudless skies of Minnesota its dark and more somber aspect is far less objectionable than in darker and damper atmospheres."⁴² Buckley, in his work on the stones of Wisconsin, spoke of the demands and uses of stone, the selection of stone, and the estimated value of stone. He discussed the occurrence, color, composition, adaptability, and strength and durability of the building and ornamental stones of Wisconsin.⁴³

Builders and architects relied most heavily on the results of the crushing strength test and the transverse strength test in determining the comprehensive strength of a stone. They relied on the modulus of elasticity test in calculating the effect of loading a masonry arch or proportioning abutments and piers of railroad

bridges subject to stress. In both cases, sandstone tested lower than granite and limestone.⁴⁴

Scientists rated having a crushing strength of over 5,000 pounds per square inch strong enough for any modern structure. Buckley showed the results of crushing strength tests on two-inch cubes of sandstone from seven quarry sites in the Bayfield group. The average strength of twenty samples taken was 4,816 pounds per square inch. In Buckley's opinion, the crushing strength of Bayfield sandstone equalled or exceeded that of Jacobsville sandstone and probably equalled that of Connecticut stone.⁴⁵ By comparison the Michigan commissioner on mineral statistics presented crushing strengths of Jacobsville sandstones: Portage Entry redstone, 7,300 pounds per cubic inch; Marquette raindrop variegated, 10,780; and L'Anse brownstone, 10,645.⁴⁶

Buckley stated that testing to determine the resistance of stones to the effects of freezing and thawing were inconclusive. Although tests placed the porosity and ratio of absorption of Bayfield sandstone at four and one-half to eleven percent its weight, a ratio that could exceed the ten percent considered vulnerable to injury from the conditions of alternating freezing and thawing, other factors affected the ability to resist weather. Also a factor is the rapidity with which stone gives off water. This depends on the sizes of the pores. Buckley concluded that the pores of Lake Superior sandstone were sufficiently large to release quickly rather than retain the water that might collect

in them, thereby avoiding the injurious effects of freezing and thawing.⁴⁷

In some cases, changes produced by weathering improved the stone. Sandstones undergo a process of hardening on being removed from the quarry. The water which permeated the stones holds in solution or suspension a small amount of siliceous, calcareous, ferruginous or clay-like matter. On exposure to the atmosphere capillary action draws this "quarry water" to the surface of the block where it evaporates. The dissolved or suspended material is deposited at the surface and serves as an additional cementing constituent to bind the grains more closely together. Thus, carving was best done immediately after extracting the stone while the "quarry water" was still present to form a crust, rather than after the structure was completed.⁴⁸

Buckley claimed that tests demonstrated that Lake Superior sandstone resisted heat effectively. Up to a temperature of 800°F it was little injured. Not until subjected to 1200°F, a temperature no stone can endure, did it crack, crumble, and lose its color and strength. By comparison granites and limestones change more rapidly at lower temperatures.⁴⁹

One man who inspected the ruins of Chicago after the Fire of 1871 reported that only Marquette red sandstone and Akron stone withstood the melting heat of the fire. All others cracked and crumbled before the scorching flames.

The stone of Marquette . . . remains intact in places amid the hottest heat and where it was tumbled down by the warping of bricks or the giving away of iron it can be seen unscorched and merely fractured by the weight of its descent.⁵⁰

The Marquette Mining Journal considered the fireproof quality of Marquette sandstone one of its most important attributes as a building material. It said, "No better argument in favor of the great value of Marquette stone for building purposes than this could be given and we predict for it a very extensive sale in the future."⁵¹

Color and texture determined to a large extent the market value of the stone. Many thought top quality Marquette stone the "handsomest stone quarried on the lake" because of its purplish brown color and the "raindrop effect [which] when viewed in certain lights, appears as though a few heavy drops of rain had fallen on it and moisture partly absorbed." The rich brown color of sandstone was well suited to cities and industrial centers since it could neither become dingy looking nor discolor as would white marble, gray granite, and Ohio sandstone. In particular, it was suited to areas like the Marquette Iron Range where the red dust of iron ore covers everything.⁵² In the early 1890s clear Marquette brownstone brought one dollar and thirty cents per cubic foot, more than three times that of a second quality or variegated stone, which was sometimes known as bacon stone for its red and white streaks and which was less desirable but more common. The latter sold for forty cents per cubic foot. In 1895 top grade Portage Entry redstone, "even, rich red color, perfectly uniform in grain, compact and without flaws," sold for one dollar and twenty cents per cubic

foot. Second quality variegated stone with white bands running through it was taken out only on order and sold for sixty cents per cubic foot.⁵³ In some cases rubble stone and inferior stone, suited only for foundations, was employed in the front of buildings where only top grade stone should have been allowed.⁵⁴

Many public buildings, banks, churches, schools, and houses in the Lake Superior region employed first grade sandstone. Frequently, a variety of grades was used in a single structure. For example, the Ryan Block (Charles K. Shand, 1898), at Calumet was constructed of different grades of Portage Entry sandstone: the front is Number One grade, uniformly red in color with alternating courses of rough and smooth dressed blocks at the first story level, with coursed ashlar at the second level, and with random ashlar at the third level; the side walls are of Number Two grade, a heavily striated red and white stone.

Promoting and Marketing

Owners, developers, and managers of quarries, sometimes assisted by commissioners of mineral statistics, vigorously promoted their stone in a variety of ways. Initially they overcame uncertainties about the stone's soundness with statements from scientists, geologists, and engineers, who analyzed its composition and tested its strength and porosity. They secured from architects, builders, and clients who had used the stone statements about its beauty and the ease with which it could be carved and worked. They distributed

samples to cut-stone dealers in such midwestern cities as Cleveland, Chicago, Detroit, and St. Paul. Later, in one instance, they compiled a pamphlet of photographs of buildings constructed with Lake Superior stone for distribution as prospectuses or advertisements. Evidence of the fashionableness of Bayfield and Jacobsville sandstone in large midwestern cities enhanced its reputation. Thus, lists, photographs, and statements resulted in the ready acceptance of Lake Superior sandstone as a building material. Eventually quarry companies opened offices and dealerships in the Lake Superior region and actively marketed the stone directly among local architects and builders.

The Basswood Island Brownstone Company, which opened the first quarry in the Bayfield area in 1868, initially experienced difficulty in placing its product on the market. People feared using an untried stone in an important building. When engineers and contractors questioned the suitability of Lake Superior brownstone for the Milwaukee County Courthouse (L. A. Schmidtner, 1869-73) in a report to the Milwaukee County Board of Supervisors in 1869, the board sought the opinion of recognized scientists on the quality of the stone as a building material. A special committee consulted Increase Allen Lapham and James Hall, both scientists; Peter White, "an old resident of Marquette" and "a reliable and trustworthy man"; and other "competent people." Lapham (1811-1876), a well-known geologist and civil engineer and regarded as the first scientist in Wisconsin, examined the stone and reported to the building committee as follows:

The Bass Island (Lake Superior) sandstone having now been fully tested as to its power to resist crushing, its porosity, and as to its chemical composition, I am able to give a more correct and reliable opinion as to its suitability for the facing of the walls of the new court house than that expressed in my letter to you of January 9th last.

The strength of the stone is found to be such as to require a pressure of 5,426 pounds per square inch to crush it--a strength much more than is required for the purpose of our court house. The test was made under the direction of Prof. Joseph Henry, Secretary of the Smithsonian Institute, at the Navy Yard, in Washington. . . .

In view of all the facts in the case, I cannot but recommend that the contract contemplating the use of the Lake Superior sandstone be carried out, care being taken to select the best of the stone, and to see that they are properly . . . placed in the wall.⁵⁵

James Hall (1811-1898), geologist and paleontologist who had studied natural science with Amos Eaton at Rensselaer Polytechnic Institute, examined a sample of Basswood Island sandstone and reported,

I have examined the specimen of brown freestone left at my rooms. . . . The rock is a reddish brown sandstone of uniform texture and free from clay seams. For the purpose of building or for ashlar facing, I regard it as a valuable and durable stone. The character of the weathered surface and the presence of lichens show slow disintegration in its natural exposures.⁵⁶

With these statements the company and the industry advertised the soundness of its product.

Timothy T. Hurley of the L'Anse Brownstone Company refuted earlier reports that L'Anse stone was blemished with white specks and promoted stone from his quarry with first-hand accounts of a designer and a builder of Chicago who had inspected the L'Anse Brownstone Company's quarry in the summer of 1876. O. L. Wheelock,

architect, and George A. Gindele, contractor, reportedly expressed enthusiasm about the quality and quantity of the L'Anse sandstone, and noted that the stone on the dock was unblemished. The Marquette Mining Journal for 19 August 1876 summarized their reactions as follows:

They pronounced the stone equal to if not superior to any they have seen and will return to Chicago prepared to recommend it to all who wish to combine beauty with durability in the construction of residences or public buildings.

Gindele Brothers, contractors in Chicago, stated:

This is to certify that we have used considerable quantities of your Brown Stone for the past two years and it gave satisfaction in almost every instance. We consider it a very durable stone and cheerfully recommend it. The knowledge we have of your quarry we consider that any required size can be furnished.⁵⁷

O. H. Wheelock, architect, of Chicago said:

Having made a thorough examination of your Brown Stone quarry at L'Anse, I feel confident that it is the most desirable stone that has yet been placed on this market. All things considered it has fewer defects, and is more uniform in color than other brown stone, and can be obtained in any size required. I saw one piece of the following dimensions split from the main rock--10 feet thick, 12 feet wide, 34 feet long and very nearly perfect in every particular. I am satisfied that a large amount of it would be used in this city next season, provided it could be obtained when wanted.⁵⁸

In 1877 Charles E. Wright, Michigan commissioner of mineral statistics, assisted the industry by seeking the opinion of the "leading architects" of Detroit, Chicago, and Cleveland on the value of Marquette brownstone. William Scott and Company, architects and civil engineers in Detroit, stated:

We have used the Marquette Brownstone, and consider it to be of the very best quality for building purposes, fine grained, easily cut, and keeping color, while the stone hardens with age and exposure to the atmosphere. We consider it fully equal in quality to the Portland Brownstone.

Cudell and Blumenthal, Chicago architects who had designed the Cyrus McCormick House (1877) of red Lake Superior sandstone claimed:

Having used [Marquette brownstone] to a considerable extent, we consider it an excellent building stone, especially adapted to elegant residences and structures, where its beautiful color appears to an advantage. This latter feature must ever secure it favor with the true artist, being rich and warm, and suggestive of vitality. As a working material, it is all that the artist can desire, being soft and tenacious, thus enabling the stone cutter to cut and carve the most elaborate and intricate designs of the architect. Durability being one of the essential qualities, we would add that having carefully observed buildings constructed from this stone which have stood for a number of years, that in our opinion it possesses this property in a high degree. During a short visit to the quarry last summer, we were highly pleased with what we saw, and the inexhaustible quantity of brownstone.

Joseph Ireland, a Cleveland architect, stated:

I have used but little of the Marquette Brownstone; but so far as I can judge from my limited knowledge of it, I regard it as being a very superior material as to color, soundness, and working qualities. In this vicinity its use will doubtless be limited to surface decoration upon white sandstone buildings, and for this purpose it is far preferable to the Connecticut stone, particularly as to its durability; nor would I hesitate to recommend it for entire facing of walls, should any of my clients approve of a "brownstone front," and not object to the cost of it.⁵⁹

Testimony from these leading architects lent credence to the suitability of Marquette brownstone as a unique and sound building material.

Quarry companies expected their quarry superintendents to sell the stone locally. Thus, the secretary of the Portage Entry Quarries Company sent instructions from the main office in Chicago to the quarry office at Jacobsville to promote the stone locally: "We note that you saw Paul Roehm and that he is figuring on a job

that will take all the stone that is at Traverse Bay; we do hope that you will sell him the stone and clean it all up."⁶⁰ Later in the same year the secretary again wrote to the Jacobsville office: "We also note what you say in regard to the church that is to be built at Calumet and we shall certainly expect you to look after this and sell them the stone we have there [at Marquette]."⁶¹

J. W. Wyckoff, superintendent of the Portage Entry Quarries Company's quarry at Jacobsville sought statements from architects, cut-stone contractors, and clients in Duluth, Minneapolis, and St. Paul on the desirable qualities of stone from the Traverse Bay Redstone Company quarry, also located on the Keweenaw Peninsula. In fact, Wyckoff maintained a list of midwestern architects and had on file letters from architects, contractors, and clients expressing satisfaction with the use of Portage Entry red sandstone. Lowell A. Lamoreaux, a Minneapolis architect, stated:

"The Portage Red Stone" furnished by you on several pieces of work recently completed has been more than satisfactory. I have never seen building stone so free from imperfections of any character as the stone furnished from your quarries has been. I shall continue to use this stone where ever it will require a good quality of red stone.

Frank L. Young and Carl E. Nystrom, architects and superintendents in Duluth, wrote: "My experience with your stone is that it is the finest stone known to me, of all the stone around the lakes it is the finest in quality and the most uniform in color." John A. Young and Sons, cut-stone contractors in St. Paul claimed:

During the past season we have used about 4000 cu ft of your "Portage Red Stone." We are entirely satisfied with it. Our customers, also specified same; are well pleased. We have heard no word of complaint from anyone about either quality or color, but have heard architects and contractors speak favorably of it.

In addition, W. P. Arcking, who used the stone in his house at 1800 Vine Place, Minneapolis; Jones and Hartley, stone contractors in Minneapolis; and H. K. Jennings, cashier of the Merchants' National Bank in Charlotte, Michigan, wrote letters expressing their satisfaction with the stone.⁶²

Architects, contractors, and scientists generously praised Lake Superior sandstone, and made known their positions publicly. In this manner, prospective buyers had first-hand statements from recognized public figures. These testimonies were used widely in the promotion of Lake Superior sandstone.

The Portage Entry Quarries Company promoted its "Portage Red" sandstone and "Marquette Raindrop" sandstone in a forty-eight page pamphlet published about 1900. This booklet contained an analysis of the stone's suitability as a building material prepared by F. H. Denton, instructor, Michigan Mining School. Denton reported on the results of mechanical tests of compression conducted at the Watertown Arsenal in Massachusetts and concluded:

As a result of this investigation it would appear that the Portage Entry Sandstone is well adapted to building purposes. Its chemical composition is such as to indicate no danger of the stone losing its color or disintegrating from any chemical changes in its composition. Its crushing strength is above the average for sandstones, and yet not sufficiently high to cause difficulty in working. Its unusual uniformity of texture increases its value both as regards durability and appearance. The only agent likely

to affect it appreciably is the alternate thawing and freezing of some climates. This agent is the most powerful one and no stone can withstand its action of frost well. Since the ratio of absorption is indicative to a certain degree of the power of stones to resist the weather, it is reasonable to expect the Portage stone to weather as well as other sandstones of similar composition. If the stone after quarrying should be well seasoned before being exposed to the weather in buildings, its durability would probably be still further increased.

The booklet contained full-page illustrations of buildings constructed of stone from the Portage Entry Quarries Company and listed a hundred more buildings located in sixteen states--eleven were midwestern states--and in two provinces of Canada. It cited fifteen examples in the Lake Superior region: ten structures in Duluth, three in West Superior, the Gogebic County Court House at Bessemer, and Michigan Mining School at Houghton. It contained letters from one geologist, three architects, and the president of the Northwestern Guaranty Loan Company testifying in support of its desirability as a building material. The booklet indicated that the main office of the Portage Entry Quarries Company was in Chicago. Branch offices in Cleveland, New York, Philadelphia, Pittsburgh, Duluth, St. Louis, and Toronto distributed stocked supplies of the red sandstone.⁶³

Quarries

The major red sandstone quarries clustered in three geographic locations and were scattered along the south shore of Lake Superior where the stone crops out. They were centered at Marquette and Keweenaw Bay in the Jacobsville formation and at Chequamegon Bay in the Chequamegon formation of the Bayfield group.

Quarries were scattered along the shore where the Rock, Laughing Whitefish, and Salmon Trout rivers empty into Lake Superior in Alger and Marquette counties, Michigan, in the Jacobsville formation, and where the Cranberry, Flag, Iron, and Amnicon rivers empty into the lake in Bayfield and Douglas counties, Wisconsin, in the Orienta formation of the Bayfield group (Figure 1).⁶⁴

Alger County, Michigan

The Jacobsville formation extends in a three-to-four-mile-wide belt along the south shore of Lake Superior from L'Anse to Munising. In Alger County at the points where the Laughing Whitefish and Rock rivers empty into Lake Superior and break through the cuesta, one company briefly quarried a dark brown and variegated sandstone in the 1870s, and two, in the 1890s. Earlier, in the 1860s, builders of iron blast furnaces opened quarries on Grand Island and on Grand Island Bay.

At Powell's Point on Grand Island Bay (S27 T47N R19N) and on the southwest end of Grand Island (SE 1/4 S15 T47N R19N) the Schoolcraft Iron Company and the Bay Furnace Company opened quarries in the 1860s. These furnished a fair quality of a light bluish red sandstone, sometimes mottled with lighter and darker colored specks, for constructing nearby iron blast furnaces.⁶⁵ Much later, in the 1920s, stone from another site at Powell's Point (S26,27 T47N R19W) was used to build the Lincoln School and the Sacred Heart Convent in Munising.

In 1870 George Craig of Marquette and Henry D. Smith, a Marquette lawyer, who owned property near the mouth of the Laughing Whitefish River (S25,26 T48N R22W) twenty miles east of Marquette, employed George P. Cummings, a civil engineer and land surveyor of Marquette, to investigate the suitability of the site for extracting stone.⁶⁶ Cummings identified outcrops, ledges, and ridges with little soil cover near the mouth of the river and on a bay or arm of Lake Superior, where he thought a safe harbor could be constructed cheaply and easily. He described the stone as of "even better quality than that being shipped all the way from Bayfield, Wisconsin, to Milwaukee."⁶⁷ With this report, in February 1871, Craig and George Wagner, an explorer and mineralogist of Marquette, secured from Chicago investors financing for developing their quarry.⁶⁸ That spring the company built near Laughing Whitefish Point a settlement called Rockport, constructed a thirty-foot dock, sent to Bayfield for experienced quarrymen, and opened a quarry within 150 feet of the dock, from which it extracted what some anticipated would be a very marketable stone. It opened a second quarry about one mile inland and connected it to the dock by means of a plank tramway, over which horse-drawn cars transported the stone down a gentle incline to the landing.

The Marquette Mining Journal predicted a far-reaching market not only for the fine-grained stone from the newly opened Craig and Wagner quarry at Laughing Whitefish Point but also for brownstone from Lake Superior quarries everywhere. It thought

this stone would supersede marble for "aristocratic city fronts" and "fashionable residences" in all the lake cities.⁶⁹ The newspaper expressed romantically its optimism over the economic benefits of exploiting this natural resource.

The demand for it is unlimited; and these same stones sleeping so many years in obscurity, clambered over by the Indians and furnishing the hiding places for the wolf and bear, are now to be torn from their beds, transported and hewn into tasteful shapes, to be again sent forth in time, to almost every city south and west of Pittsburgh, and who knows, since the Orient and Occident have met, but that the products of this Boreal quarry may yet reflect the sun which lights the Inca or Aztec! And who knows, but the opening of these quarries may mark an epoch, in the history and to a large extent affect the wealth of Lake Superior!⁷⁰

Early indications that the rock was of the best quality, fine grained, and "sufficiently hard to take a fine polish" proved false.⁷¹ The rock did not hold out in uniformly good quality and too much worthless material had to be handled. By September 1871 the company suspended operations at a loss.⁷²

More than fifteen years later, in 1889, Charles Johnston of Marquette, the principal investor in the newly incorporated Rock River Brownstone Company, explored the company's property at Rock River (S14,15,22,23 T48N R21W), three miles west of Au Train and twenty-five miles east of Marquette.⁷³ Drill core samples indicated the extent of a deposit containing a body of top grade, purplish brown sandstone, another solid body resembling the "Marquette raindrop" sandstone, a layer of clear white sandstone, and a layer of brown and white variegated sandstone.⁷⁴

But the removal of the first large blocks more fully demonstrated to outsiders the value of the property.

The capping layer is a variegated stone good for foundations and rubble and immediately under this is a three foot layer of solid brown, free from all defects and possessing as rich a color as any stone on the market to-day. Below this is a deposit of clear white sandstone, something never before found on the peninsula. This stone has a very fine grain, is as solid and dense as the other varieties and is bound to fill a long felt want with builders as it will make a very handsome trimming for the clear brown, far surpassing in beauty any other stone yet used for that purpose. Already the architects have heard of it and a Milwaukee firm is waiting for the first block to be taken from the quarry to test it.

Below these layers are other layers of clear brown. . . . There is every indication the company has struck the richest kind of a thing in the stone business.⁷⁵

In one year's time, between July 1890 and the next summer, workmen cleared and stripped a site, one-half mile in length by fifty-to-one-hundred rods in width, and built a dock, railroad siding, houses, and a mill.⁷⁶ The local newspaper predicted that the Rock River Brownstone Company would become one of the largest and best paying quarries in the Lake Superior region and would contribute to the prosperity of the area. As soon as the Rock River Brownstone Company placed its sandstone on the market the Marquette Mining Journal attributed its success to the ingenuity of Marquette men: "The Rock River Brownstone Company is a Marquette institution, organized, managed and chiefly owned by Marquette men and its success is the success of the industries tributary to this city."⁷⁷

The year 1890-91 was one of great productivity for the Rock River Brownstone Company. It secured four large contracts, three of them for local projects, and one for a project in Bay City. It supplied brownstone for the Alger County Jail at Au Train; the footing, rubble, and sawed stone for the Marquette County Savings Bank; "pure and dazzling" white sandstone for the Odd Fellows and Knights of Pythias Block in Marquette; and brownstone for the Masonic Temple in Bay City.⁷⁸

This success inspired the Marquette incorporators of the Rock River Brownstone Company to establish the Butler Brownstone Company in 1891. They purchased from the Rock River Brownstone Company a 130-acre site immediately north of that company's quarry and opened a quarry within a year.⁷⁹

There is little information on the production for subsequent years. Both companies at Rock River surely suffered from the economic depression of 1893, the gradual disfavor of brownstone, and the difficulty of maintaining a shipping dock on Lake Superior. By the mid-1890s the Butler Brownstone Company probably had closed and the Rock River Brownstone Company slowed down greatly. Both the Butler Brownstone Company and the Rock River Brownstone Company were listed in the Michigan State Gazetteer and Business Directory for 1893. Neither was listed in 1895-96. Through 1906 the Rock River Brownstone Company listed an office in Marquette from which it probably sold the stone it had on hand.⁸⁰

Marquette County, Michigan

Between 1869 and 1900 more than a dozen companies intermittently extracted sandstone from quarries in Marquette County. The principal quarries were located at two sites south of the center of Marquette where patches of Jacobsville sandstone are exposed: at South Marquette (S26 T48N R25W), and at Mount Mesnard (S35 T48N R25W). Two other quarries were opened where the Jacobsville formation crops out along Lake Superior: at the mouth of the Salmon Trout River (S30 T52N R27W), six miles northwest of Marquette; and at Thoney's Point (S35 T50N R26W), three-quarters of a mile north of the Little Garlick River and thirteen miles northwest of Marquette.

Carl Rominger investigated the sandstones of Marquette while conducting a geological survey of the eastern portion of the Upper Peninsula in 1871-73. He described the quarry site in a sandstone patch at Marquette as follows:

The Potsdam deposits seem to have formed a continuous belt all around the Huron mountain district, which must have been an island in the ancient ocean. But a part of these deposits has been washed away again, and only in protected situations have patches of the rocks resisted destruction in places where the denuding forces had freely acted. One of these patches, surrounded by Diorite and Slate hills, we find within the city limits of Marquette, in a small side valley, at the lake front of which the Marquette gas works and an iron furnace have been erected.⁸¹

From the quarries opened in this recess where the stratification is more regular than usual, quarrymen obtained "an admirable fine building material."⁸²

At South Marquette in Section 26, companies formed and operated by Chicago, Detroit, and Marquette investors, several of

whom were cut-stone contractors and dealers and had been trained as stone workers in Ohio and Germany, extracted stone. Eventually most of the firms restructured and consolidated into one, which, under the supervision of John Henry Jacobs, became the major quarry company at Marquette. Jacobs invested in, developed, and managed several companies, all top producers.⁸³

In 1869 Peter Wolf (1819-1902), a German-born, cut-stone contractor in Chicago, acquired from George Craig a portion of the property known as the J. P. Pendill Farm on Section 26 in the southern portion of Marquette, a short distance from the lakeshore.⁸⁴ At this site a quarry had been partially opened some years earlier, and from it stone taken for the construction of Marquette's earliest and "most substantial business blocks"--in fact, the only buildings in town that survived the fire of 1868--and for the construction of the Marquette and Ontonagon Railroad shops. The Marquette Mining Journal for 28 May 1870 projected, "There is upon this land a large bed of excellent red sandstone, which needs only to be properly developed to demonstrate its immense value." Subsequent newspaper articles expressed the belief that the quality of this stone surpassed that used extensively in "the fashionable quarters of New York City," and surpassed "any known deposits in the country." Moreover, the bed of "fine grained, compact sandstone, brown, clear and free from streaks or blemishes" was reportedly inexhaustible.⁸⁵

The Wolf firm was the first to work the Marquette quarry in a "proper and legitimate way," using plugs and feathers to trench

and underseam any size stone in a form nearly as perfect as that obtained with the saw and chisel. The earlier method of extracting stone by blasting with powder frequently checked, shattered, and damaged stone. Wolf and Son shipped by 1869 most of its large fine blocks of uniformly dark brown, moderately coarse-grained sandstone to Chicago. It sold cheaply the rubble for local use in cellar walls and foundations and supplied for home consumption pieces of coarser-grained, less uniformly colored sandstone.⁸⁶ Wolf employed as his foreman John Henry Jacobs, who eventually played a principal role in the development of the sandstone industry in the Lake Superior region.

People expected the development of the South Marquette quarry by Wolf and Son to contribute greatly to the growth of business and commerce in Marquette. The local newspaper said, "In addition to furnishing the bulk of the iron product of the United States, we shall in a few years supply the best building material for all the great lakes cities."⁸⁷

Recognizing the economic value of the sandstone at this location, George Craig had purchased the Pendill Farm in the late 1860s. In April 1869 he sold the parcel already opened to Wolf and Son; in June 1872 he sold the remaining parcel to a group of Marquette men who established the Marquette Brownstone Company, opened a quarry, eventually acquired the Wolf and Son Company, and promoted the use of sandstone locally.⁸⁸

The principal stockholders of the Marquette Brownstone Company were Peter White, Samuel P. Ely, William Burt, Frederick

Wetmore, Sidney Adams, and Henry R. Mather, all frequent collaborators in local and regional business ventures.⁸⁹ Jacobs had a moderate interest and Alfred Green, a local builder, had a small interest. Two experts in Upper Peninsula geology, Thomas B. Brooks of the economic division of the state geological survey of the Upper Peninsula, and Raphael Pumpelly, who taught mining engineering at Harvard and who had served as state geologist of Michigan from 1869 to 1871, held small interests, probably given to them by primary investors to lend scientific credibility to the venture and, thereby, to encourage the investment of others.⁹⁰

Under the supervision of Jacobs, the Marquette Brownstone Company continued to work the quarry opened by Wolf, and expanded it to the adjacent site. In the mid-1870s in a flurry of activity the company erected a stone sawmill and a substantial shipping pier. Then the company furnished stone locally for St. Paul's Episcopal Church, the Superior Block, another business block, and the Marquette High School. Certainly White, a vestryman at St. Paul's, and the other major stockholders, all prominent Marquette citizens, influenced the choice of sandstone for the church and school. White and Mather selected it for their own building, the Superior Block, built by Alfred Green who held a minor interest in the company. In 1878 the company leased its operation to Edward M. Watson and E. B. Palmer, a local firm that supplied goods, supplies, and materials to lumbermen, furnace men, and townsmen. Jacobs continued to superintend the operation until 1881.

On property adjoining the Marquette Brownstone Company's quarries members of the Burt family of Detroit and Marquette opened a quarry in October 1872, after forming the Burt Freestone Company. The Burt Freestone Company erected a sawmill and installed machinery to cut the stone into window sills, water tables, columns, and caps. These it sold, along with blocks and ashlar in brown, variegated, and mottled colors. Although the deposit resembled that of the Marquette Brownstone Company, the stone was lighter in color and inferior in quality. The company was less successful than others and ceased operations by 1879.

The Burt family long had engaged in identifying and promoting the mineral resources of the Upper Peninsula. John and William Burt had assisted their father, William Austin Burt (1792-1858) in a ten-year-long land survey of the Upper Peninsula, conducted in coordination with Houghton's geological survey. John Burt (1814-1886) employed the knowledge and skill gained in conducting the land survey in assisting the development of the mineral resources of the Upper Peninsula through the promotion of the Lake Superior Iron Company, the canal at Sault Ste. Marie, and several iron manufacturing companies. He served as president of the Burt Freestone Company. William Burt (1825-1892) speculated in land, iron mining and manufacturing, invested in Marquette businesses, and managed the Marquette and Pacific Rolling Mills. John Burt's son, Hiram A. Burt (1839-1921), manager of several iron companies and investor in real estate, joined in the family company. Two of William Burt's sons, A. Judson Burt and William A. Burt (1851-1893),

cashier of the Hurley National Bank at Hurley, Wisconsin, also participated. Like the Marquette Brownstone Company, the Burt Freestone Company promoted the local use of brownstone. As a member of the Baptist Church, William Burt probably influenced the decision of its building committee to use variegated brownstone for its Gothic Revival structure in 1884. And Hiram Burt chose smooth-cut hexagonal blocks of variegated brownstone for his elegant French Mansard style house on Ridge Street in 1872-76.⁹¹ In the early 1880s, the Burt family leased the quarry to Jacobs, who paid royalties for the stone his company extracted.

In 1883 Jacobs interested Peter Wolf and Son in forming Wolf, Jacobs and Company to operate and to open more extensively the Burt Freestone quarry, then regarded by some as exhausted. The company built a mill to dress for market stone from both its Marquette quarries and a quarry that it had opened by then at Portage Entry on property leased from the Lake Superior Brown Stone Company. By 1887 Wolf sold out his interest in the company, and it became Furst, Jacobs and Company. The involvement of the Furst family of Chicago in the company provided additional capital needed for machinery, equipment, real estate, and expansion.⁹² Then the company expanded, working quarries formerly operated by the Marquette Brownstone Company and Burt Freestone Company, and in 1891, opened new ones on land it acquired in the First Ward. That year Jacobs sold his interest in Furst, Jacobs and Company. By 1890 Furst, Jacobs and Company showed substantial profits. It divided \$100,000 in cash dividends among six equal partners.

It paid \$500,000 in expenses, \$60,000 in wages, \$129,290 in freight, and \$31,181 in royalties. Its assets included accounts receivable of \$133,000, machinery worth \$75,000, Marquette real estate valued at \$30,000, and capital investments of \$180,000.⁹³

Less successful was the quarry at Mount Mesnard in Section 35. Here, three miles east of Marquette, on 160 acres of land situated on the south slope of Mount Mesnard near the Marquette prison and the mouth of the Carp River and owned by the Michigan Land and Iron Company, a group of Detroit and Marquette investors developed a quarry discovered the year before by Myron E. Orrin, and Mark J. David of Marquette. Test pits and drill core samples taken by George P. Cummings indicated that the deposit was made up of solid, clear brown, fine-grained sandstone that was situated in a bed only ten feet below the surface. With this information Charles H. Little, a manufacturer and dealer in building supplies in Detroit, assembled a group of Detroit investors that included John H. Bissell, a lawyer who acquired a major interest, and Willard S. Pope, an engineer and bridge builder. Alfred Kidder, Boston-born agent of the Champion Mine, and the David brothers, all of Marquette, held minor interests.⁹⁴ The company had ambitious plans to operate the quarry on a large scale, employing the latest in machinery, steam derricks, steam drills, and channeling machines. The company quarried and shipped over 100,000 cubic feet of stone in 1891. But in 1893, then known as the Detroit Brownstone Company, it ceased operations, leased the quarry to others, and sold its equipment.⁹⁵

A contemporary professional opinion forecast the eventual demise of the Detroit Brownstone Company. Henry G. Rothwell, civil and mechanical engineer, claimed that the experience of this company illustrated how money could be lost in quarrying and how men ignorant of the business could induce others to invest in a losing proposition. The sandstone at this quarry on the Carp River overlaid a quartzite formation and was very thin. Although the stone was a pleasing brown color, it was blotched throughout with white spots of hard quartz silica and alumina. The stone in this valley lies on the primary rock at an angle to the horizon of thirty degrees. This produces a strain and caused it to fracture in irregular prisms, almost immediately on being quarried. Rothwell claimed that a careful examination of the property and preliminary work would have revealed the lack of merchantable stone. Instead, at great expense, before the quarry was proven, the company built railroads, purchased and installed machinery, and erected shops, boardinghouses, stables and other buildings. It suffered an enormous, unnecessary loss.⁹⁶

The Newport and Lake Superior Brownstone Company made the major attempt to quarry brownstone west of Marquette on the shores of Lake Superior. At the mouth of the Salmon Trout River (S30 T52N R27W), six miles northwest of Marquette, it opened a quarry in 1888. John H. Gillett (1843-1904), a Marquette lumber dealer and operator of a tugboat business, purchased 270 acres from the Newport and Lake Superior Land Company, and with Richard Blake, also of Marquette, stripped the overburden and opened a quarry.⁹⁷

The Marquette Mining Journal for 9 April 1887 proclaimed, "It will be a Marquette enterprise and all business connected to it will draw to Marquette." Indeed, Marquette investors developed the quarry, Marquette contractors stripped the overburden, Marquette laborers quarried the stone, and Marquette vessels shipped the stone.

The location of the site along the face of the bluff where clear sandstone jutted into the lake reduced the work required to open the quarry. Dirt removed in stripping the overburden was tossed over the edge of the bluff into the water, stone removed in stripping the overburden was used to riprap the dock. From this dock stone was shipped easily by scows to docks at Marquette. Under the supervision of Robert Wagner, the company erected a large blacksmith shop, store, boardinghouse, sleeping shanty, stable, and other structures. The bed yielded brown sandstone similar to that taken in Marquette, but varying considerably from layer to layer. All was reportably marketable, however. In fact, John Lawrence, Marquette's leading stone mason of the time, testified that it equalled the stone used in St. Paul's Episcopal Church (Gordon W. Lloyd, 1874-76). Despite Gillett's early success in securing in May 1889 an order for 25,000 cubic feet of brownstone for the First Presbyterian Church in Detroit, the Newport and Lake Superior Brownstone Company did not profit and endure.⁹⁸

Keweenaw Bay: L'Anse and Portage
Entry (Baraga, Houghton and
Keweenaw Counties, Michigan)

The profitable extraction of sandstone in the Keweenaw Bay area occurred where the Jacobsville formation crops out on the shores of the bay. This outcropping extends in a belt from Pequaming southwest down the east shore of Keweenaw Bay to L'Anse, around the head of the bay to Baraga, and northeast up the west shore of the bay to a point on the Keweenaw Peninsula several miles north of the entry to the Portage River. The rock on the east shore is a hard sandstone of a duller purplish brown than Marquette brownstone, that on the west shore is fine-to-medium-grained and a deep rich brick red.⁹⁹ At least twenty companies owned or leased sites and operated quarries intermittently in the two major locations at L'Anse and Portage Entry and at several scattered locations in Keweenaw, Houghton, and Baraga counties between 1875 and 1918. Production peaked during the late 1880s and early 1890s when the Portage Entry Quarries Company, which operated its largest quarries on the west bay, probably became the largest producer of sandstone in the Lake Superior region. Production declined in the early 1900s and ended by World War One.

The L'Anse Brownstone Company opened the first sandstone quarry in the Keweenaw Bay area near L'Anse in the 1870s. It produced a small amount of stone for three years before the bank foreclosed on its mortgage. The quarry was revived briefly in the 1890s.

In 1875 Timothy T. Hurley of Marquette prospected for marketable sandstone, purchased from Peter Crebassa land on the east shore of Keweenaw Bay, one and three-fourths miles northeast of L'Anse, and organized the L'Anse Brownstone Company.¹⁰⁰ The sandstone at this site (S25 T51N R33W) possessed a rich dark purplish brown color, sometimes banded with pale greenish gray spots, an even texture, and great hardness and strength. The bed was nine feet thick at the point where quarrying began. It extended back from the waterfront some four or five thousand feet and was covered with a drift less than two feet thick. The bayside location enabled the L'Anse Brownstone Company to handle its stone more easily and cheaply than others with beds so far from navigable waters that teams of horses had to haul the product to the shore. A rubble stone crib dock was built into sixteen feet of water, a depth reached less than two hundred feet from the shore. Rubble stone cribs just north of the quarry served as a breakwater and enabled ships to land in all kinds of weather. Large blocks of stone could be broken loose from the quarry, swung from the beds by a steam-powered derrick, loaded on tramcars, and carried without steam or horse power down an inclined tramroad that ran the full length of the dock to ship's side. Another steam-powered derrick hoisted the stone from the docks onto the ships.

First managed by E. M. Wood, an Ohio quarryman and former employee of the Burt Freestone Company, and later managed by George Craig, the L'Anse Brownstone Company shipped no more than 10,000 cubic feet per year during the 1870s, despite management's

predictions that it would produce ten times that amount and claims that it would collect on promises for orders sixty times that amount.¹⁰¹ The L'Anse Brownstone Company went bankrupt in 1879. It was sold for \$5,000 to the highest bidder, the St. Clair brothers of Ishpeming, investors in mining property.¹⁰² In 1893 Chicago men revived on a small scale this quarry company and produced 2,000 cubic feet in 1894, 23,000 in 1895, and 21,000 in 1896.¹⁰³ During each period of operation, the L'Anse quarry furnished stone for local buildings. The First Methodist and Catholic churches in L'Anse of the 1870s and 1890s are examples.

At Portage Entry, fourteen miles east of Houghton, companies opened quarries which became famous and proved lucrative to their owners and operators. In fact the twelve-foot bed of sandstone located here was said to make the Portage Entry quarries "yield like gold mines."¹⁰⁴ Recognizing the superb quality of the sandstone here and the facility for its shipment by water, speculators acquired titles and leases to land on the northeast side of the entry as early as 1870. At this point the stone crops out horizontally in a bluff which rises from the bay and is readily accessible for removal to ships. But quarry operations did not begin here until 1883. Around them grew the settlements of Portage Entry, Craig, Jacobsville, and Red Rock. Two of the largest companies consolidated in 1893 and gradually took charge of some of the smaller ones as well. The largest producers of sandstone in this area were the companies associated with John Henry Jacobs from 1883 to 1902: the Wolf and Jacobs Company and its successors, the Furst and

Jacobs Company, and the Furst, Neu and Company; the Portage Entry Quarries Company, a consolidation of the Furst, Neu and Company, and the Portage Entry Red Stone Company; and the Kerber-Jacobs Redstone Company.

Wolf and Jacobs Company opened the first quarry at Portage Entry in 1883 on the twelve-foot-deep sheet of sandstone discovered by Jacobs and Craig more than ten years before and noted by Foster and Whitney more than thirty years before. The Company leased from the Lake Superior Brownstone Company a site described as Lot one of Section nineteen (T53N R32W).¹⁰⁵ At this site the clear red stone was considered "unsurpassed" in quality for building purposes and "inexhaustible" in quantity. Even the laminated red and white stone was thought suitable for trimmings and ornamentation. The Marquette Mining Journal described the sandstone of Lot one as follows:

The thick layer of uniform merchantable stone, of beautiful color and fine texture, rises out of the lake at the western boundary of the property, and runs a quarter of a mile east where it thins out abruptly and becomes worthless. At the western limit overlying the clear stone is ten feet of thinly laminated stone, much of which is very beautifully variegated and striped, clear white alternating with clear brown.¹⁰⁶

Chicago men invested in the company, reorganized as Furst, Jacobs and Company in 1887. Jacobs supervised the work at the quarry during the years of greatest production and expansion, eventually selling out his interest in 1891. Then the company reorganized as Furst, Neu and Company. Jacobs received \$100,000 for his one-sixth interest in Furst, Jacobs and Company. The Marquette Mining Journal for 6 June 1891 observed that with "no money but lots of grit" and

"by hard and intelligent work" the firm of Wolf, Jacobs and Company "began to be known in the world," was succeeded by Furst, Jacobs and Company and assumed "enormous proportions." From its early production of 90,000 cubic feet of stone in 1885, the company effected technological improvements so that production consistently exceeded 300,000 cubic feet annually between 1887 and 1891. Its peak was 450,000 cubic feet in 1890.

In 1893 Furst, Neu and Company and the Portage Entry Red Stone Company consolidated as the Portage Entry Quarries Company, with capital stock that totalled \$1 million.¹⁰⁷ The firm placed J. W. Wyckoff, a Marquette man experienced in construction work, in charge and opened an additional quarry on Section eighteen (T53N R32W). Wyckoff continued to manage locally the consolidated Portage Entry Quarries Company until it ceased operations around 1909. The quarry on Lot one of Section nineteen produced a total of 2,537,688 cubic feet of top grade and variegated stone between 1883 and 1898. Production consistently exceeded 300,000 cubic feet each year for the period 1887 to 1891 but peaked at about 450,000 cubic feet in 1890. The quarries on Section eighteen produced 487,029 cubic feet of stone between 1893 and 1898, averaging 81,171 cubic feet per year.¹⁰⁸ Over time the Portage Entry Quarries Company ran a large business, operating quarries on sections thirteen, eighteen and nineteen, and on land leased from the Traverse Bay Redstone Company (S6 T56N R31W). As Wyckoff explained, the Portage Entry Quarries Company was to commercial red stone what the Calumet and Hecla Mining Company was to copper.¹⁰⁹

The Portage Entry Quarries Company operated according to sound business practices anywhere. The management of the company in Chicago, the agent in Marquette, and the superintendent of the quarry at Portage Entry corresponded daily. They discussed stripping new beds; shipping arrangements, including locating scows capable of transporting stone to various ports, the cost of freight, and negotiations with railroad companies; marketing the stone through the Chicago or Marquette office and by bidding on jobs locally; improving or constructing docks and the costs involved; moving stone from one agent or yard to another to fill orders; wages and expenses; keeping good workers; maintaining machinery and equipment; renewing contracts and arranging visits; and cutting stone at the sawmill in Marquette.¹¹⁰

On a 424-acre site (S8 T53N R32W) on Keweenaw Bay, one mile north of Portage Entry, John H. Jacobs made plans to develop a quarry in October 1892, after selling out his interest in Furst, Jacobs and Company and organizing the Kerber-Jacobs Redstone Company. But first, he conducted drilling tests over a year-long period to determine the quality and extent of the sandstone bed. He assembled a group of investors, which included a Chicago man named Kerber, probably the son of Henry Kerber, the Chicago cut-stone contractor and partner of Henry Furst from 1861 to 1865 and the Marquette contractors, Powell and Mitchell.¹¹¹

Powell and Mitchell employed seventy men to strip the overburden of the Kerber-Jacobs site and construct a shipping dock

on the unprotected shore of Keweenaw Bay. They opened the quarry one hundred feet from the edge of a fifty-two-foot bluff which forms the shore of the lake at that place. They cut and graded a road from the opening to the lake in direct line with the dock and on it laid a track over which steam-powered dump cars hauled stone. Parallel to the shore they put in a bulkhead of cribs made from heavy hemlock logs and filled with riprap discarded when stripping the quarry opening. They constructed a dock that extended into the lake 1,000 feet. Along the broad avenue leading from the quarry to the dock grew the settlement of Red Rock. The company's structures stood nearest the quarry. Higher up the hill some workers built hewn-log houses side by side. W. J. Fales, superintendent of the quarry, oversaw the construction of two large boardinghouses, a blacksmith shop, barn, storehouses, and offices. The local newspaper said that "Redrock is already a very handsome little village" and noted the huge scale and full development of the Kerber-Jacobs quarry.

The Kerber-Jacobs company is starting out on a scale never before approached here, its equipment being perfect in every feature. It will spring into the field full armed both in quarrying and shipping facilities and as it is believed to have the thickest solid bed of stone ever tackled in this part of the country its operations are already attracting attention and it promises to be a large shipper this year.¹¹²

By 1895 Kerber-Jacobs shipped 137,529 cubic feet of stone and in 1896, 125,000 cubic feet. It was then the second largest producer in the Keweenaw Bay area.¹¹³ Its success was attributable to the rich bed of stone, the business and technical skill of its

president, solid financial backing, and its Finnish workers.¹¹⁴ But by 1895 the sandstone industry at Portage Entry experienced the first tremors of its decline.

The several smaller companies formed in the 1890s met with more limited success, in part because by 1895 the industry was faltering. In April 1891 James H. Seager of Hancock and men from Detroit and from Racine, Wisconsin, formed the Excelsior Red Stone Company to quarry stone on a site (S8 T53N R32W) two miles inland from Red Rock. Seager managed the quarry locally. F. L. Smith managed the general offices in Detroit.¹¹⁵ Locating the "true sheet" of stone took one year of systematic exploration. The marketable strata averaged eight feet in thickness, but twenty-one feet of material needed to be removed to reach it. The Excelsior Redstone Company transported its sandstone over three miles of railroad to Red Rock, then shipped it from the docks of the Kerber-Jacobs Company. In 1894 it shipped 18,000 cubic feet and in 1895, 45,000 cubic feet. Because it was unable to sell the stone it had in stock, it produced nothing in 1896 and ceased operations.¹¹⁶

In 1889 a group of Marquette men organized the Building Stone and Mineral Exploring Company to explore for sandstone on land near Portage Entry. Satisfied with the results of its testing, a group of nearly the same men formed the Lake Superior Redstone Company with a capital stock of \$2 million. It acquired from the Building Stone and Mineral Exploring Company the lease of fifty-five acres (Lot 3, S19 T53N R32W) adjoining the government lighthouse reservation and the Furst and Jacobs

quarry. As the Marquette Mining Journal explained, "Now-a-days sandstone quarries are not opened up in a happy-go-lucky manner." Drill samples demonstrated that "the splendid sheet of No. 1 stone on which the Furst-Jacobs and Malone companies are now working" extended upon it and in greater density than existed on the latter's properties when quarrying first had commenced.¹¹⁷ J. W. Wyckoff, then superintendent of the Furst-Jacobs quarry, took charge of explorations for the Building Stone and Mineral Exploring company and presented the following report:

The boring done shows conclusively that the sheet of stone which is now being quarried by Furst, Jacobs & Co. and the Portage Red Sandstone company underlies the entire Building Stone & Mineral Exploring company's tract, the greater portion of which, as is the case with the two properties mentioned, is a No. 2 quality. I succeeded, however, in locating a belt of No. 1 stone, beginning at a point 480 feet west of the north-east corner of said tract, this belt runs southeast by south, and cores taken out for a distance of about 900 feet at intervals of from 100 to 150 feet, the width of said belt being about 200 feet. It was my intention to continue testing the belt entirely across the property, as far as it extended, but as the drill had to go elsewhere I was not able to complete the work I had mapped out. I have no doubt, however, but that the belt of No. 1 stone extends nearly if not quite across the tract. . . .

Comparing this No. 1 belt of stone with that which Furst, Jacobs & Co. are working, and its value becomes more apparent, the total of which was 1,100 feet long, 225 feet wide with an average thickness of about 7 feet, giving 1,692,500 cubic feet of No. 1 stone, or only 252,000 feet in favor of the famous Furst, Jacobs & Co. quarry. Should the Building Stone & Mineral Exploring Co.'s belt prove to be 1,400 feet long it would give a total of 1,680,000 feet of No. 1 stone. Comment is not necessary.¹¹⁸

Lot three was sited so as to permit the construction of a short dock, well protected from winds, and it contained a stand of

timber for its construction. On this property a break in the terrain saved about eighteen feet of stripping. Only one or two feet of earth covered the first layer of stone. The twelve-foot sheet of top grade stone on which the Furst-Jacobs and Malone companies were working was covered here by various layers of stone, much of it merchantable, to a depth of about fifteen feet.

By summer Powell and Mitchell had uncovered a space 108 feet by 185 feet, installed machinery, and constructed a dock.¹¹⁹

The Marquette Mining Journal for 1 August 1891 noted that

No mistake has been made in opening the new quarry and every dollar has been wisely expended. It will make a better record in this its first season than either of the old quarries did in their first year and the experience gained in handling the stone in the older openings will be of constant value in the working of the new. The stone is there in the quantity and quality which have made the Portage quarries famous and the fortune is there also for the stockholders just as it was in the other two.

Inland, in Houghton and Keweenaw counties, several quarries extracted stone for local use. Two were the Torch Lake Quarry and the Traverse Bay Red Stone Company. By 1880 the Calumet and Hecla Mining Company, then undergoing a period of great growth and expansion both at its copper mine location in Red Jacket and at its stamping mills at Lake Linden, took red sandstone from a site known as the Torch Lake Quarry (S1 T55N R33W) on a sandstone ridge just west of Lake Linden and near its railroad line between Red Jacket and Lake Linden. It used the company railroad between the mine and the stamping mill to transport the stone which was employed in some of its industrial buildings at Calumet and South Lake Linden.¹²⁰

In 1894-95 Charles Hebard of Pequaming formed the Traverse Bay Red Stone Company to quarry a pink-to-reddish-colored stone with white mottling on a 120-acre parcel of land (S6 T56N R31W) at the headquarters of the Trap Rock River north of Lake Linden in Keweenaw County. Hebard laid eight miles of railroad track from the quarry west to land he owned on Keweenaw Bay, where he built a one-hundred-foot dock. He developed and equipped the quarry and shipped 6,500 cubic feet of stone in 1895. In 1896 20,000 cubic feet of stone were extracted; it then closed.¹²¹

Listed in the ledger for the Traverse Bay Quarry, later operated under lease by the Portage Entry Quarries Company and under lease from the Charles Hebard estate, is the evidence that the Hebard site supplied rubble and sawed stone to local mining companies, builders, suppliers, and projects. It furnished rubble stone for the Baltic, Ahmeek, Allouez, Champion, Centennial, Mohawk, and Trimountain mining companies and to such local builders as Paul Roehm, Edward Ulseth, and Peter Donahue.¹²²

Bayfield and Douglas Counties, Wisconsin

The sandstone of the Bayfield group lies in a six-to-eight mile-wide strip of land bordering Lake Superior in northern Wisconsin. This belt extends almost from the Montreal River on the east to the northwestern corner of the state. Except for bold sandstone cliffs that project at many points along the south shore of the lake and on the Apostle Islands, the sandstone everywhere is covered with a thin layer of clay. In Bayfield County it forms

bold and nearly vertical cliffs along the lakeshore, some rising forty or fifty feet. In Douglas County it is found in the channels and banks of nearly all the streams for a distance of from one to three or four miles from the lake and extending to the crystalline rocks. Between 1868 and 1910 twenty-four companies extracted sandstone from fifteen quarries in the Bayfield group: nine quarries were clustered in the vicinity of Bayfield and Washburn and on three of the Apostle Islands in the Chequamegon formation; six were scattered along the south shore of Lake Superior in the Orienta formation.

F. T. Thwaites, assistant state geologist in Wisconsin, identified the quarry sites producing good stone in the Chequamegon and Orienta formations. He noted that merchantable building stone is found only in certain more or less well-defined horizons.

It will be noted that the quarries, especially those in the Apostle Islands, are arranged in a nearly straight line along the strike of the formation. Therefore, but one horizon of good quarry rock is believed to exist in the Chequamegon formation, although good stone was seen at many scattered points. Less is known about the Orienta sandstone. The best brownstone is that found at Port Wing and Orienta, but it is most probably that the brownstone quarry on Amnicon River is at a lower horizon. The quarry at Fond du Lac does not produce a true brownstone, the rock being firmer, more felspathic, and irregularly colored red and white.¹²³

The sandstones of the Bayfield group vary in color from a light reddish brown to a very dark bluish brown. Some contain white streaks and spots that give it a variegated coloration. The (St. Paul) Pioneer Press described simply and romantically the sandstones from the Duluth Brownstone Company's quarry at

Fond du Lac and the Bayfield Brownstone Company's quarry on Chequamegon Bay, "They are essentially the same stones, both being Potsdam sandstones, colored to their beautiful brown by some ante-diluvian alchemy which diffused through every particle of rock its necessary atoms of iron pigment."¹²⁴

In the Chequamegon Bay area companies opened quarries on Basswood, Presque Isle, and Hermit islands, and at Houghton and Van Tassell's points. Production was heaviest between 1883 and 1896. It peaked in the early 1890s when the Ashland Brownstone Company, the Excelsior Brownstone Company, and the Superior Brownstone Company quarried stone at Presque Isle, Hermit Island, and Basswood Island, respectively; when the Washburn Stone Company, the Hartley Brothers, and the Prentice Brownstone Company quarried stone at Houghton Point; and when R. D. Pike extracted stone from Van Tassell's Point. The Ashland Daily Press reported the total production for 1892 for the seven quarries in the Chequamegon Bay area at 2,313,000 cubic feet.¹²⁵

In 1868 Captain Almson Sweet, D. L. Wells, and other Milwaukee prospectors selected a quarry site (S4 T50N R3W) at the south end of Basswood Island, sometimes called Bass Island, after searching for fifteen months for a location along the bay and the lake.¹²⁶ Investors purchased land and hired workmen to erect docks and install machinery. Together they developed the first brownstone quarry in northern Wisconsin and helped launch the industry in the Lake Superior region. The first stone extracted was for the Milwaukee County Court House.

Many questioned the advisability of using Lake Superior brown sandstone from Basswood Island for the construction of so important a public building, until scientists, engineers, stone masons, scholars, and respected citizens testified that the stone was sound. In June 1871 the Basswood Island quarry completed the shipment to Milwaukee of stone for the Renaissance Revival court house. And the erection of the Milwaukee County Court House in Basswood Island sandstone helped to establish the reputation of Lake Superior sandstone as a building material for all kinds of structures. It set a standard for public buildings in the Lake Superior region. In the 1880s, 1890s, and 1900s, when Bayfield, Washburn, Ashland, and Superior had progressed socially and economically, Bayfield brownstone would furnish the building material for northern Wisconsin court houses, a federal building, libraries, schools, railroad depots, banks, and other public buildings. The Bayfield Press for 24 June 1871 reported the Milwaukee County Court House shipment as follows:

The brig Starlight is now at Basswood Island, loading with brown stone for the Milwaukee Court House. She will take 500 tons this trip. We understand that this load will nearly complete the contract for that magnificent building. The work in the quarry will still go on. Several large contracts are already made with different parties in Chicago, and the quarry will be taxed to its utmost to supply the demand. The stone is better as the work progresses and large quantities are being taken out.

During the season of 1871 Chicago investors had expressed an interest in acquiring the quarry on Basswood Island, but Strong, French and Company continued to employ seventy laborers to extract

and supply stone to Chicago and Milwaukee markets. That summer the company announced plans to add three large buildings to its fourteen-structure settlement on Basswood Island and it recruited more men for its fifty-man labor force.¹²⁷ The following year the Bayfield Press of 4 May 1872 noted the great demand for Lake Superior brownstone in Milwaukee and Chicago and predicted that in a very few years it would be one of the greatest and wealthiest resources of the region. In the mid-1870s legal difficulties over the titles to the land caused the quarry to be inactive. But from 1883 to 1888 Cook and Hyde, cut-stone dealers in Milwaukee leased and operated the quarry. In 1891 a group of Ashland investors organized the Superior Brownstone Company, and leased and operated the Basswood Island Quarry until 1893. In 1898 a group of Superior men formed the Bass Island Brown Stone Company.¹²⁸

Throughout the early history of the stone industry on Basswood Island, its operators exploited the advantages of its waterside location. They transported the stone exclusively by water on company-owned vessels. Even though opening the quarry required the removal of from three to four feet of clay soil and fifteen feet of rubble stone, nearly always the sale of the rubble for piers and breakwaters paid for the cost of removing it.

In 1886 William Knight of Bayfield announced his plans to open a quarry on Presque Isle. Knight, John Knight, and D. S. Kennedy of Ashland formed the Ashland Brownstone Company and chose a lakeshore site (S4 T51N R2W) which offered unequalled advantages for shipping by water and for disposing of rubble and stripping

material.¹²⁹ Stone was taken from the quarry until 1897, when Chicago investors who then owned it suspended operations.¹³⁰

The largest and most ambitious quarry operation in the Chequamegon Bay area during the period when the industry here grew to "mammoth proportions" was the Prentice Brownstone Company quarry on a 764-acre site (S27 T49N R4W) with one mile of water frontage at Houghton Point three miles south of Washburn. In 1888 a group of Ashland and New York City investors, led by Frederick Prentice, organized a corporation with capital stock of \$1,250,000 to develop a quarry on land held by Prentice since 1857.¹³¹ During the summer of 1887, a large work force cleared land and stripped earth from the surface for what the local newspaper forecast would be "one of the largest stone quarries in this section of the country." The Chicago, St. Paul, Minneapolis and Omaha railroad laid a side track right up to the works. And tramways led from the quarry to docks so stone could be shipped either by rail or by ship. Within one and two year's time, the company employed between 200 and 250 workers and "the brownstone town of Houghton" had a Main Street, numerous workers' cottages, three boardinghouses, sawmills, and a general supply store and blacksmith shop. The operation itself employed eleven steam channelers, twelve derricks, and a large sawmill.

Prentice said that he intended to ship the stone chiefly to New York City by way of Buffalo and the Erie Canal. He anticipated his principal markets to be New York, Boston, and Philadelphia, but thought he would also ship to Chicago, Milwaukee, and Detroit.¹³²

Prentice sold the stone locally as well. Two years after opening the quarry, he installed a large sawmill and ran it year round. He erected a combined storehouse, workshop, stables, and barn, and installed a reservoir tank and water system. He ordered a stone traveler (an engine and machinery fitted to run on a track above the quarry and back to take stone anywhere, piling it for shipment), and ordered a self-propelled stone piling car capable of drawing two or three loaded cars. Both enabled the company to stockpile a large quantity of stone through the winter for spring shipment. Explained Prentice: "We are not trying so much now to get out a large quantity of stone, as to get the quarries in thorough condition for handling orders of almost any magnitude in quick time."¹³³

From the time it opened until it went bankrupt in 1893, the Prentice Brownstone Company conducted business on a large scale. It furnished stone for the Cincinnati City Hall (1889-90), the Lumber Exchange (1885) in Minneapolis, the Potter Palmer House (1889) in Chicago, and the Washington High School in St. Paul. It provided the stone for the Government Building (1894) in Ashland.¹³⁴

Bankruptcy diminished neither Prentice's ambition nor his ability to raise money. In 1891 Prentice opened a quarry on a site on Wilson Island (SE1/4 S13 T51N R3W), later named Hermit Island, after E. E. Davis of Ashland had prospected for a good location. Within two years he organized the Excelsior Brownstone Company and convinced S. S. Fifield, Edwin Ellis, F. E. Goddard, and L. C. Tobias of Ashland to furnish the capital needed to develop it properly. Production reached 220,000 cubic

feet of stone annually for the period 1893 to 1895. By 1897 operations ceased.¹³⁵

Robinson D. Pike of Bayfield opened the first quarry on the mainland at Van Tassell's Point (S33 T50N R4W) south of Bayfield in the fall of 1883. The large amount of rough and shattered rock removed in reaching the solid bed of stone was used to fill docks then going in at Washburn. After "experts in various cities" had pronounced the stone first class, Pike purchased a steam drill, erected a derrick, and took orders from people in Minneapolis and St. Paul. Facilities for shipping the stone by water were good at this site and were thought likely to improve with the arrival of the railroad. The local newspaper predicted

the day is not far off when the brownstone from the Bayfield quarries will be in far greater demand for building purposes than any other stone on the continent, and that not one, but many of these quarries will be opened, developed and profitably worked.¹³⁶

In March 1885 Pike traveled east to purchase machinery for his quarry. Of the 17,156 cords of stone produced and shipped from the Pike Quarry during the season of 1885, 15,228 went to Washburn and 1,098 to Ashland.¹³⁷

In 1885 C. N. Babcock and W. H. Smith, operators of a quarry at Kasota, Minnesota, who held reputations as "practical stone men," opened a quarry at Houghton (S27 T49N R4W) between Washburn and Bayfield. Known as the Washburn Stone Company quarry, it was worked continuously for eleven years, producing annually on the average of 100,000 cubic feet of stone and in 1892, its most productive year, 185,000 cubic feet. Stone from the Washburn

Stone Company quarry was used locally in the Bayfield County Courthouse (1895), the Northern State Bank, the Union Block (1889), and the Walker High School (1893-94) in Washburn.

When rumors of the opening of the quarry by Minnesota stone men reached Washburn, the Bayfield Press again expressed its optimism:

The anxiety manifested by practical stone quarry men, as well as others not so practical, to secure a foot hold in the Bayfield brown stone quarries, demonstrates beyond belief what the Press has so long maintained is a fact, viz., that there's millions in the Bayfield brown stone if properly developed.¹³⁸

Lake Superior brownstone was extracted from quarries along the south shore of the lake from Range six to the northwestern corner of Douglas County. A man named Ingalls opened the first quarry in the Orienta formation at Fond du Lac (Lots 1 and 2, S6 T48N R15W) in 1869. Operations continued here regularly except for the period 1873-85. In 1887 J. H. Crowley of Duluth assembled a group of investors and incorporated as the Duluth Brownstone Company, sometimes called J. H. Crowley and Company. The stone taken from the quarry at Fond du Lac was sold principally in Superior, Duluth, Minneapolis, and St. Paul. It was quarried cheaply, loaded on scows and shipped by tugs to Duluth. The stone, a Number two or three grade, did not possess a uniform color and was less desirable than that extracted from the quarries of the Chequamegon Bay area.¹³⁹

In the 1880s and 1890s, concurrent with developments at the Chequamegon Bay quarries, companies opened quarries at five sites on rivers on the south shore of Lake Superior: the Amnicon,

Flag, Cranberry, and Iron rivers. Two are worthy of special mention. In 1886-87 A. J. Cheney and N. S. Maxwell of Kenosha, Wisconsin, opened a quarry on a site (S32 T48N R12W) on the Northern Pacific Railroad and Amnicon River about ten miles east of Superior and seven miles south of Lake Superior. Called the Arcadian Brownstone Company, it constructed a village for a work force of thirty. After its first shipment in May 1888, it secured contracts for supplying the stone for the Masonic Hall and Opera House (1889) in Duluth and the Todd and Listman Mills (1892) and the St. Francis Cathedral (1892) at Superior.¹⁴⁰

The Flag River Brown Stone Company, incorporated in 1889, quarried stone at Flag River, thirty-two miles west of Duluth on a site (S19 T50N R8W) leased from Isaac H. Wing of Bayfield. In 1891 it extracted over 100,000 cubic feet of stone. It employed nearly forty men in its yards at Duluth and fifty at the quarries. The Flag River Brown Stone Company ceased operation in 1894 when its lease expired, but the Portage Entry Quarries Company continued the work here until the early 1900s.¹⁴¹ The companies operating in the Orienta formation did not flourish to the same extent as those working in the Chequamegon formation because, in part, they lacked good harbors for water transportation.

Conclusion

At the moment the sandstone quarry industry rose to its period of greatest production and the cities and towns of the Lake Superior region reached their period of greatest prosperity and

growth, the massive, ponderous, stone forms of the Richardsonian Romanesque style of architecture came into popularity in the Midwest. This mode, named for Henry Hobson Richardson (1838-1886) was particularly suited for expression in colored stone. Richardson had given name to the style through his designs for buildings that borrowed elements from the medieval French Romanesque and massed towers, arches, and buttresses in varied colors and textures of Connecticut brownstone and Hallowell granite. The stone and the style gave the builders of the Lake Superior region an architectural medium capable of expressing their ambitions, tastes, and fears, durable enough to withstand a harsh climate, and rugged enough to harmonize with wild surroundings.

The quarry industry declined in the late 1890s. After the depression of 1893, employment and production at the quarries fell off, supplies on hand were sufficient to fill orders, and many quarries became idle. The value of sandstone produced in Michigan plunged from \$290,578 in 1901 and \$188,000 in 1902 to \$13,000 in 1911.¹⁴² The director of the Michigan geological and biological survey cited as causes the depression of the 1890s and the great distance of the deposits from large markets. Also, lighter-colored natural stones had gained favor. Then, too, artificial stone, concrete, and brick displaced natural stone. These man-made materials cost less and could be handled more rapidly and easily and conformed to the "fads" of architects seeking "a variety of artistic effects."¹⁴³ Moreover, brick manufacturers mounted a successful campaign against stone.

The commissioner on mineral statistics reported 1895 an unprofitable year for producers of Lake Superior sandstone and explained the changing fashion:

Architects have pronounced against it in their plans and specifications, not because it is not substantial or beautiful, but for the reason that architecture must have change of style and material the same as millinery and tailoring. They claim that too much sandstone was being used, and that the sameness must be broken into by the use of stone of other kind and color. . . .¹⁴⁴

The decline of the fashion for Lake Superior brown sandstone greatly disappointed and perplexed many residents of the Lake Superior region. On learning that Portage Entry red sandstone had lost out to Bedford white limestone for the construction of the Federal Building at Sault Ste. Marie, despite the opposition of the Business Men's Club and prominent Upper Peninsula citizens to federal architect John Knox Taylor's decision, the agent of the Portage Entry Quarries Company in Marquette observed, "So here we we have a building, next door to the quarry, so to speak, requiring about 16,000 feet gone into Bedford."¹⁴⁵

In April 1908 Joseph Thomlinson, president of the Portage Entry Quarries Company, instructed Wyckoff to limit quarrying that year to 50,000 cubic feet. Thomlinson explained, "The prospects and outlook for the consumption of red stone is simply deplorable, and all we can depend on is simply additions to present existing buildings."¹⁴⁶

The Board of Directors of the Portage Entry Quarries Company met on 12 January 1909 and decided not to renew Wyckoff's contract. It notified Wyckoff immediately and explained simply the reason:

"That the outlook of the colored stone business does not warrant the quarrying of any Portage Red Stone."¹⁴⁷ By then, however, sturdy red sandstone buildings stood proudly and prominently in the cities, towns, and villages of the Lake Superior region. They are monuments to a once flourishing native industry that extracted stone from the rocky shore of Lake Superior in the Jacobsville formation and the Bayfield group.

FOOTNOTES--CHAPTER II

¹At Sault Ste. Marie, where the Jacobsville formation lies beneath the St. Mary's River and no outcrops were suited for quarrying, stand numerous buildings constructed of this material that here ranges in color from a light gray to a brick red. Known locally as "canal rock" because it was excavated from the shipping locks canal beginning in 1853-55 and from the power canal of the Michigan Lake Superior Power Company in 1898, it furnished the building material for many structures. Some significant examples are: Michigan Lake Superior Power Company Hydroelectric Plant (Edison Sault Electric Company), 1898-1902 (J. C. Teague, architect); Central Methodist Church, 1893 (after the frame Owosso Methodist Church); St. James Episcopal Church, 1902 (J. C. Teague); Water Tower; McTavish Building (Murray Hill Hotel, destroyed 1940s); Everett Block, 519 Ashmun; Comb Building, Portage Avenue; the Antlers, 804 E. Portage; D. K. Moses and Company Dry Goods Building, 500 block Ashmun; and the commercial building at 226 Ashmun.

Douglass Houghton, an early explorer-geologist in Michigan, had observed this stone in specimens taken from the excavation for a mill race. He had warned against its use in the construction of the locks, but had approved its use for ordinary walls (Second Annual Report of the State Geologist, Michigan. House Doc. 8, 1839, pp. 14-15). Nevertheless, the sandstone taken from the St. Mary's was used for the protection walls of the canal and for stone fences. Carl Rominger observed that it decayed on exposure to frost and weather (C. Rominger, "Palaeozoic Rocks," Michigan, Geological Survey of Michigan, vol. III, Upper Peninsula 1869-1873, p. 84).

²Bayfield was named after Captain Henry Bayfield (1795-1855) of the British Royal Topographic Engineers, who first carefully explored the sandstone of the Lake Superior region while conducting his trigonometrical survey of the Lake Superior region in 1822-23.

³Wm. Kenneth Hamblin, Cambrian Sandstone of Northern Michigan (Michigan Department of Conservation, Geological Survey Division, Publication 51, 1958), pp. 15, 139, plate 1; David Marcel Hite, "Sedimentology of the Upper Keweenawan Sequence of Northern Wisconsin" (Ph.D. Diss., University of Wisconsin, 1968), p. xix, and figure 2; F. T. Thwaites, Sandstones of the Wisconsin Coast of Lake Superior (Wisconsin Geological and Natural History Survey, Bulletin 25, Scientific Series, No. 8, 1912), pp. 25-26.

⁴Thwaites, pp. 33-47.

⁵For summaries of the development of nomenclature of the Lake Superior sandstones of northern Michigan and Wisconsin, see Hamblin, pp. 4-10 and Hite, pp. 8-13.

⁶John A. Dorr, Jr. and Donald F. Eschman, Geology of Michigan (Ann Arbor: University of Michigan Press, 1970), p. 91.

⁷Hite, pp. 193-94, 196. A forthcoming publication supports the correlative relationship between the Jacobsville formation and the Bayfield group (Richard W. Ojakangas and G. M. Morey, "Keweenaw Sedimentary Rocks of the Lake Superior Region: A Summary," Geological Society of America, in press).

⁸J. C. Makens, J. P. Dobell, and A. D. Kennedy, "Study of Technical and Economic Aspects of an Expanded Stone Industry in Michigan," Michigan Department of Commerce, Office of Economic Expansion, Research Project no. 23 (Houghton: Institute of Mineral Research, Michigan Technological University, 1972).

⁹Hite, pp. 137, 150, 155.

¹⁰Conglomerate, not correctly a sandstone, contains larger pebbles of gravel or boulders (Hamblin, p. 23).

¹¹Michigan, Michigan and Its Resources, John W. Jochim, Secretary of State, comp. (Lansing: Robert Smith and Co., 1893), p. 80.

¹²Hite, p. 130.

¹³Ibid., pp. 145-46. For earlier comparative data of Bass Island sandstone (1873-79), Portage Entry sandstone (1902), and L'Anse and Portage Entry sandstones (1895), see R. D. Irving and George A. Koenig in the J. W. Wyckoff Papers; and Michigan, Mineral Statistics, 1895, respectively.

The J. W. Wyckoff Papers are the major primary documents on the quarry industry in this dissertation. They contain the correspondence, quarry maps and drawings, time books and payroll sheets, ledgers, contracts, vouchers and miscellaneous papers of the superintendent of the Portage Entry Quarries. They are held at the Michigan Technological University Library Archives and Copper Country Historical Collections, Houghton, Mich.

¹⁴Ibid., p. 134.

¹⁵Ibid., p. 148-50.

¹⁶Hamblin, pp. 23-25. Hite summarizes P. H. Oetking's explanation for these features: "Decomposition of organic matter with or without accompanying bacterial growth caused a low pH and reducing conditions. These conditions were most pronounced about the organic nucleus and decreased outward in a texturally homogeneous rock as a spherical front. The iron oxide would be removed in solution and precipitated beyond the influence of the organic core or possibly partially converted to a carbonate" (Hite, p. 129).

¹⁷Hamblin, pp. 42-43.

¹⁸For summaries of scientific work in the clastic sedimentary rocks of the south shore of Lake Superior, see Hamblin, pp. 4-10 and Hite, pp. 9-15.

¹⁹H. R. Schoolcraft, On the Number, Value, and Position of the Copper Mines on the Southern Shore of Lake Superior, 17th Cong. 2nd Sess., S. Doc. 5, 1822, pp. 7-28.

²⁰Douglass Houghton, Fourth Annual Report of the State Geologist, Michigan. House Doc. 27, 1841.

²¹"Lake Superior in 1840," paper read before the Detroit Pioneer Society, January 1874, in Bela Hubbard, Memorials of a Half-Century in Michigan and the Lake Region (New York and London: G. P. Putnam's Sons, 1888, rpt., Gale Research Co., Detroit, 1978), p. 50.

²²J. W. Foster and J. D. Whitney, Report on the Geology and Topography of a Portion of the Lake Superior Land District, in the State of Michigan (part 1, Copper Lands: U. S. 31st Cong., 1st sess. House Ex. Doc. 69, 1850; part 2, The Iron Region, Together with the General Geology), U. S. 32nd Cong. Spec. sess., Senate Ex. Doc. 4, 1851; Ibid., pt. 2, p. 191. Foster and Whitney commented also on the economic value of the granite of the Huron Islands in Marquette County. This "would afford beautiful and durable building material" and "is admirably adapted to the purposes of construction, separating readily into large tabular masses, and resisting the action of atmospheric agents" (Ibid., pt. 2, pp. 48-49, 82). Though granite, not sandstone, was so perceived, Foster and Whitney specifically cited sandstone's economic value later in their report.

²³Ibid. pt. 1, p. 110.

²⁴Ibid., pt. 2, p. 124. In fact, Albert Bierstadt (1830-1902) visited the Apostle Islands in 1878, and reportedly sketched Grand Arch on the extreme western point of Sand Island, and later used it as the subject of one of his landscape paintings (Sam S. Fifield, "Beautiful Isles of Chequamegon," Ashland Press, 25 December 1895. The painting may be On Lake Superior--Sand Island, 1886?, in Gordon Hendricks, Albert Bierstadt, Painter of the West [New York: Harry N. Abrams, 1974], illus., p. 284. Bierstadt visited the Wisconsin Dells and the Lake Superior region in the summer of 1886).

²⁵Foster and Whitney, pt. 1, p. 110.

²⁶"Lake Superior in 1840," pp. 25-50.

²⁷Charles Lanman, Adventures in the Wilds of the United States and British American Provinces (Philadelphia: John Moore, 1856), 1; 103-104. Of the eastern white sandstones at the Pictured Rocks, Lanman said: "The most conspicuous of them is perhaps three hundred feet high, but its most superb feature was demolished by a storm in the year 1816. That feature, according to a drawing in my possession, was an arch or doorway, fifteen feet broad and one hundred feet high, through which Indians were accustomed to pass with their canoes. In those days, too, from the crevices in these solid walls of whitish sandstone leaped forth beautiful cascades, and mingled their waters with those of the lake" (p. 103).

²⁸Ashland Press, 21 December 1895.

²⁹"Sam S. Fifield, "Beautiful Isles of Chequamegon," Ashland Press, 25 December 1895.

³⁰Marquette Mining Journal, 12 April 1873.

³¹H. G. Rothwell, "Methods of Stone Quarrying," Michigan Engineering Society, Michigan Engineer's Annual 1894, pp. 27-29; George P. Merrill, The Collection of Building and Ornamental Stones in the U.S. National Museum: A Hand-Book and Catalogue, Annual Report of the Board of Regents of the Smithsonian Institution, Part 2 (Washington, D. C.: GPO, 1889), p. 312.

³²Portage Lake Mining Gazette, 18 July 1889. Machinery and techniques for quarrying and dressing stone that replaced earlier methods of drilling and blasting were introduced to the Lake Superior quarry industry in the 1880s. These included the channeling machine, a steam-driven locomotive that moved on steel tracks along the quarry bed and carried either a single gang drill that was raised and lowered by levers on one side, or two such drills, one on each side. As the machine ran back and forth over

the tracks, cutters delivered strokes that cut channels in the rock. The machinery of the 1880s also included a gadding machine, which undercut and released the block after the channeler had done its work. This machine stood on a platform on trucks which ran on a track. To the boiler, which formed the main support of the machine, was secured a perpendicular guide bar to which was attached a drill. By raising, lowering, and swiveling the drill, its operator could bore a series of perpendicular holes in any direction. Earlier quarrymen had divided and subdivided stone with plugs and feathers. With this technique they drilled holes from six to eight inches deep and from twelve to eighteen inches apart in a line. Into each they inserted two iron strips or feathers, flat on one side for contact with the wedge, and curved on the other to fit the wall of the drill hole, and drove between them an iron wedge or plug. They sledged them gently and successively, beginning at one end of the line and ending at the other, so as to maintain an even strain on the rock, until it fractured (Merrill, pp. 321, 324-26; and Oliver Bowles, The Stone Industry [New York: McGraw-Hill Book Co., 1939], pp. 51-52). German immigrants reportedly introduced the plugs and feathers method at Quincy, Massachusetts, around 1725-50 (Merrill, pp. 313-16).

³³John H. Jacobs, "The History of the Life of John H. Jacobs Who Developed the Wonderful Sandstone Business of Lake Superior," TS., 1924, J. M. Longyear Collection, Marquette County Historical Society, Marquette, Mich.

³⁴Merrill, pp. 310-11.

³⁵Ibid., pp. 319-20. For historic photographs of the extraction process see Figures 2 through 7.

³⁶John C. Smock, "Building Stone in New York," Bulletin of the New York State Museum 2 (September 1890): 302.

³⁷Ashland Daily Press, Annual Edition, 1893, p. 81.

³⁸Marquette Mining Journal, 21 September 1872.

³⁹Ibid., 20 November 1875.

⁴⁰U. S. Department of Interior, Census Office, Tenth Census, Vol. 10, Building Stones of the United States, and Statistics of the Quarry Industry for 1880 (Washington, D. C.: GPO, 1884). Merrill's work was revised in 1889.

⁴¹Allan D. Conover, "Michigan," in Report on the Building Stones of the United States and Statistics of the Quarry Industry for 1880, pp. 22-30.



Figure 2.--Quarriers and Tramcar, Portage Entry Quarries Company, Jacobsville, ca. 1895.

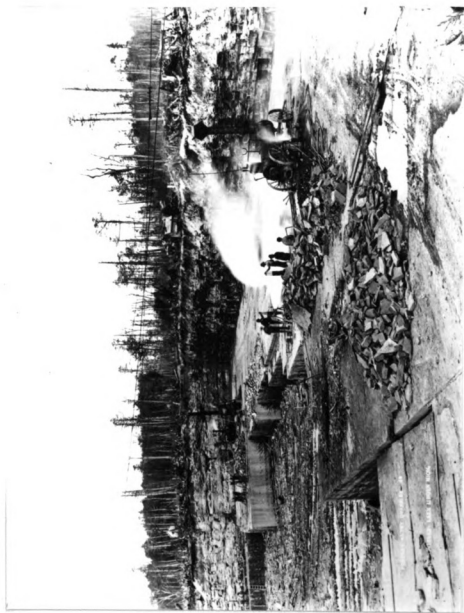


Figure 3.--Quarriers and Channeling Machine, Portage Entry
Quarries Company, Jacobsville, ca. 1895.



Figure 4.--Derricks, Portage Entry Quarries Company, Jacobsville, ca. 1895.

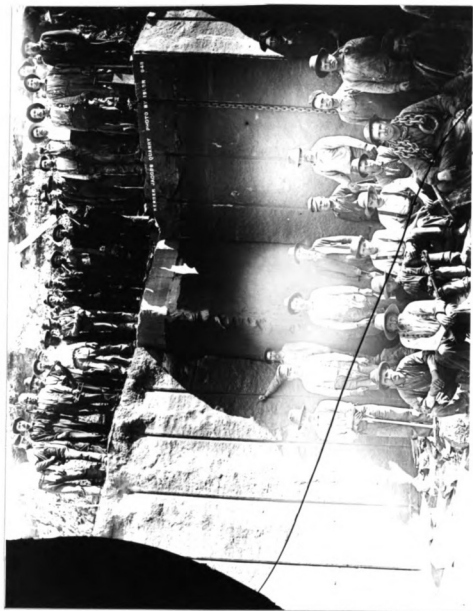


Figure 5.--Quarriers, Kerber-Jacobs Redstone Company, Red Rock, ca. 1895.



Figure 6.--Dimension Stone, Portage Entry Redstone Company, Jacobsville, ca. 1891.



Figure 7.--Dock, Portage Entry Quarries Company, Jacobsville, ca. 1895.

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⁴²W. H. Winchell, Preliminary Report on the Building Stones, Clays, Limes, Cements, Roofing, Flagging and Paving Stones of Minnesota, Geological and Natural History Survey of Minnesota, Miscellaneous Publications No. 8 (St. Paul: Pioneer Press, 1880), p. 35.

⁴³Ernest Robertson Buckley, On the Building and Ornamental Stones of Wisconsin, Wisconsin Geological and Natural History Survey, Bulletin No. 4, Economic Series, No. 2 (Madison, State of Wisconsin, 1898).

⁴⁴Buckley, pp. 368-71.

⁴⁵By comparison, the crushing strength of granite ranges from 12,000 to over 47,000 pounds per square inch and indicated much greater strength. Its minimum strength exceeded the maximum strength recorded for Lake Superior sandstone. The crushing strengths in pounds per square inch of sandstone samples from seven sites in the Bayfield group were as follows: Presque Isle, 2,001 to 6,244 pounds; Houghton, 4,166 to 6,502; Bass Island, 4,310 to 5,126; Bayfield, 3,492 to 4,588; Port Wing, 1,658 to 5,498; and a site across the river from Fond du Lac, 4,668 to 5,931 (Buckley, pp. 393-94). For results of crushing strength tests of Lake Superior sandstone conducted at the Michigan Mining School, see O. P. Hood to J. W. Wyckoff, 7 May 1902, Wyckoff Papers. The Hood test, which was limited to three specimens of red sandstone, presumably from Portage Entry, since Wyckoff was the superintendent of the Portage Entry Quarries Company, reported figures on crushing strength using approximately three-inch cubes (cf. Buckley's report on two-inch cubes). The three samples tested showed 9,804, 7,470, and 8,000 pounds per square inch, which is significantly greater than those reported in Buckley.

⁴⁶Michigan, Mineral Statistics, 1895.

⁴⁷Buckley, pp. 377-84.

⁴⁸Merrill, pp. 339-41.

⁴⁹Buckley, pp. 385-88.

⁵⁰Marquette Mining Journal, 28 October 1871.

⁵¹Ibid.

⁵²Slate from the Huron Bay slate district, northwest of the Huron Mountains near Huron Bay and fifteen miles north of L'Anse, furnished a compatible roofing material for sandstone buildings. The slate was of fine texture and ranged in color

from light steel and brown, to deep black, to bright red. Marquette men who frequently invested in mineral lands and companies, aided by eastern and midwestern investors on whom they regularly relied to furnish needed capital, formed companies to quarry, finish, and sell slate beginning in 1872, concurrently with the first activities of the sandstone industry. They included the Huron Bay Slate and Iron Company, the Stafford Slate Company, the Clinton Slate and Iron Company, Hurley's Huron Mountain Slate and Mining Company, and the Superior Slate and Mining Company. In 1881 several consolidated as the Michigan Slate Company.

⁵³"The Sandstones of Lake Superior," The Michigan Engineer's Annual Containing the Proceedings of the Michigan Engineering Society for 1891, p. 51; Portage Lake Mining Gazette, 13 March 1895.

⁵⁴Buckley claimed this misuse by contractors securing jobs for low rates damaged the reputation of the Lake Superior brownstone industry by leading people to think that Lake Superior stone was of inferior quality (Buckley, p. 212).

A recent writer, Kenneth Hudson, has pointed out that two trends in the use of limestone were noticeable by the fourteenth century in Portland and Bath, England. For major projects architects shifted from choosing purely local materials to selecting the most suitable stone wherever it was found. As freestone grew in fashion for building, great demands to find quantities of stone ahead of quality had bad results. The same trends may be observed in the Lake Superior region in the nineteenth century. For the major projects architects selected the best of the red sandstone. As freestone grew in fashion after the Chicago Fire of 1871, and as the demand exceeded the supply, inferior grades that lacked endurance and beauty were placed on the market. This sometimes gave the industry a bad reputation (Kenneth Hudson, The Fashionable Stone [Bath, Somerset, Great Britain: Adams and Dart, 1971], p. 14).

⁵⁵Lapham's and Hall's statements were quoted in "The Superior Brownstone Co.," Ashland Daily Press, Annual Edition, 1893, pp. 64-65. With statements from "competent people" employed "to examine the quality of the stone" and "to report whether it is a proper and fit material" to use in the construction of the court house, the Milwaukee County Board of Supervisors concluded that Milwaukee brick veneered with Bass Island sandstone would be the "cheapest, most durable, and most attractive" material (Milwaukee County Supervisors, Proceedings of the Board of Supervisors of Milwaukee County, July, September 1868, March 1869).

⁵⁶Ibid.

⁵⁷Marquette Mining Journal, 2 March 1878.

⁵⁸Ibid.

⁵⁹Michigan, First Annual Report of the Commissioner of Mineral Statistics of the State of Michigan for 1877-1878 and Previous Years (Marquette: Mining Journal Steam Printing House, 1879), pp. 194-95.

⁶⁰E. T. Malone to the Portage Entry Quarries Company, 28 May 1906, Wyckoff Papers. Roehm was a stone mason who did many works in Calumet, including his own house in Laurium.

⁶¹E. T. Malone to J. W. Wyckoff, 12 December 1906, Wyckoff Papers.

⁶²Lowell A. Lamoreaux to W. C. [probably J. W.] Wyckoff, 5 January 1903; Frank L. Young and Carl E. Nystrom to Traverse Bay Redstone Company, 5 January 1903; W. P. Arcking to Wyckoff, 6 January 1903; James A. Young to Wyckoff, 7 January 1903; Jones and Hartley to Wyckoff, 10 January 1903; and H. K. Jennings to Wyckoff, 22 January 1903, Wyckoff Papers.

⁶³West Superior buildings listed were the Blaine High School, Hoxby & Chisholm, architects; Chicago, St. Paul, Minneapolis & Omaha Depot, Charles G. Frost, architect; and the Board of Trade, C. C. Haight, architect. Duluth buildings listed were the Fowler Building, German & Brown, architects; Chamber of Commerce, Reider & Warner, architects; Board of Trade Building, Traphagen & Fitzpatrick architects; Torrey Building; City Hall; County Jail; Lyceum Theater (illus.); Traphagen Residence (illus.); Duluth & Iron Range Depot, Tenbusch & Hall, architects; and Jefferson School, Radcliff & Willoughby, architects (The Portage Entry Quarries Company [n.p., n.d., c. 1900], Michigan Technological University Library Archives and Copper Country Collections, Houghton, Michigan). John H. Jacobs had employed Frank E. Parshley of Brooklyn to travel throughout the United States to photograph "some of the great structures" built of the stone from Lake Superior quarries. These photographs probably were used in the booklet (Marquette Mining Journal, 28 February 1891).

⁶⁴This discussion includes only the quarries central to the topic of the dissertation. Consult lists, Appendix A, for full identification of all known quarries.

⁶⁵Rominger, "Palezoic Rocks," pp. 87-89; Marquette Mining Journal, 21 November 1868.

⁶⁶George P. Cummings (1826-1911) was a Vermont-born civil engineer and railroad builder. In 1857 he came to Marquette and worked as an engineer, surveyor, and land agent, and as official surveyor for Marquette County. He was interested in the mineral development of the Lake Superior region (Proceedings of the Lake Superior Mining Institute, Vol. XVI, 1911, p. 258).

⁶⁷Marquette Mining Journal, 19 March 1870. Some beds in this area are white or blotched with red and white, or formed in alternating layers of red and white laminae. But Rominger reported the sandstone at Laughing Whitefish Point of "an even, agreeably red color, only rarely spotted with white; it has a silicious cement, is sufficiently hard, and can be worked with the chisel or the saw; it is not in all localities alike, and becomes in places so argillaceous as to be worthless" (Rominger, pp. 88-89).

⁶⁸Wagner advertised in the local directory that he located lands, paid taxes, and furnished general information on the mineral and timber resources of the Upper Peninsula (A. H. Holland, Marquette City Directory 1891 [Marquette: Marquette Mining Journal Press, 1891], p. 182).

⁶⁹Marquette Mining Journal, 11 February, 1 July 1871.

⁷⁰*Ibid.*, 11 February 1871.

⁷¹*Ibid.*

⁷²Rominger, pp. 88-90.

⁷³Johnston held 14,500 shares, George Barnes held 5,000, and other investors 100 shares each (Rock River Brownstone Company, Articles of Association, 27 December 1889, Michigan Department of Commerce, Corporations Division).

⁷⁴Marquette Mining Journal, 4 January, 10 May 1890.

⁷⁵*Ibid.*, 10 May 1890.

⁷⁶*Ibid.*, 21 March 1891.

⁷⁷*Ibid.*, 11 October 1890.

⁷⁸George Barnes, the second largest stockholder in the Rock River Brownstone Company, probably promoted the contract for the Marquette County Savings Bank, to which he served as cashier. Other brownstone companies and "the famous Portage Entry redstone" companies competed for the Bay City Masonic Temple contract. Willard I. Brotherton, a Bay City stockholder, probably assisted

in acquiring the contract for this structure, whose construction costs were estimated at \$150,000 (Ibid., 4 January 1890, 30 May 1891, 30 January, 20 August 1892).

⁷⁹Ibid., 21 March 1891.

⁸⁰R. L. Polk's Michigan State Gazetteer and Business Directory, 1893-94, 1895-96; R. L. Polk's Marquette City and Marquette County Directory, 1899-1907. At its annual meeting in January 1893, the Rock River Brownstone Company paid up all delinquent assessments, entered the new year free of debt and with cash in the treasury, and with the intent to operate the quarry that season "for all there is in it" (Marquette Mining Journal, 14 January 1893). However, no records support the activity of the Rock River quarry after the mid 1890s.

⁸¹Rominger, pp. 90-91.

⁸²Ibid., p. 91.

⁸³John Henry Jacobs (1847-1934) was born in Lorain County, Ohio, the son of German immigrants from Saxony and at age sixteen began working in the stone quarries at Independence and Amherst. In 1870 he came to Marquette to take charge of the Wolf and Company quarry. After marrying Peter Wolf's daughter two years later, Jacobs briefly interrupted his career to earn a business degree at Oberlin College, Oberlin, Ohio. He returned to Marquette to work for Wolf, and, eventually acquired an interest in this business and its successor, Furst, Jacobs and Company, which he held until 1891 and again between 1901 and 1902. From 1892 to 1898 he established and ran the Kerber-Jacobs Redstone Company. He served for three terms as mayor of Marquette (John H. Jacobs, "Life of John H. Jacobs").

⁸⁴Wolf, later attributed with introducing brownstone in Chicago, came to Chicago from Rehlingen, Rhinebreison, Germany, in 1847 (Biographical Record: Biographical Sketches of Leading Citizens of Houghton, Baraga and Marquette Counties, Michigan [Chicago: Biographical Publishing Co., 1903], pp. 403-407). Wolf was originally spelled "Wolff."

⁸⁵Marquette Mining Journal, 22 October 1870, 9 September 1871.

⁸⁶Ibid., 28 May 1870, Rominger, p. 91.

⁸⁷Ibid., 28 May 1870.

⁸⁸Ibid., 7 April 1869, 22 June 1872. Jacobs claimed that the Marquette Board of Supervisors had assessed Wolf and Company's real property and personal property in the amount of \$191,000, forcing the sale to the Marquette men, who organized the new company and acquired the property for \$183,000 (John H. Jacobs, "The History of the Life of John H. Jacobs"). The Marquette Brownstone Company purchased from Wolf and Company for \$26,000 "all the horses, wagons, tools, derricks and personal property of every description connected with the stone quarry at Marquette, and oats on the way and all the stone quarried and on dock at Marquette belonging to us . . . everything owned by the firm in Marquette (except the stone sold to Wyckoff and to Green and two pieces of stone belonging to J. H. Jacobs)" (Peter Wolf to S. P. Ely, Bill of Sale, 9 September 1872, Peter White Papers, Michigan Historical Collections, Bentley Library, University of Michigan, Ann Arbor, Mich.).

⁸⁹Peter White (1830-1908) arrived in Marquette in 1849, became an entrepreneur, politician, and businessman. Samuel P. Ely (1827-1900), born in Rochester, New York and educated at Williams College, came in 1858 to Marquette where he built a railroad from the iron mines to the lake and developed the Lake Superior, Republic, Washington, and Champion mines. William Burt (1825-1892) had assisted his father in the survey of the Lake Superior region in 1846. He came to Marquette in 1866 and speculated in real estate, iron mines, manufacturing, and brownstone and slate quarries. Frederick P. Wetmore (1813-1883), born in Vermont, arrived in Marquette in 1864 and became a merchant. Sidney Adams (1831-1906), born in Herkimer, New York, came to Marquette in 1851 and invested in real estate and lumber (A. T. Andreas, History of the Upper Peninsula of Michigan [Chicago: Western Historical Co., 1883], pp. 427-36).

⁹⁰National Cyclopaedia of American Biography, s.v. "Pumpelly, Raphael"; Dictionary of American Biography, 1929, s.v. "Brooks, Thomas B."

⁹¹For biographical information on members of the Burt family, see Silas Farmer, History of Detroit and Wayne County (Detroit: Silas Farmer and Co., 1890), pp. 1178-85; Andreas, History of the Upper Peninsula, pp. 427-48; and Memorial Record, pp. 10-12.

⁹²Henry Furst and Company had been established as a cut-stone contractor in 1861 and was restructured in 1885. The partners included Henry Furst (1835- ?), a German immigrant, who had learned the stone cutter's trade in his birthplace, Ottweiler, near Saarbruck, Germany, and had practiced it in Cleveland and Chicago, before forming a partnership with Henry Kerber in Chicago in 1861.

Eventually he was joined by his nephew, Peter W. Neu (1846- ?), also a German-born-and-trained stone cutter, and by his son, Henry Furst Jr. (1863- ?), a graduate of Yale College (A. T. Andreas, History of Chicago: From the Early Period to the Present [Chicago: A. T. Andreas Co., 1886], 3: 84-85).

⁹³Marquette Mining Journal, 28 February 1891.

⁹⁴Albert Nelson Marquis, The Book of Detroiters (Chicago: A. N. Marquis and Co., 1914), s.v. "Bissell, John H." and "Little, Charles H." For mention of Pope, see Marquette Mining Journal, 12 January 1889. For biographical information on Kidder, see Andreas, History of the Upper Peninsula, pp. 431-32.

⁹⁵Marquette Mining Journal, 15 December 1888, 2 January 1889, 31 October 1891; Detroit and Marquette Brownstone Company, Articles of Association, 7 January 1889; Amended Articles of Association, 13 March 1891; and Dissolution, 31 December 1913, Michigan Department of Commerce, Corporations Division.

⁹⁶Henry G. Rothwell, "The Sandstones of Lake Superior," The Michigan Engineer's Annual Containing the Proceedings of the Michigan Engineering Society for 1891, pp. 55-56.

⁹⁷Born in Rochester, New York, Gillett came to the Upper Peninsula in 1857, and to Marquette in 1863 (Andreas, History of the Upper Peninsula, p. 430).

⁹⁸Newport and Lake Superior Brownstone Company, Articles of Association, 5 May 1888; J. H. Gillett, Ceased Business Statement, 27 January 1902; Michigan Department of Commerce, Corporations Division. Marquette Mining Journal, 9 April 1887, 28 April, 1 September, 17 November 1888, 25 May 1889.

⁹⁹Although the stones were said to be equally durable, builders preferred Marquette over L'Anse sandstone because of its brighter color and its carvability (Marquette Mining Journal, 17 November 1877).

¹⁰⁰Edward Breitung (1831-1887) of Negaunee, a speculator in Lake Superior mineral lands, was the other principal investor (L'Anse Brownstone Company, Articles of Association, 3 August 1875, Michigan Department of Commerce, Corporations Division. Marquette Mining Journal, 16 October 1875, 24 June 1876; Michigan Commissioner on Mineral Statistics, First Annual Report for 1877-1878, pp. 196-93.

¹⁰¹A. P. Swineford, Mineral Resources of Lake Superior, pp. 273-74; Marquette Mining Journal, 19 February 1876, 10 February 1877.

¹⁰²Marquette Mining Journal, 12 July, 2 August 1879.

¹⁰³Michigan, Mineral Statistics, 1895, p. 144; 1896, p. 156; 1897, p. 158.

¹⁰⁴Marquette Mining Journal, 1 August 1891.

¹⁰⁵One account held that Wolf and Jacobs leased Lot one from George Craig and others who had purchased it from Ransom Shelden in 1871. Shelden had acquired it from the United States government in 1854 and had operated a trading post here (J. W. Wyckoff, "The Red Stone Industry of the Upper Peninsula," T.S., Library Archives and Copper Country Historical Collections, Michigan Technological University, Houghton, Mich.). Another account said that Henry Stafford, E. J. Mapes, and other Marquette men who had formed the Lake Superior Brown Stone Company in 1873 had purchased Lot one, a 43-acre wooded parcel extending one-half mile on the lakeshore east of the lighthouse reservation, and had leased for twenty-five years with the option to renew the lease for another twenty-five years, 294 acres adjoining it and including one-half mile of river frontage close to the Entry where the water depth was sufficient for shipping. The lease contained easements giving the tenant the right to construct and install tramroads, docks, houses, and machinery, the right to cut and use timber, and the right to quarry and remove stone (Marquette Mining Journal, 22 February 1873; Lake Superior Brown Stone Company, Articles of Association, 25 February 1873, Michigan Department of Commerce, Corporation Division. From 1883 to 1898 the stockholders of the Lake Superior Brown Stone Company collected \$150,232.19 in royalties for the stone extracted from Lot one (Table Showing Stone Quarried from Lot 1 Sec 19-53-32 from 1883 to 1898 inclusive, and Royalty Paid Thereon, Wyckoff Papers).

¹⁰⁶22 February 1873. For a description of the stone at Portage Entry, see also T. R. Brooks, "Iron Bearing Rocks (Economic)" Geologic Survey of Michigan. Upper Peninsula, 1869-1873, vol. III [New York; Julius Bien, 1873], p. 58).

¹⁰⁷Portage Entry Quarries Company, Articles of Association, 28 February 1893, Illinois, Department of State.

¹⁰⁸Table showing Stone Quarried from Lot 1, 19-53-32 from 1883 to 1898 inclusive, and Royalty paid thereon and Table showing Stone Quarried from Sec. 18 from 1893 to 1898, inclusive in Wyckoff Papers.

¹⁰⁹J. W. Wyckoff, "The Red Stone Industry of the Upper Peninsula."

¹¹⁰Wyckoff Papers, passim.

¹¹¹Andreas, History of Chicago, 3:84. Other investors included a man named Gindele, probably of Angus and Gindele, general contractors and builders. John Angus and Charles W. Gindele, descendants of Scotch and Bavarian stoneworkers, respectively, had established this business in 1881 and had built the Potter Palmer House (1889) in Chicago, a structure of Bayfield sandstone from the Prentice Brownstone Company (Ibid., p. 83; Buckley, p. 218).

¹¹²Marquette Mining Journal, 11 March 1893.

¹¹³Michigan, Mineral Statistics, 1896, 1897.

¹¹⁴The quarries at Portage Entry employed Finns almost exclusively. At least twenty-seven of the thirty-five names on the time book of the Portage Entry Quarries Company time book for June 1908 were Finnish (Portage Entry Quarries Company Time Book, June 1908, Wyckoff Papers). The Finns provided a great deal of the labor for the quarry industry. These quarriers sang this song as they were learning the necessary skills.

Stones, stones, crushers of stones--

Our work is hard, but there's zest in our bones.

There's no place here for an untrained mate,

With a sledge that's sixteen pounds in weight.

And there's no soft shale, but the healthy crew

Just sing for a good tobacco chew.

(Ashtabula [Ohio] Amerikan Sanomat, 14 April 1898, quoted in John I. Kolehmainen and George W. Hill, Haven in the Woods [Madison: The State Historical Society of Wisconsin, 1951], p. 29).

¹¹⁵This probably was Fred L. Smith (1862-1941), a son of Mortimer L. Smith and partner in the early Detroit architectural firm of Mortimer L. Smith and Son, predecessors of Smith, Hinchman, and Grylls (Thomas J. Holleman and James P. Gallagher, Smith, Hinchman & Grylls [Detroit: Wayne State University Press, 1978]).

¹¹⁶Michigan Mineral Statistics, 1896, 1897, Escelsior Red Stone Company, Articles of Association, 5 April 1892, Michigan Department of Commerce, Corporations Division. John H. Seager to Secretary of State, 23 June 1902, Michigan Department of Commerce, Corporations Division.

¹¹⁷14 February 1891. The Malone Brothers of Cleveland (and Chicago?) operated the Portage Entry Red Sandstone Company on a site (S18 T53N R32 W) leased from Earl Edgerton of L'Anse.

¹¹⁸Marquette Mining Journal, 17 January 1891. Number One stone sold for twenty-five cents per cubic foot.

¹¹⁹Marquette Mining Journal, 14 February 1891.

¹²⁰In reference to the Torch Lake Quarry, one account said: "The works are extensive, as are all the branches of industry operated by the Calumet and Hecla Company" (Andreas, History of the Upper Peninsula, p. 255).

¹²¹Michigan, Mineral Statistics, 1895, p. 144; 1896, p. 154; 1897, p. 158.

¹²²Traverse Bay Red Sandstone Quarry, Rubble Stone Account, 1904-1905 and Sawed Stone Account, 1904-1905, Wyckoff Papers.

¹²³F. T. Thwaites, "Sandstones of the Wisconsin Coast of Lake Superior," Wisconsin Geological and Natural History Survey, Bulletin 25, Scientific Series No. 8 (1912), pp. 45-46.

¹²⁴Quoted in Bayfield Press, 20 September 1884.

¹²⁵The newspaper listed production for 1892 as follows: Prentice Brownstone Company, 750,000 cu. ft.; Superior Brownstone Company, 310,000 cu. ft.; Ashland Brownstone Company, 683,000 cu. ft.; Smith & Babcock (Washburn Stone Company), 185,000 cu. ft.; Excelsior Quarry, 150,000 cu. ft.; Hartley Brothers, 130,000 cu. ft.; and R. D. Pike, 105,000 cu. ft. (Ashland Daily Press-Annual Edition [1893], p. 81). The Prentice Brownstone Company and the Ashland Brownstone Company together produced more cubic feet than any company operating at Portage Entry.

¹²⁶This is probably Alanson Sweet (1804-1891) who moved from Owasco, New York to Milwaukee in 1835, and later to Kansas and Illinois. Sweet promoted many early plankroads and railroads, traded in grain and was active in politics (Dictionary of Wisconsin Biography [Madison: The State Historical Society of Wisconsin, 1960], p. 344). In Milwaukee he built homes, stores, ships and the first steam elevator; on the lakes he built many lighthouses. By trade Sweet was a stone mason (A. T. Andreas, History of Milwaukee, Wisconsin [Chicago: Western Historical Co., 1881], pp. 1176-77). Daniel Wells, Jr. (1808-1902) was a speculator, businessman, and congressman. Born in West Waterville, Maine, Wells speculated in Wisconsin land in 1835 and moved to Milwaukee the following year. Through investments in lumbering, transportation projects, and banks, he earned a fortune estimated at \$15 million and a reputation as the wealthiest man in Wisconsin (Ibid., p. 369).

¹²⁷Bayfield Press, 24 June 1871.

¹²⁸Ibid., 25 February, 29 April, 3, 10, 24 June 1871, 1 August 1885; Buckley, pp. 178-82.

¹²⁹The Ashland Brown Stone Company stated its purposes more broadly than most quarry companies: "to purchase, lease, open, quarry, cut, maintain and operate stone quarries, black smith and machine shops, boarding houses, warehouses, wharves, docks, tramways, steam boats, barges, tugs, and all kinds of water craft; to construct houses and buildings of all kinds, bridges, piers and to carry on and do all kinds of mason and other works as it may have a right to do and to bring and prosecute actions and proceedings there fore; to lay out and plat city, town and village sites and to buy, sell and deal in some part thereof to operate and deal in farms and gardens; to buy, hold, raise, breed and deal in livestock of all kinds; to purchase, subscribe for and deal in the stock of other corporations to such as is now or may here after be permitted or allowed by the laws of the state of Wisconsin; to buy, sell, lease and deal in all kinds of property, real personal and mines to avail itself of all the benefits, rights and priveleges of any franchises granted or which may exist or which may hereafter be granted to any business which the corporation may carry on; and generally to do and perform all such acts and things as may be found convenient or proper in carrying on, conducting and managing a general stone quarrying, stone cutting, mercantile, trading manufacturing, transportation, shipping and forwarding business at Ashland County, Wisconsin and at any and all other places in the United States as may be expedient and lawful (Ashland Brown Stone Company, Articles of Organization, 4 October 1886, State Historical Society of Wisconsin Archives, Madison).

¹³⁰Bayfield Press, 17 April, 21 April, 16 October 1886, 1 February 1890; Buckley, pp. 183-85.

¹³¹Ashland Press, 20 July 1889. Prentice had leased earlier, in 1883, the quarry at Houghton Point to Captain H. Doherty, operator of the steamer, City of Ashland. Doherty had planned to open it immediately and "get stone out for the Ashland trade," but there is no evidence to date that he did (Bayfield Press, 21 July 1883).

¹³²Ashland News, 25 July 1888.

¹³³Ashland Press, 24 May 1890.

¹³⁴Buckley, pp. 190-93, Ashland Press, 27 August 1887, 20 July 1889, 24 May, 6 September 1890; Ashland Weekly News, 25 July 1888; Washburn Times, 18 September 1902; Prentice Brownstone

Company, Articles of Association, 12 October 1888, State Historical Society of Wisconsin Archives, Madison; Pen and Sunlight Sketches of Ashland (Chicago: Phoenix Publishing Co., 1892), pp. 166-67.

¹³⁵Buckley, pp. 185-87; Excelsior Brownstone Company, Articles of Association, 21 June 1893, State Historical Society of Wisconsin Archives, Madison.

¹³⁶Bayfield Press, 24 May 1884.

¹³⁷*Ibid.*, 12 December 1885.

¹³⁸*Ibid.*, 21 March 1885.

¹³⁹Pen and Sunlight Sketches of Duluth, Superior and Ashland, p. 86.

¹⁴⁰Ashland Press, 27 April 1889; Superior Leader, 25 September 1892.

¹⁴¹Pen and Sunlight Sketches of Duluth, Superior and Ashland, p. 75; Buckley, p. 204.

¹⁴²R. C. Allen, Mineral Resources of Michigan with Statistical Tables of Production and Value of Mineral Products for 1913 and Prior Years, Michigan Geological and Biological Survey, Publication 16, Geological Series 13 (Lansing: Wynkoop, Hallenbeck, Crawford Co., 1914), p. 88.

¹⁴³Michigan, Mineral Statistics, 1899, p. 301.

¹⁴⁴Michigan, Mineral Statistics, 1896, p. 155.

¹⁴⁵W. Cooper to J. W. Wyckoff, 28 January 1909, Wyckoff Papers.

¹⁴⁶Joseph Thomlinson to J. W. Wyckoff, 30 April 1908, Wyckoff Papers.

¹⁴⁷E. G. Malone to J. W. Wyckoff, 12 January 1909, Wyckoff Papers.

CHAPTER III

THE SANDSTONE ARCHITECTURE OF MARQUETTE

In the beginning was a wild, unbroken wilderness. There were a few Indians, but legend has it they avoided Marquette, thinking its ore bearing rocks the home of lightning and thunder. Then, in 1844-45, the white man came to inaugurate the "advance of progress and civilization."¹ He transformed that wilderness into one of the most flourishing towns and commercial centers on the lakes.

Marquette is located on Marquette Bay, originally named Iron Harbor, an inlet of Lake Superior equidistant from the St. Mary's and Montreal rivers, which form the eastern and western boundaries of the Upper Peninsula. The city nestles beneath highlands, which rise first to a plateau, then to a chain of hills. Belts of geologic formations encircle the community and rocks crop out everywhere. The land all around is covered with heavy forests of pine and hardwood and broken by rivers and valleys.

Indians, French missionaries of the early seventeenth century, and trappers of the early nineteenth century knew of the valuable iron rocks in the hills around Marquette. In 1844 William Burt substantiated Douglass Houghton's reports of extensive iron deposits when he and Jacob Houghton discovered iron deposits near

Teal Lake, twelve miles west of Marquette. The reports of this and subsequent finds brought an onslaught of entrepreneurs and fortune hunters to the recently organized Marquette County.

Philo M. Everett explored the area in 1845 and located lands for the newly formed Jackson Mining Company, the first mining company organized in the region.² In 1846, after sending one ton of ore to the mouth of the Carp River and on to Pittsburgh for scientific testing, he opened the Jackson Mine and in 1847 built the Jackson Forge for the production of iron bloom on the Carp River, three miles east of Negaunee.³

In 1849 Amos Rogers Harlow,⁴ Waterman A. Fisher, and Edward Clark of Worcester, Massachusetts, and Robert J. Graveraet of Mackinac, Michigan, organized the region's second iron concern, the Marquette Iron Company. On learning of the discovery of iron ore on Lake Superior, Harlow consulted with J. W. Whitney of Boston, who with J. D. Foster, had conducted the geological survey of the Upper Peninsula. Later than same year Harlow and his party reached the present site of Marquette. Attracted by the area's excellent harbor, they cleared ground, erected a few simple wooden buildings, and constructed a forge for the production of iron bloom from ore to be transported from nearby mines.

By 1853 three mining companies--the Jackson, the Lake Superior, and the Cleveland--operated in the Marquette Iron Range but further development required an effective means of transporting the ore from the mines to the large furnaces and coal fields of the Lower Lakes. The completion of the first railroad and modern ore

dock and the opening of the locks at Sault Ste. Marie in the 1850s revolutionized the mining industry and made efficient shipment a reality. As the rail network expanded later in the century, Marquette became the Upper Peninsula's leading shipping center. Prior to the advent of rail transportation, Marquette bore little resemblance to the flourishing "Queen City of the North" characterized by later writers. Peter White (1830-1908), a youthful envoy to the founding party, described the appearance of Marquette two years after their arrival.

A few houses, a stumpy road winding along the Lake Shore, a forge which burnt up after impoverishing its first owners, a trail westward just passable for wagons leading to another forge (still more unfortunate in that it did not burn up) and to the undeveloped iron hills beyond, a few hundred people, uncertain of the future--they were all that was of Marquette in 1851-52.⁵

By 1862, however, the community's population exceeded 1,600 and investment returns on mining and shipping interests sent the local economy soaring. Other important industries, such as lumbering, tourism, and the extraction of local sandstone, also developed. The community fast became a regional center of commerce, finance, government, and land, mineral, and timber speculation.

Building activity in the way of new construction and improvements to old structures created demands for materials and labor which the people of Marquette could not meet despite the region's vast resources. Aware of the shortages, architects, carpenters, builders, and suppliers in Detroit and Cleveland advertised their goods and services in the Marquette newspapers for the 1860s. In 1859 at least four Detroit concerns routinely made known their ability to erect

public and private buildings and to supply doors, sash, blinds, windows, scroll work, cut stone and the like. Ten years later two Cleveland stone works advertised building stone. By 1875, however, Marquette claimed its own large sash, blind, and door factory, several building firms, and stone quarries. Beard's Directory of Marquette for 1873 listed more than one hundred carpenters, masons, and tradesmen.

Stone for building structures had been blasted with powder out of quarries here and there and taken from excavations for foundations, mines, and roads since the time of settlement.⁶ Industry, seeking substantial and utilitarian structures for its activities, first employed with frequency the local stone and furnished the area with engineers, workmen, and masons capable of handling it. Mining, furnace, and railroad companies, and government agencies found the sandstone readily available and ideally suited for its machine shops, forges, furnaces, roundhouses, and lighthouses.

Stephen R. Gay was the first to introduce to the Upper Peninsula blast-furnace methods for the production of pig iron and to guide the erection of several stone furnaces. He experimented with this method in a forge chimney which he had converted into a temporary stack in 1857 and then built the Collins Furnace in 1858 and the Bancroft Furnace in 1860. Smelting iron ore in blast furnaces became the most important manufacturing interest in the Lake Superior region by 1873 when sixteen blast furnaces and one rolling mill stood in the district.⁷

In 1869 the Bay Furnace Company built a blast furnace at Onoto, situated on Grand Island Harbor on the south shore of Lake

Superior six miles west of Munising and forty miles east of Marquette (Figure 8). Workers blasted light bluish red rock from nearby Powell's Point and used it to erect a stack large enough to accommodate both the hot blast and boilers which were placed at the top. They gathered stone on the spot and built two sets of charcoal kilns two and one-half miles from the furnace and two and one-half miles from each other. Each set was located in the center of great tracts of hardwood timber and produced the charcoal fuel which was hauled over roads to the furnace. The furnace fired iron ore, charcoal, and flux in a continuous process and produced pig or cast iron. Ships carrying iron ore from Marquette and pig iron to the steel mills of the Lower Lakes unloaded and loaded at a nearby company-owned dock. The Bay Furnace, focal point of Onoto, began smelting iron in the spring of 1870 and produced 3,498 tons of pig iron that year. By 1874 the furnace turned out 8,359 tons and gave employment to a community of 600, including those engaged in making charcoal. Fire destroyed the Bay Furnace in June 1877 and only crumbling ruins remain.⁸

Similarly, the Schoolcraft Iron Company selected and extracted stone for its furnace on Grand Island Harbor at Munising. After finding the rock blasted out for the foundation too soft for building purposes, the company opened a quarry on the southwest end of Grand Island and took the stone across the bay by scows. The Marquette Lake Superior Mining Journal praised the result as a handsome and substantial piece of masonry.⁹ Two Marquette residents, Peter White and Henry R. Mather, formed the Schoolcraft Iron Company in 1866. The furnace was located

along Munising Creek some 1,100 feet from the shore of Lake Superior where it had a natural harbor and a hardwood supply. In 1870 it produced sixteen tons of pig iron a day.¹⁰

The John Burt House at 220 Craig Street (Figure 9) further exemplifies the early rubble stone construction. It is the oldest surviving structure of its type in Marquette. Built in the 1860s by New York-born John Burt,¹¹ the stone cottage later served as a warehouse and clerk's office for the Burt Freestone Company established in 1872 to work a nearby quarry. The one-story, rectangular building measures thirty feet by thirty feet. Its rubble stone walls are about two feet thick and were later resurfaced with a stucco-like material. The gable roof presents its long side to the street. Four small windows admit light to the attic space and provide a pleasing proportional relationship to the three windows and door below. The interior is divided into two rooms, one of which contains an open fireplace. A ladder leads to the attic. The Marquette County Historical Society restored the cottage in 1958 and uses it as a house museum.

One of the first stone masons in the Upper Peninsula, English-born George Craig,¹² arrived in Marquette in 1866 to work for Stephen R. Gay in erecting stone furnaces for furnace companies at Forestville (1860s), Morgan (1867), and Greenwood (1864). Craig probably extracted some of the first stone in the Upper Peninsula when he quarried and cut stone for the Samuel Peck Building from a partially opened quarry on the former J. P. Pendill Farm, which he and a man named Smith owned in the southern portion of Marquette.



Figure 8.--Bay Furnace, Onoto, 1869, destroyed 1877.



Figure 9.--John Burt House, Marquette, ca. 1860.

Stone from this quarry was used for several business blocks, and for the roundhouse and machine shops he later built for the Marquette and Ontonagon Railroad.

The Peter Wolf and Son firm of Chicago, which had purchased the Smith and Craig property in 1870, reputedly was the first to work a quarry in a "proper and legitimate way." By means of wedges and feathers the quarriers trenched and underseamed any size stone in a form nearly as perfect as that obtained with the saw and chisel. The earlier method of extracting stone by blasting with powder checked, shattered, damaged, and wasted it. Wolf and Son shipped almost all of the large blocks to Chicago and cheaply sold the rubble locally for use in cellar walls and foundations.¹³

The people of Marquette were ready to use the native dimension stone themselves by the 1870s when the community had progressed socially and economically. The need for substantial new structures, some to replace primitive wooden ones and a disastrous fire, hastened the need to rebuild. The fire of 11 June 1868 started in the Marquette and Ontonagon Railroad shops and destroyed all the business blocks then in existence north of Superior Street; the Marquette and Ontonagon Railroad shops themselves, which then occupied the north half of the block between Front, Third, and Spring streets; the Marquette and Ontonagon dock, warehouses, and trestle dock; and the Lake Superior Company's pier. Although it took two years to rebuild the vast sections damaged by the fire, five months after it happened the Marquette Lake Superior Mining Journal concluded that it would benefit the business and physical

appearance of Marquette. Many businessmen burned out in the fire would build more elegant and commodious structures. The newspaper observed that the new buildings would represent "more value than all the wooden structures destroyed by the fire. All the new buildings are substantially built of stone or brick . . . some would reflect credit upon more pretentious towns than Marquette."¹⁴ A Wisconsin writer described the shift from building with wood to building with brick and with stone in these comments about Marquette.

Fine buildings of stone and brick have taken the place of the cheaper wooden structures, and have given its business center the more substantial and lasting look of a New England town. . . . Among the promising producing interests of Marquette, most recently developed, are the quarries of brown freestone, which are now being worked to a considerable extent, and the product sent to Milwaukee, Chicago and other cities for building purposes. It is the same stone, we presume, so popular in New York in the brown stone fronts of buildings. It comes out of the quarry quite soft, and is easily worked; but with exposure to the air soon hardens. The supply is inexhaustible, and the hewn stone will doubtless become one of the most valuable products of the place for export. Some buildings have already been built of it in Marquette--as the basement of the new Methodist Church and of the new public schoolhouse.¹⁵

During the twenty years following the fire and with Marquette's incorporation as a city in 1871, the population tripled, and the community experienced one of its biggest building booms despite the Panic of 1873.

The Marquette and Ontonagon Railroad Company built in 1868 a group of machine shops and a roundhouse (Figure 10) to replace those destroyed by the fire. The people of Marquette regarded this "valuable improvement" as a demonstration of the company's faith

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in the future of the city. The utilitarian structures were constructed solid, substantial, and fireproof of roughly finished Marquette brownstone quarried by blasting.¹⁶ The structures stood next to the tracks on company grounds in the western part of Marquette. The roundhouse, machine shop, blacksmith shop, and foundry were grouped for convenient mutual use and access and were constructed of brown Marquette sandstone. Other structures included a car shop and forge, carpenter and pattern shops, lumber sheds, and storehouses. The company, once isolated from shops and mills, gradually built these facilities to house the workers and equipment necessary to manufacture and maintain its railroad cars, locomotives, tracks, and bridges. By 1870 the company employed 150 to 200 workers at these shops.¹⁷

The machine shop, blacksmith shop, and foundry were all housed under one roof in a building which measured 52 feet by 275 feet in plan. The machine shop held all the tools and equipment--lathes, boring and drilling machines, screw cutters, and hydraulic press--needed for supplying wheels and axles for several hundred ore cars which the company routinely added to its inventory. The tools were arranged parallel to a railroad track which ran along the midline of the structure. The blacksmith shop had from ten to twelve fires, belt heaters, and the usual accessories. Twelve or fifteen men worked in the foundry. The roundhouse measured sixty-five feet in length and contained nine stalls which sheltered locomotives under repair and rebuilding. Walls were of cut stone which the Marquette

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Lake Superior Mining Journal for 21 November 1868 considered "very solid and substantial as well as ornamental." With doors, window frames and casings of iron, the round house was as fireproof as possible.

A series of consolidations with other railroads led to the Marquette and Ontonagon Railroad Company. The Iron Mountain Railroad, incorporated in 1855 as the area's first railroad, merged into the Bay de Noquet and Marquette Railroad in 1858, later to become the Marquette and Ontonagon Railroad which extended its lines to Michigamme. The Marquette and Ontonagon Railroad Company had overcome great difficulties in constructing and operating a railroad in this remote and isolated part of the country. The erection of these utilitarian stone structures at Marquette gave the company the facilities it required for the construction and maintenance of its railroad tracks, cars, locomotives, and bridges. These stone buildings indicated the success of the company in conquering this wild country.

Stone first appeared in business blocks in the 1870s. In 1871 two prominent Marquette businessmen, Henry R. Mather (1824-1888) and Peter White, commissioned the Chicago architectural firm of Henry Lord Gay and Company to design a block of stores and bank building for one of Marquette's most desirable business locations. In setting out to build "the handsomest and most substantial business

structure on the lake," they chose to construct it of variegated brown Marquette sandstone.¹⁸

The Superior Building (Figure 11) exemplified skillfully designed architecture in the cultivated tradition. This first stylish commercial building guided and shaped the fashion for stone and advanced the careers of its designers and builders. Gay sent Carl F. Struck to Marquette to supervise the execution of the project under the employ of Alfred Green. Struck remained here for three years and established standards of quality for architectural designs during the 1870s. Similarly, Alfred Green, a contractor who had come from Cleveland for this job, also stayed on in Marquette. Thus, the Superior Building represented success for the client, the architect, and the contractor. During the time the construction of the block was in full progress, White, Mather, and Green, and other residents of Marquette established the Marquette Brownstone Company which bought out the Wolf and Sons business, equipment, and quarry in South Marquette.

The Superior Building, now demolished, stood on the southwest corner of Front and Spring streets, one of Marquette's principal intersections. The three-story building rose fifty-six feet from a raised foundation and fronted on Front Street for ninety-six feet and Spring Street for eighty-five feet. The two fronts of the Superior Building employed variegated brown Marquette sandstone extracted from the Wolf Quarry by wedges and feathers, cut by hand, dressed by rubbing and polishing, and laid in even courses. Dressed



Figure 10.--Roundhouse, Marquette and Ontonagon Railroad Company, Marquette, 1868, destroyed.



Figure 11.--Henry Lord Gay, Superior Block, Marquette, 1871-73, destroyed 1885.

stone was used for the lintels, belt courses, and door jambs as well as for the walls. Steps led to a corner entrance. Thirty-eight semi-circular arched windows graced the Front Street facade, twenty-eight the Spring Street facade. Ornamental pediments projected from the Howe truss roof at the center and each end. The words "Superior Building" were carved in the stone front, "Bank" over the corner entrance, and "1872" on the center pediment.

This handsome building contained office, store, banking, and public hall space. The ground floor housed large stores and rooms for the First National Bank. The second floor held offices and the third floor had a large public hall. Black walnut, white ash, and chestnut was used for the interior finish throughout and added to its richness. A basement furnace heated the building.¹⁹

Henry R. Mather, born in Middleton, Connecticut, came to Marquette while in his twenties. He speculated in Marquette real estate, owned an interest in the Munising furnaces, and served as receiver in the land office and as county treasurer. Mather had ties to Cleveland; he married the daughter of Morgan Hewitt, who came to Marquette to invest in mineral lands and became the first president of the Cleveland Iron Mining Company. He was related to the Mathers of Cleveland, developers of iron and steel industries in America and of the Cleveland Iron Mining Company, later the Cleveland Cliffs Iron Company in Ishpeming. Mather, Peter White, and the First National Bank built the Superior Building eight years after the bank had organized on 22 January 1864. White, Mather's brother-in-law

and operator of a private bank since 1853, interested some of Marquette's industrial and business leaders in forming a national bank as soon as President Lincoln signed the National Banking Act. White, John M. Longyear, Josiah G. Reynolds, E. H. Towar, and Alfred Kidder served as directors. Incorporators included Mather; Morgan L. Hewitt; David Murray, a grocer; and S. P. Ely Ely, president of the Marquette, Houghton and Ontonagon Railroad and secretary of at least five early mining companies.²⁰

On 16 September 1871 the Marquette Mining Journal announced that Mather and the First National Bank had begun their building on the corner of Front and Spring streets and predicted that it would be one of the best blocks in the city. Construction was completed sometime in 1873. The cost, estimated at \$75,000, probably exceeded \$100,000. To design the city's first major commercial block, Mather and his partners, the directors of the First National Bank, people whose connections and experiences extended beyond Marquette, sought a well-trained urban architect. They selected eastern-born-and-educated Henry Lord Gay (1844-1921), who was establishing his reputation in Chicago. Born in Baltimore, Maryland, Gay attended private grammar school in New Haven, Connecticut, and later trained with Sidney Stone of that city. In 1864 Gay arrived in Chicago and worked with W. W. Boyington, a noted hotel architect, until 1867 when he opened his own practice.²¹ Gay dispatched his partner Carl F. Struck (1842-1912) to Marquette to supervise the construction

work contracted to Alfred Green of Cleveland.²² Struck was born in Christiania (now Oslo), Norway, educated in Copenhagen, and had emigrated to the United States in 1864. With their involvement in this project, Gay, Struck, and Green announced plans to open offices in Marquette. All three justifiably pointed to the Superior Block as evidence of their unique talents.

Gay opened a branch office in Marquette in 1872, placed Struck in charge, and sought commissions for public buildings, churches, school houses, hotels and private residences.²³ The Marquette Mining Journal for 28 December 1872 noted that "the plans of the Superior Building were furnished by Mr. Gay and are now being carried out under the care of Mr. Struck. It is hardly necessary to observe that it would be difficult to find a better example of architectural skill than the Superior Building so far presents." Even in the wilderness of the Upper Peninsula, the local press quickly recognized the skills of Gay and Struck.

In a like manner Green established a permanent architectural design and building business in Marquette. On 15 March 1873 the Marquette Mining Journal praised this contractor when it reported that, "Green, contractor for the new National Bank Building, had announced his intention to make Marquette his permanent headquarters. . . . His work in Cleveland and Marquette speaks for itself." Soon thereafter, in 1874, Green became the manager of the recently organized Lake Superior Building Company which offered architectural, building, and general contracting services, but continued to

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advertise his building and construction services in the city directory.²⁴

Twelve years after its completion the "magnificent three-story brownstone building" known as the Superior Building was still considered "the pride of the business portion of Marquette.

. . . The most imposing and stately building in the upper peninsula

. . . in whose solidity and architectural beauty the people of

Marquette have felt a justified pride."²⁵ Unfortunately in early

February 1885 a fire destroyed this building, then also known as

either the Mather Block or the First National Bank Building. Mather

commissioned Hampson Gregory (1833-1921), a Marquette builder, to

plan the reconstruction in two rather than three stories and to

rebuild it during the summer and fall of 1885 (Figure 12). Gregory

raised the first floor to make the full basement suitable for

offices, apartments, and businesses, placed the bank in the corner

of the first floor separated from a store by a stairway to the second

floor, and divided the second floor into six offices and an auditor-

ium which seated 700. Replacement costs were less than one-half

the cost of original construction. This was partially due to

Gregory's modified design and partially because he used stone and

brick salvaged from the original building. During the construction

of the original building in 1871-73, the labor required for hand-

sawing the stone and the freight charged for shipping materials and

supplies in over an unfinished railroad system contributed to the

higher cost.²⁶ Professional skill and ample finances produced the

sensitively designed and smoothly polished Superior Block. The local community admired the solidity and beauty of the building and saw it as a magnet around which pivoted the commerce of Marquette.

Publicly funded sandstone structures differed in character from privately funded sandstone structures. The High School (Figure 13) at Ridge, Arch, and Pine streets, designed by Carl F. Struck, and built by Hampson Gregory in 1874-75 but destroyed by fire in February 1900, was the first publicly funded building erected of sandstone in Marquette. A resident practitioner with some training working with a local building committee intent on giving the community the highest value for its dollar produced a functional design. The no-nonsense approach to materials taken by the Marquette School Board when it replaced the brick school that had occupied this site since 1860 clearly indicated its sense of accountability to the taxpayer and its awareness of the value the community placed on education.

The High School fronted on Ridge and Arch streets at Pine Street. The rectangular two-story structure stood on a raised foundation and measured ninety-nine feet by eighty-six feet. Two pedimented projecting central entry pavilions permitted access to the school either from Arch or Ridge Street through a pedimented doorway. The school was constructed of evenly coursed, variegated brownstone from the quarries of the Marquette Brownstone Company. The stone was hammer-dressed, a finish which left the stone free of irregularities. Pure brown Marquette sandstone furnished



Figure 12.--Hampson Gregory, Superior Block, Marquette, 1885, destroyed.



Figure 13.--Carl F. Struck, High School, Marquette, 1874-75, destroyed 1900.

the trim which included corner quoins, belt courses, window hoods and sills. A galvanized iron cornice encircled the top of the building. Lake Superior slate from the quarry of the Huron Bay Slate and Iron Company covered the mansard-type roof.

Stone steps led to a wide hall which ran the length of the building from north to south. A classroom occupied each corner of the first floor. Each had a cloak room through which one entered. A large high school room, two adjoining grammar school rooms (which could be converted to one room by folding the flexible doors which separated them), an equipment room, four recitation rooms, a teacher's room, principal's office, and library occupied the second floor. The basement held boilers, janitor rooms, a fuel room and lavatories. Special attention was paid to the ventilating system which used brick ducts attached to the chimneys that extended from the basement to the roof on each side of the hall. Openings in the outer chimneys drew off deoxygenated air which was carried off by means of the heated air of the inner pipe to the roof.

In 1874, one year after \$30,000 had been appropriated for the construction of a new high school, members of the Marquette School Board contemplated a building of mottled stone--less expensive than uniform stone but considered by many to be equally beautiful--trimmed with clear brown stone.²⁷ The Board quickly adopted Struck's plans and the Marquette Mining Journal explained its intent in these words:

There has been no attempt at fancy architecture, the external appearances of the building being at once neat and massive, suggestive of solidity, and devoid of superfluous ornamentation. . . . The arrangement of the

interior shows convenience and adaptability to have been the study of the architect, while the solid, substantial appearance of the building externally will be pleasing, and convince the public that their money has not been frittered away by sacrificing stability to a taste for gorgeous effect.²⁸

In the opinion of the Marquette School Board, the variegated native sandstone building material best suited the utilitarian nature of a public school and best conveyed the wise use of public monies. Only minor concessions were made to "superfluous ornamentation."

Struck designed and supervised the construction of the major stone buildings erected in Marquette in the 1870s.²⁹ He stayed in Marquette for only three years before moving to La Crosse, Wisconsin, in 1876, then to Minneapolis in 1881, and finally to Spokane, Washington, in 1905. Working in the Gothic Revival style, Struck drafted plans for at least seventeen structures in the Upper Peninsula, eleven of which were in Marquette. Building committees called upon him to do their school, fire station, opera house, and church. Prominent citizens asked him for plans for their homes on the Ridge, the town's most prestigious residential section. Struck's role in improving the appearance of Marquette did not go unnoticed. The local newspaper viewed his buildings as handsome and substantial, and noted that his increased business had forced him to send to Chicago for a "first-class draughtsman."³⁰

The Marquette School Board awarded the construction contract for the High School to Hampson Gregory. Born in Devonshire, England, Gregory had studied building while he worked as a miner. In 1860 he emigrated to Canada and worked in the construction business there

for eight years. He came to Marquette in 1868 just as the city was rebuilding after the fire. Soon after his arrival in Marquette, Gregory advertised as a builder competent in brick, stone, and wood construction. By 1874 he owned the Marquette Manufacturing Company, the largest building contractor and building supplier in Marquette and an employer of eighty men.

Gregory began construction of the new High School in August 1874 after the old Ridge Street School had been torn down to make way for this "more pretentious structure."³¹ It was finished in September 1875 at a cost of \$40,000. As construction approached completion the Marquette Mining Journal reported that the new high school would be "the finest edifice in the Upper Peninsula . . . an ornament to the city and a monument to the good sense of our people and the resources of this favored region."³² Again, the people of Marquette were proud of the evolving image of their city. They liked its growth, its uniqueness, its enterprising people. The new high school of variegated brown Marquette sandstone expressed the ambition, practicality, and identity of the people of Marquette.

From 1874 to 1876 Marquette's wealthiest religious community built a small parish church after the plans of Gordon W. Lloyd (1832-1905) of Detroit, one of the Midwest's most fashionable church architects, and under the local supervision of Carl F. Struck. The clear brown Marquette sandstone building material, beautiful Gothic Revival design, and first-rate craftsmanship of St. Paul's Episcopal

Church (Figure 14) symbolized the high level of social and economic achievement reached by the parish and the city.

St. Paul's Episcopal Church stands in a conspicuous position at the entrance to the Ridge Street residential district. It is situated at the northeast corner of Ridge and High streets on the site of the parish's first church, a wooden structure completed in 1857 and moved in 1874 to make way for this larger church which was thought "better adapted to the wants of the growing parish, and more in keeping with the wealth and refinement of the city."³³ Originally free standing, the church is now connected by means of a hallway at the northeast corner to the stone Morgan Memorial Chapel (1889), designed by Cobb and Frost of Chicago, and in turn to the Parish Hall (1907-1909), designed by Demetrius Frederick Charlton.

St. Paul's Church is a small asymmetrical structure with a steep roof, two transepts, and a crenelated and buttressed square tower placed at a forty-five degree angle at the southwest corner where it serves as an entrance and gives the building a distinctive appearance. A clearly articulated chancel projects at the north. The building is constructed of uniformly colored and cut Marquette brownstone, laid in even ashlar. Slate from the quarries at Huron Bay covers the roof. Four double windows pierce each side of the church, two double windows flank the entrance on the south, and a large circular window is over the entrance. The church features abundant Gothic features in the lancet windows, trefoil, and quatrefoil motifs in the stonework, and window tracery.

The tower entrance leads to a vestibule which contains stairs ascending to a gallery that seats nearly 100, and functions as an entry to the nave that seats 500. The nave has a three-aisled arrangement. Open wood trusswork supports the ceiling of the nave. Light filtered through stained glass windows illuminates the interior. The woodwork was designed and crafted by A. Gustafson of Hager and Wallaster, local furniture manufacturers. Pews of butternut trimmed with walnut originally were upholstered in crimson terra. All portions of the church were carpeted with a coral pattern of crimson and black ingrain. Walls were finished in a mellow tint of French gray and the squares between the arches of the roof in pale blue frescoes.

On 12 March 1874 the Vestry of St. Paul's Episcopal Church decided "to build as soon as possible a new [Church] edifice of stone--to cost in the neighborhood of \$33,000."³⁴ It noted that the church would be built after the plan of the Episcopal Church at Fond du Lac, Wisconsin, with changes and improvements in details as necessary. The vestry appointed a building committee which included Peter White, a stockholder in the Marquette Brownstone Company; W. L. Wetmore; J. C. Morse; and H. A. Downs. It took preliminary steps by inspecting plans, preparing estimates, examining the prospects for raising funds, and reporting to the vestry. On 29 May 1874, the vestry adopted, with some alterations, the plans that Gordon W. Lloyd had prepared the summer before.³⁵

Lloyd was born in Cambridge, England, and although he spent much of his youth in Canada, he had trained in England under the

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tutelage of his uncle, Ewan Swan, a well-known church builder and restorer who practiced in the vernacular of the Gothic Revival and later became president of the Royal Institute of British Architects. Lloyd augmented this practical studio training with a classical education unknown in American schools by studying at night at the Royal Academy. After touring Brittany, Normandy, Touraine, and the Upper Rhine in 1856, he returned to England a refined architect committed to the Northern Gothic style. In 1858 Lloyd came to Detroit. Here and throughout Michigan and Ohio he soon found his unusually polished skills in great demand.

When the Marquette Mining Journal described the recently approved plans for the church on 13 June 1874, it noted that "the building will be the Marquette brownstone--than which the world does not afford a handsomer or more appropriate material for such buildings. The stone will be hammer-faced, with chiseled edges, giving a solid, massive appearance."

A detailed drawing of the tower facade, owned by St. Paul's Church, shows how the stone was cut and finished. It specifies the exact dimensions and finishing of each block, thereby instructing the quarry on exactly what was required. The sawmill at the quarry cut and finished the stone to order. The newspaper noted that much of the stonework for the cornice, window, door casings, and the like was done during the winter. A man identified as Gowling, "the manipulator of fancy stone work--the boss mason of Marquette," and his force began placing it in position on the church in the spring.³⁶

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Construction on St. Paul's Church began in July 1874 and ended a year and a half later. The church cost nearly \$56,000, almost twice as much as estimated. The Marquette Mining Journal described the spellbinding visual splendor of the interior and noted its unlikely presence in Marquette:

The improbability of finding, in a section of the country remote from the centers of wealth and population, a house of worship so costly, so elegant and so pleasing, leads one to seek assurance that he is not amid the wealth and ecclesiastical magnificance of one of the great cities of this or the eastern countries. Upon all sides, the rarest and costliest materials, wrought by the most skillful and experienced artisans, and combined in exquisite taste, contribute to the pleasing appropriateness of this temple of worship. The lofty arches of open woodwork supporting the roof, lend a resonance to the atmosphere and a solemnity to the place and voice, scarcely heightened by the subdued and vari-colored light which finds its way through the elegantly wrought stained glass windows.³⁷

With costs so high and subscriptions difficult to attain during the Panic of 1873, the building committee compromised its plans by deferring the construction of the steps, the completion of the tower and spire,³⁸ and the landscaping. Nevertheless, the church was completed in time for Christmas Day services, 1875. The newspaper added that St. Paul's stood unrivaled among the many costly and elegant buildings in Marquette largely because of its materials and workmanship. Indeed, St. Paul's Episcopal Church remains one of the most beautifully designed and crafted stone structures built anywhere in the Lake Superior region.

The economic boom of the 1880s which followed the Panic of 1873 resulted in a surge of building activity. Marquette's population reached 10,000 in 1890, and the many fine residences and

commercial buildings attested to the city's prosperity. In 1880 Daniel H. Merritt, a pioneer industrialist, commissioned Hampson Gregory to build an elegant brownstone residence on the south side of the street where it would command a view of Lake Superior, the city, and the surrounding country. The Daniel H. Merritt House at 410 East Ridge Street (Figure 15) demonstrated the financial and social success of its newly rich owner and the capability of a craftsman steeped in the stone building tradition of his native Devonshire to apply his skills in the rocky Lake Superior region.

Merritt was born in Green County, New York. He came to Marquette in 1858 to work for the Iron Mountain Railroad, and became the general manager of its successor, the Marquette, Houghton and Ontonagon Railroad, a position he maintained until 1874. From 1868 to 1893, he also worked with the Lake Shore Iron Works. Merritt invested in mining companies, banks, and land. When he built his fifteen room house at age forty-seven, Merritt belonged to St. Paul's Episcopal Church and held a prominent position in social circles.

Hampson Gregory, the designer of the house was not a stranger to Marquette for he had designed and built many stone buildings in this city. By the 1880s he had promoted himself from builder to architect and superintendent and by the middle of the decade the newspaper noted that Gregory, more than any other man, had been responsible for the building of Marquette.³⁹ For a client seeking the services of a local man capable of designing and building, Hampson Gregory was a logical choice. For a client desiring



Figure 14.--Gordon W. Lloyd, St. Paul's Episcopal Church, Marquette, 1874-75.



Figure 15.--Hampson Gregory, Daniel H. Merritt House, Marquette, 1880.

the services of a professional capable of handling stone, Gregory was the very best choice.

The nearly square suburban villa house displays a central projecting tower with a concave mansard roof, bracketed hood, and wrought iron balconet which serves as a double-doored entry and observatory. The home measures forty-five feet by sixty feet in plan and is two and one-half stories in height. At the south the site slopes away exposing the basement. A low-pitched mansard roof topped with iron cresting and supported by wooden brackets covers the structure.

The evenly spaced, segmentally arched, elongated windows of the first and second stories are placed beneath the small attic story windows in the frieze, and enhance the formal balance of the house. Four corbelled and decorated brick chimneys push through each quadrant of the roof. A veranda sweeps around the east and south sides of the house. The walls are of variegated brown Marquette sandstone laid in evenly coursed ashlar.

The basement or ground floor contained the reception room, billiard room, laundry, pantry, kitchen, and bathrooms. The second floor held the library, parlor, dining room, bath and bedroom. The third floor had ten sleeping apartments and a bath. Walnut finished the billiard and reception rooms and the entire second floor, while cherry was used in the third floor. Today the house is divided into apartments but the exterior and many interior features remain unchanged.

When construction on the Merritt House began in May 1880, the Marquette Mining Journal thought that

it will be the handsomest as well as the costliest private residence on the upper peninsula, and will add at least a hundred per cent to the handsome appearance of that already handsome street. A town or city cannot have within its borders too many such men as D. H. Merritt. A dozen more such as he would make Marquette the prettiest and one of the most enterprising cities in the whole northwest.⁴⁰

The Merritt House gives the impression of dignity, refinement, elegance, and a love of social pleasures. One such occasion, the lavish wedding reception of Merritt's daughter, Edith Louise, to William Jarvis Stevens, was reported in detail by the Marquette Mining Journal of 9 May 1885. The house is styled as a villa or country house which Andrew J. Downing and other nineteenth century writers advocated as the most refined home of America, suited for its most leisurely and educated class of citizens. The roughly dressed, native sandstone expresses the handsome character and picturesqueness of the house, the competence, wealth, and good taste of its owner, and the coming of age of the city in which it stands.

Another example of the building activity of the 1880s was the Harlow Block. In 1887 Amos R. Harlow, one of Marquette's earliest settlers and the one whom many called its founder, built a large commercial building at the northwest corner of Washington and Front streets. Seeking to invest some of his money in real estate, Harlow, at age seventy-two, collaborated with Hampson Gregory in the plan and design of the block. They produced the Harlow Block (Figure 16), a plain variegated brown Marquette sandstone structure in the vernacular tradition. Nearly all of the space in the building was rented before it was finished.

The Harlow Block is a detached commercial building which stands on a south sloping lot, formerly occupied by the Clifton House Hotel at the principal intersection of Marquette's downtown commercial district. Driveways separate this building from commercial buildings to the north and from the block to the west, built for Harlow four years earlier.

The rectangular shaped building measures 75 feet on Front Street and 146 feet on Washington Street. It is three stories on a full foundation. The grade slopes southward to Washington Street, gradually exposing all three stories. Pilasters divide the windows of the south facade into a 3-3-2-3 arrangement and suggest the interior grouping of stores and offices and the main entry and central halls above. The westernmost section of the front is narrower than the sections which flank the entry and seems like an extension to an otherwise symmetrical design. The walls are of smooth-cut and evenly laid variegated sandstone, locally called "raindrop" for its purplish-brown iridescence.

Keystoned ornamentally carved caps top the segmentally arched windows. Giant pilasters enframe the main entry section, which contains a double door surrounded by lights and surmounted by two pairs of windows and which terminates in a cornice that projects from the main cornice line and contains a panel inscribed with the name of the block. This upward thrust intersects the horizontal movement of windows, floors, and cornice.

The first floor contains five stores, three facing Washington Street, two facing Front Street. All displayed large

plate glass windows and iron fronts. Entries from each street lead to intersecting hallways. The second and third floors contain offices and rooms. All were supplied with water, ventilating flues, light from at least two windows, and steam heat. Solid stone walls divided the basement into store cellars. From one entrance on the alleyway, goods arriving for the five stores could be sent to the cellars without disturbing customers. The building was fireproof: solid masonry firewalls rise from the basement to the roof between stores; iron doors separate rooms from hallways; vaults stood on every floor; fire escapes lead from every floor; and solid masonry formed walls and partitions. Except for the disturbing plastic paneling on the first floor Washington Street facade, the block is in original condition.

Amos R. Harlow frequently invested in real estate. Just one door east of the Harlow Block on Washington Street he had erected "a substantial and handsome business block" in 1883.⁴¹ And later, in 1890, he bought a row of old structures on South Front Street which he replaced with a reconstructed and enlarged three-story building of stores, offices, and flats.⁴² When Harlow's will was entered in probate, the Marquette Mining Journal expressed its approval of this man's business activities and their effect on the growth and development of Marquette:

He was never given to locking up his money in bond and mortgage, after the manner of some men, much preferring to invest his income in the improvement of real estate and the erection of buildings. This spirit on his part served to build up and improve this city and afford employment to labor and therefore deserves praise. Had Amos R. Harlow been content to let his fortune accumulate and increase in

interest-bearing securities, bonds and mortgages, he might have died wealthier but not so worthy the respect and remembrance of his fellow citizens. Though he left a large estate he never became a mere coupon clipper but up to his death kept on building and improving and thereby adding to the appearance, wealth and convenience of the city where he lived.⁴³

Admiration for the role Harlow played in building up Marquette typifies the optimism and pride felt by Americans as enterprising citizens settled, developed, and promoted their communities.

Of Harlow's commercial real estate investments, the Harlow Block was probably the most substantial. On 5 February 1887 the Marquette Mining Journal announced that Gregory had completed plans for the Harlow Block and work on the foundation had begun. It noted that

it will be built either of brick, or Marquette variegated sandstone, sawed, and in either case the pilasters will be of the sandstone, while the ornamental window caps will be of sandstone or terra cotta. The lower cornice will be of galvanized iron, and the upper cornice of brick or terra cotta. . . . The front and side elevations as drawn by Mr. Gregory are very fine and the plans give every evidence of having been drawn with a great deal of care, both Mr. Gregory and Mr. Harlow having put a great deal of time and thought upon them. The building will be completed this summer and will be a splendid addition to the business blocks of the city, and one in which both the owner and the architect can feel pride.

While the Harlow Block was under construction, the Marquette Mining Journal for 9 April 1887 remarked that the \$80,000 structure would be "one of the handsomest buildings in the city, not only from the architectural point of view, but also from the location. . . . Marquette's beautiful variegated sandstone, trimmed with clear brownstone will be used. . . ." The location, building material, and straightforward exterior design and convenient interior

contributed to the desirability of the Harlow Block as commercial income property.

As the building neared completion in September 1887, all five stores and nearly every office were leased. The Harlow Block succeeded because Harlow and Gregory knew from practical experience what prospective tenants wanted in the way of commercial and office space. The Harlow Block gave tenants a good address in a substantial stone building located in the heart of the downtown business district. Its corner site permitted direct and convenient access from two streets and light, airy, and ample interior spaces. Harlow and Gregory let their common sense guide them in the production of this utilitarian structure of native brown sandstone.

It was the completion of substantial stone buildings like the Harlow Block that led one writer to conclude that Marquette gives the impression of "a large city in miniature." Unlike most rapidly growing western towns which resemble "an uncouth boy, whose clothing has unfortunately far from kept pace with his growth," Marquette seemed by 1887 to combine the activity of the West with the finished effect of the East. This, the writer explained, was due in large part to paved streets, progressive business activity, costly and beautiful church architecture, substantial and convenient schools, and the handsome business blocks of brick or freestone, "the product of quarries in the immediate vicinity, which are one of the city's numerous resources."⁴⁴

The erection of the Upper Peninsula Branch Prison and House of Correction (Figure 17) at Marquette in 1885-89 marked the



Figure 16.--Hampson Gregory, Harlow Block, Marquette, 1887.



Figure 17.--William Scott & Company, Upper Peninsula Branch Prison and House of Correction, Marquette, 1885-89.

importance of this city's role as a governmental center for the Upper Peninsula. Acting on behalf of the state which was responsible for constructing and maintaining prisons and disciplining criminals, the Board of Commissioners decided to locate this major state institution at Marquette. It selected the plans of William Scott and Company, a Detroit firm which rapidly was gaining experience in the design of public buildings at a time when state and local governments were building their first substantial schools, insane asylums, orphanages, courthouses, city halls and the like in recently settled frontier areas. Construction of the prison attracted building professionals from large cities in Lower Michigan and employed hundreds of local contractors and workmen. The red and brown Jacobsville sandstone prison became a regional landmark. Moreover, it expressed current thought on the punishment and reform of criminals.

Marquette Prison is situated on a plateau nearly three miles southeast of the center of Marquette where it commands a view of the valley, bay, and city. The site was said to be "almost too beautiful for a prison."⁴⁵ In 1888 the site included 152 acres; today it encompasses 284 acres with an additional 160-acre farm. The hardwood land was well suited for cultivation and contained good sand pits, clay, and extensive bodies of building stone, all of which were used in construction. In preparation for construction, the Detroit, Mackinac, and Marquette Railroad, later the Duluth, South Shore and Atlantic, ran branch tracks into the grounds.

The Marquette Prison was designed in a regional interpretation of the Victorian Romanesque style. It was constructed of

locally quarried brown Marquette sandstone with contrasting trim of red Portage Entry sandstone. Lake Superior slate covered hipped roofs supported by timber trusses. The style and the rock-faced, multi-colored stone building material seemed appropriate to such a powerful building.

The Michigan legislature established the Upper Peninsula Branch State Prison and House of Correction in 1885, after the increased criminal population of the state overcrowded the Michigan Asylum for Insane Criminals at Ionia and the Detroit House of Correction, and after new thought regarded county jails as ineffective accommodations in which to rehabilitate criminals. The problem was to design a facility in which prisoners could be punished with strict military discipline and corrected by productive work. The Marquette Mining Journal for 25 January 1890 expressed the current opinion on criminal reform:

Certainly it is much better in every way for disorderly persons and criminals to be sent to a prison where they will be made to work than to be committed to a county jail and enforced idleness. Labor contributes to health of both mind and body and idleness is demoralizing in an extreme degree.

At Marquette the prisoner would work during the day in a common area making brooms, snowshoes, clothing, or cigars--or he would improve and beautify the prison grounds--and he would sleep at night in a single cell. Marquette follows the Auburn, named for the prison at Auburn, New York (1816-25), rather than the Eastern system, named for the Eastern Penitentiary at Cherry Hill near Philadelphia (1825). Auburn called for the rehabilitation of criminals by

allowing them to sleep in cells at night but work in common areas during the day; Eastern kept prisoners in solitary confinement day and night.

The original walled complex consisted of several structures: an administration building; rotunda; two cell block wings; dining hall, kitchen and hospital building which included a laundry, tailor shop and drying room; boiler and engine house with an immense brick stack; and guard wall and sentry block. The administration building, rotunda and one cell block are the only remaining parts of the original prison complex completed in 1889.⁴⁶ The plan arranged the prison in a radial pattern with two cell block wings or radii projecting from a semi-octagonal rotunda. It anticipated the addition of two more cell block wings radiating from the rotunda; these were never built.

The administration building, 112 feet in length by 56 feet in depth, rises two stories with a square central tower which stretches 88 feet from the ground to the top of the turret and contains a Syrian-arched entrance. Octagonal turrets with conical roofs terminating in terra-cotta finials rise 60 feet and delimit the front corners of the structure. The Marquette Mining Journal for 28 April 1888 extensively described the prison buildings while under construction:

In an architectural sense, the administration building is the building of all. . . . It is to be built entirely of Marquette and Portage Entry rockfaced sandstone, and will present the most elegant and massive appearance of any building north of the straits. . . . Marquette brownstone will be used entirely except for the string course,

cornices, window arches, gables, the embattlements on the tower, etc., which will be of Portage Entry red sandstone. The roof will be of Lake Superior slate, which was used on all the other buildings, with terra cotta ridging. On the building there will be a great deal of carved and dressed stone work; this is mostly finished and ready for the builders, the stone cutters having been at work all winter. Some of it is very beautiful and required an immense amount of work.

The administration building contained the residence and business office for the warden and offices and living quarters for the deputy warden, physician, chaplain, and other officers. A long corridor connects the administration building to the rotunda. The rotunda, 75 feet in diameter, and the cell block wings, each 168 feet by 44 feet in plan and containing 156 cells arranged in three tiers, were built of Marquette brownstone backed by stone quarried on the prison site. An immense slate-covered hipped roof supported by trusses and surmounted by a cupola tops the structure. The first floor of the rotunda contains a guard room, which permitted views of both cell block wings and offices. Two broad stairways led to the vast hall of the second floor, unobstructed by the truss-supported roof. A small gallery over the stairs provided space for a chapel.

The dining and hospital building stand behind the prison. Nearby was the engine house which furnished heat and light for the prison. An arched conduit of brick ran through all of the buildings carrying the water and steam pipes, speaking tubes and electrical wires.

Act 148 of the (Michigan) Public Acts of 1885 established the Upper Peninsula Branch State Prison and House of Corrections

and appropriated funds for its location and erection. Governor Russell A. Alger appointed a blue ribbon board of prominent Upper Peninsula citizens representing all geographic areas and many industries and businesses to investigate and manage the construction of the prison. This six-member Board of Commissioners included Peter A. Van Bergen of Menominee, Eli P. Royce of Escanaba, James M. Wilkinson of Marquette, Eli B. Chamberlain of St. Ignace, Charles Hebard of Pequaming, and John Duncan of Calumet. The board selected and secured a site; adopted plans and specifications for the grounds, buildings, and fixtures; and reviewed bids and proposals for construction.

After inspecting sites at Escanaba, Negaunee, L'Anse, and Marquette, the board selected a seventy-two-acre site in Marquette, which the Marquette Business Men's Association then purchased and donated to the state.⁴⁷ Later additional land was acquired to gain full control of the prison's water supply. The Marquette Mining Journal for 28 April 1888 remarked that the Board carefully had selected the site:

The commission visited nearly every prominent point on the peninsula before selecting a site, the strife being great. Marquette through her business men's association was meanwhile making ready her bid and when the commission at last came here several sites were offered and one of them was chosen almost at once as superior to any offered elsewhere, Marquette's importance as the central city of the peninsula being fully recognized.

Upper Peninsula towns competed keenly for the prison but Marquette's superior location, more advanced development, and aggressive businessmen made it the obvious choice.

In September 1885, only a few months after the Michigan legislature had appropriated funds for the location and erection of the prison, and after the Board of Commission had met and elected officers, and, less than a week before the board published in the newspaper a request for the donation of a site, a Marquette quarryman urged the board to select an architect who would design the prison in Portage Entry red sandstone. John H. Jacobs, the owner and manager of the Wolf and Jacobs quarries recently opened at Portage Entry, asked J. W. Wilkinson, treasurer of the board, to give full consideration to John Scott of William Scott and Company, architects, whom he called "the best friend our Portage Entry Red Stone has got."

Mr. John Scott of the firm of Wm Scott & co Architects of this city [Detroit] will call on you and make an application for making the Plans of the new States Prison that will be built at Marquette I trust he is the best friend our Portage Entry Red Stone has got and about the only friend so what helps me will help you the Portage is what I want to figure on when the job is to be let and if you can help him to get the making of the plans it will be of grate help to us the Royalty is quite a consideration if possabely you will do all you can for him his Partner has bin to see the Portage Quarry last year and likes the stone Well the sale of the stone depends on the success of the quarry.

They are the oldest and most reliable firm that I know off and have done a grate deal of this kind of work they made plans of the Pontiac Jail and used our stone. I trust you will do for Mr. Scott all you can and oblige.⁴⁸

The Board chose the designs and plans made by William Scott and Company of Detroit and modeled largely after the Ionia House of Correction over those prepared in competition by other architects.⁴⁹ It employed the firm to supervise construction. William Scott, a trained architect, had emigrated from Ipswich,

England, to Windsor, Ontario, in 1853. In 1875 he located in Detroit and formed a partnership with his two sons, John and Arthur Scott. When William Scott's plans for the prison were selected in 1887-88, the firm opened a branch office in Marquette and placed Demetrius Frederick Charlton in charge of the office and the prison construction. After William Scott retired in 1889, the firm changed its name to John Scott and Company, but was known as Scott and Charlton in Marquette. It won several important public and private commissions in the Upper Peninsula in the late 1880s and early 1890s and used the indigenous red and brown Jacobsville sandstone.⁵⁰

Demetrius Frederick Charlton (1856-1941) was born in Ingtham, Kent County, England. He emigrated first to Canada and then to Detroit in 1877. By 1881 he was working as a draftsman for Gordon W. Lloyd, and by 1885, for William E. Brown. In 1887 he married Cornish-born Alice H. Grylls, the sister of H. J. Maxwell Grylls, who also worked for John Scott but later became a partner in Smith, Hinchman, and Grylls. Trained as a civil engineer, Charlton was elected a Fellow of the American Institute of Architects in the spring of 1893. He worked for the passage of the first state registration act and was appointed by the governor to its first board.⁵¹

Once the prison was completed Charlton remained in Marquette and became the most prominent architect in the Upper Peninsula. In 1892 he took in an associate, R. William Gilbert, and in 1895 another, Edward Demar. The firm opened branch offices in Sault Ste. Marie and Houghton, Michigan and in West Superior, Wisconsin. By

1903 Edwin O. Kuenzli joined Charlton and they opened a branch office in Milwaukee. This association continued until Charlton retired in 1917. By then Charlton had designed 80 schools, 20 public buildings, 3 Carnegie libraries, and 250 business blocks and houses.⁵²

The Marquette Prison was designed, constructed, and furnished at a cost of \$225,000. The original appropriation for \$150,000 contemplated the completion of only one cell wing and did not provide heat, light, or furnishings. In 1888 the Michigan legislature appropriated \$75,512 for completing and furnishing the building and for constructing the second cell block.⁵³

The board advertised the letting of all contracts for labor and materials in the Detroit daily papers and in one daily paper published in the Upper Peninsula. Wahlman and Grip of Ishpeming, who bid \$135,817 (\$90,000 less than nine other firms competing for the job) constructed the complex.⁵⁴ A. W. Lovejoy of Kalamazoo supervised the work for the contractor.

John Wahlman and John G. Grip established their general contracting and building firm in Ishpeming in 1880. Wahlman, born in Sweden in 1837, emigrated to Chicago in 1865 and moved to Ishpeming sometime between 1868 and 1872 to work as a contractor and builder. Grip arrived in Ishpeming in 1878. Wahlman and Grip regularly employed about 75 workers, but in 1886, when the prison project was underway, they employed 200. The firm secured contracts for stone buildings throughout the central and western Upper Peninsula, and worked on such Scott and Charlton projects as the Gogebic

County Courthouse (1888) in Bessemer, Michigan, and Campbell and Wilkinson's Bank (1888) in Marquette.

James Sinclair served as foreman in charge of masonry work for Wahlman and Grip. For three years he supervised crews of stone masons who built the walls of the prison and at one point numbered nearly 130, including helpers. Sinclair was born in 1860 in the Orkney Islands of northern Scotland, the son of a stone cutter and builder who frequently worked in Edinburgh. The young Sinclair learned the trade of masonry construction in Edinburgh and emigrated to Marquette in 1887. Sinclair was considered one of the most skilled stone masons in Marquette.

Subcontracts were awarded to local firms for many phases of the prison project. R. R. Williams of L'Anse, who had a reputation as "a first-class practical slater," roofed the prison with slate shipped by steamer to Marquette from the Huron Bay quarries. M. R. Manhard of Marquette roofed some of the prison buildings with copper. Robert R. French of Marquette put in the water supply for the prison for \$7,100. In 1887 his workmen cleared a large space at a creek one-half mile to the west of the prison, built a stone dam, and laid 3,100 feet of four-inch wooden pipe from the reservoir to the engine house. Charles Van Iderstine of Marquette constructed the prison walls for \$27,690. The walls measured 1,671 feet in length, 20 feet in height, and were 3 feet thick at the base and 2 feet thick at the top. Prisoners built the great guard wall about the prison buildings with sentry boxes and walks after the institution was completed and occupied. Subcontracts were awarded to a few out

of state firms. S. I. Pope and Company of Chicago installed the heating and ventilating systems. A. J. Streeter and Company of Chicago furnished the iron work and cell blocks.

When completed in the spring of 1889, the Marquette prison opened despite a temporary decline in the state's prison population of three or four hundred less than five years earlier. Indeed the prison was not fully occupied for twenty years. In 1890 prisoners were employed in a knitting industry despite the general aversion of the public toward convict-made goods.⁵⁵ J. J. Wilkinson, member of the Board of Commissioners from Marquette, said

if education and the teaching of religion, coupled with good wholesome discipline, will tend to reform, then the Marquette prison may be considered in the work to a reasonable extent. . . . An effort will be made by all concerned in its management to make it a first-class⁵⁶ institution of its kind--in fact a model of prisons.

The prison's fortress-like medieval style, the substantial building material, and its efficient plan together express the philosophy and function of prisons. Marquette's residents felt proud of this huge institution. They took excursions to view it and pointed it out to visitors. It was and still is a landmark of the Upper Peninsula.

The John Munro Longyear House (Figure 18), built in 1890-92 after the plans of Charlton, but moved to Brookline, Massachusetts in 1903-1904,⁵⁷ was the largest and most carefully planned house of Lake Superior sandstone ever constructed in the region. Its magnificent site, huge scale, perfect detail and finish, and comfort expressed the wealth, good taste, and common sense of its owner.

Moreover, the commission for the house afforded this newly arrived architect an opportunity to demonstrate his skill in designing in stone and thereby to establish his reputation.

James Munro Longyear (1850-1922) came to the Upper Peninsula from Lansing in 1873 to explore and examine mineral and timber lands for the state government, groups of investors, and land, lumber, and mining companies. Initially he secured surveying jobs through the influence of his father, who was a lawyer, congressman, and judge. Later, in 1879, young Longyear's extensive knowledge of the wild lands of the Upper Peninsula led to his appointment as land agent for the Keweenaw Canal Company, to whom the legislature had awarded a land grant for building the canal that connected Portage Lake with Lake Superior, and he settled in Marquette. Longyear's shrewdness and first-hand experience in assessing the region's mineral and timber resources and in dealing with speculators, developers, and regulators aided his own transactions. Investments in the Gogebic, Menominee, and Mesabi iron ranges, dealings with the Steel Trust, and a coal-mining venture in Spitzbergen, Norway, made him rich and brought him into contact with some of America's foremost capitalists and industrialists. By 1890, when Longyear built his house, his family had grown to five children and a household of servants, his fortune had increased to millions, and his travels throughout the United States and Europe had expanded his vision. Longyear then served as mayor of Marquette.⁵⁸

Located at 536 Arch Street, the Longyear House occupied an entire block on the high bluff at the corner of Arch and Cedar streets overlooking Presque Isle and Lake Superior. A stone retaining wall surrounded the property. The rectangular house with cross-gabled roof was two and one-half stories and measured 84 feet by 112 feet in ground dimensions, excluding the veranda. An octagonal tower at the northeast corner, projecting pavilions, decorative chimneys, and a porte cochere with attached two-story tower pushed out from the solid Romanesque style stone mass. A large stone veranda swept around the east and south sides of the house. A semi-circular entrance arch supported by short columns faced north from Arch Street. Rock-faced Jacobsville sandstone, laid in random courses and trimmed with smooth-cut and carved stone, finished the exterior.

The interior of the house featured a great octagonal hall, twenty-one feet in diameter, open to the roof and lighted from above. Around it pivoted the dining room, entrance hall, reception room, and library. By means of archways it, on occasion, could be thrown together with the drawing room, entrance hall, and reception room. An octagonal-ended dining room stood on the northeast corner and displayed many windows, a fireplace, and inglenook. The rooms most frequently used by the family--the sitting room, breakfast room, and library--overlooked Lake Superior. The detached tower contained the children's playroom on the first floor and a photography room and laboratory on the second. On the second floor of the house a gallery surrounded the great octagonal hall. This floor and the

attic held bedrooms, bathrooms, and servants' quarters. The basement contained the kitchen, laundries, and boiler room. Many open fireplaces supplemented the steam heat and made the house comfortable.

On 25 January 1890 the Marquette Mining Journal announced Longyear's intent to erect a large and expensive house on a lot adjoining his present house on Cedar Street. That winter and spring Longyear developed the design and plans for his house and chose an architect to carry them out. He invited Eugene C. Gardner of Springfield, Massachusetts, Treat and Foltz of Chicago, and Charlton to submit plans and sketches.⁵⁹ Longyear described the kind of house he wanted in a letter to Gardner of 14 February 1890:

My idea is that the house will cost say \$40,000. We want a "first-class job" if we build, and the above named figure is a guess at the cost. . . . My idea is to build a large country house.⁶⁰

By means of letters, memoranda, and diagrams, Longyear conveyed his instructions and those of Mrs. Longyear to Gardner and to Treat and Foltz but did not ask them to visit the site.⁶¹ Longyear detailed their preference for the placement of the house on the site, the arrangement of interior space to accommodate their family, servants, and guests, and the appearance of the exterior. The absence of written correspondence between Longyear and Charlton suggests that Longyear spoke directly with Charlton, since they lived in the same city.

The Longyears paid special attention to the impression the physical appearance of the exterior would have on the viewer. After all three firms had prepared satisfactory floor plans, Longyear asked

each to submit accompanying elevation sketches. In a letter to Gardner of 19 March 1890 Longyear explained "there are fine views of the house in all directions, except the west, but it is important that the west side should be presentable as the town lies in that direction and the house is approached from that way."⁶² In the same letter Longyear called for four fronts since the house would be entirely isolated from other buildings and stand in a conspicuous position on the point of the ridge: the south side would face the harbor; the east would look out over Lake Superior; the north would front the street from which all carriages must approach; the west would be visible from the entire length of Cedar Street, the neighborhood's most traveled road. Longyear stated that they preferred no one style to another. They did not like "gingerbread," however, but wanted the exterior beauty to consist mainly of proportions, lines, and we assume, texture and color.

The Longyears selected the plans drafted by Demetrius Frederick Charlton, which offered a choice between a Scotch Baronial and a Romanesque style exterior without affecting the interior arrangement and rejected the plans of the other two architectural firms. On 25 March 1890 Longyear wrote Treat and Foltz that he had concluded to go no further with their plans and would pay his bill. Three days later he elaborated in a letter to that firm, "My decision to go no farther with the plans was not due to any displeasure on my part but we have seen plans which we think we shall like better."⁶³ On 25 April 1890 he wrote Gardner that "the plans in many ways please us, but Mrs. Longyear has seen plans which

suit her better, and we will therefore not proceed farther with the plans you have been at work upon . . . if you will send me your bill for the work done heretofore, I will remit for it."⁶⁴

The Marquette Mining Journal for 3 May 1890 announced that Charlton had won the commission for the Longyear house.

The designs for the house were made competitive. Plans were made by Mr. Charlton and by well-known Chicago and eastern firms and submitted for decision. It is no small testimony to Mr. Charlton's abilities that his designs were adjudged better than his older and more renowned competitors. Marquette may well congratulate herself that she has an architect capable of entering a competition and coming out the winner.

The newspaper emphasized that the house would be built of Upper Peninsula materials and with Upper Peninsula labor. The same article made clear that "it is Mr. Longyear's intention to make the building as far as possible of upper peninsula materials. The walls will be either of Lake Superior red or brown stone, the roof of slate or copper and the interior finish of native woods and native marble." For the first time it revealed the details about the house as evidenced by the floor plans and exterior sketches.

Construction on the house began around 14 June 1890, and ended on 8 October 1892 (Figure 19). The Marquette Mining Journal observed that contracts were awarded most frequently to local people:

. . . the contracts of the new Longyear residence do remain at home whenever such a thing is possible. Mayor Longyear is evidently determined to reside in a house built of Marquette and Lake Superior materials and by Marquette labor, or in none at all.⁶⁵



Figure 18.--Demetrius Frederick Charlton, John Munro Longyear House, Marquette, 1890-92, moved to Brookline 1903-1904.



Figure 19.--Longyear House. Entry detail with the Longyears (third and fourth from left, upper row).

For example, Charlton, acting on Longyear's behalf, gave a contract to a local rather than the low bidding firm.⁶⁶ John H. Jacobs won the contract for supplying the brownstone for the house. He took it from Marquette quarries. Charles Van Iderstine laid the stone work and superintended the construction of the house.

Longyear consulted with two eastern professionals about the finishing details, however, at the suggestion of his friend, Theodore M. Davis of Newport, Rhode Island, president of the Keweenaw Canal Company. Longyear sought the advice of Richard Codman of Boston with regard to the interior finish and decoration. From him he purchased lighting and fireplace fixtures, wallpaper, Bulgarian embroideries, vantine rugs, Cottier furniture, mirrors, and clocks.⁶⁷ He asked Frederick Law Olmsted of Brookline to lay out the grounds around the new house. Olmsted personally inspected the site and planned the landscaping. He incorporated into the scheme stone retaining walls, iron fences, enclosed courts, stone sidewalks and stairways, tennis courts, a gymnasium, and an arbor and native plantings.⁶⁸

On 23 April 1893, when the landscaping plans were revealed, the Marquette Mining Journal declared that "when the Longyear residence is completed and furnished it will stand as the finest house in all Michigan and the peer of any palatial residence in the northwest" because of its huge scale, its interior arrangement, its magnificent view, and its high quality workmanship. Biographies of Longyear often referred to his magnificent stone residence on Lake Superior, "one of the most beautiful and costly

homes in the state of Michigan," as evidence of the stature of the man. In like manner, handbooks and citizens' guides to the city of Marquette referred to Longyear's palatial sandstone house as evidence of the stature of the city.⁶⁹

In the early 1890s Nathan M. Kaufman, the son of a German Jew and a young man of wealth and power, spearheaded movements to construct what would be among the last of the major sandstone buildings ever erected in Marquette--the Marquette County Savings Bank and the Marquette City Hall.

In 1890-92 a group of Marquette businessmen led by Kaufman organized the Marquette County Savings Bank and built a bank building on the southeast corner of Front and Washington streets, the city's main intersection. Designed in 1891 by Barber and Barber, architects of Duluth, and constructed by Noble and Benson of St. Paul, the modern bank was built fireproof and solid of pressed-brick and brown Rock River sandstone. It proclaimed the prosperity and progressiveness of Marquette at the very moment the city wavered on the edge of an economic recession.

The Marquette County Savings Bank (Figure 20) is situated on a site that slopes from Front Street east toward Lake Superior and south toward the Jackson cut of the Lake Superior and Ishpeming Railroad line's final approach to the ore docks. The building rises seven stories at the rear (east), six stories at Washington Street (north), and five stories at Front Street (west). The detached, flat-roofed, rectangular structure measures 42 feet in width,



Figure 20.--Barber & Barber, Marquette County Savings Bank, Marquette, 1891-92.

100 feet in length, and 97 feet from the ground to the top of the clock tower.

Rock-faced brown sandstone on the first story of the Front Street facade appears to anchor firmly the structure to its site. Lintels, sill courses, and jambs are of smooth-cut sandstone. Stone panels and blocks carved with a stylized foliated design ornament the Front Street facade (Figure 21). The building's largest block of stone carving occurs over the main entrance and bears the inscription "Savings Bank." The central, three-door, recessed entry design, one of the structure's most distinctive elements, features four polished red granite pillars topped by carved stone capitals. Ornamental wrought-iron grillwork inserted within lintel openings above the pillars further enhances the entrance.

Semi-circular bays delimit the corners of the Front Street facade and distinguish the building. The bays extend upward from the second through the fifth story and are supported by heavy, carved-stone decorative work. A clock tower tops the north bay and lends a Gothic ambience to the otherwise contemporary 1890s commercial block. The tower features a three-faced, eight-day, illuminated Howard clock, visible from Front and Washington streets, the docks, and the bay. It displays recessed brickwork which echoes that of the cornice line and is covered with a pointed, copper-clad roof.

Above ground each floor is arranged with offices on the Washington and Front streets portions and with a central hall that runs the length of the structure. The elevator and ventilating

shafts, smokestack, lavatories, and staircase are placed on the south side of the structure, where they deadened the noise and blocked the smoke and dust created by trains that once passed through the Jackson cut to the ore docks.

The central, three-door entry on Front Street gives access to the building. The banking rooms of the Marquette County Savings Bank occupied the main floor and were reached from steps on either side of the center entrance. The upper floors each contained twelve offices, some arranged in suites. From Front Street the central steps lead to the main corridor of the basement which is exposed on three sides where it has full windows. The basement contained safety deposit vaults, offices, and a barber shop. A subbasement held the janitor's quarters in the east portion, which opens directly outside, and boiler and engine rooms and coal storage in the west portion, which is entirely below ground.

In 1890, as Marquette was emerging from a major construction and population boom, some of the town's leading citizens quietly and quickly organized the Marquette County Savings Bank. The two banks then in existence served the extensive commercial demands of the city; the Savings Bank would serve smaller depositors and borrowers--the working men who constituted the majority of the population. The bank's incorporators included some of the hardest working and foremost businessmen of the period in Marquette: C. H. Call, a prominent businessman and the bank's first president; William F. Fitch, general manager of the Duluth, South Shore and Atlantic Railroad Company at Marquette; Samuel R. Kaufman, one of

the oldest and most successful merchants in the city; W. P. Healy, an attorney and one-time member of the Michigan legislature; Mary Breitung, widow of Edward Breitung, a major entrepreneur in the Upper Peninsula mining industry; and Nathan M. Kaufman, general manager of the Breitung estate, then one of the largest holders of mineral lands in the Upper Peninsula.⁷⁰ Its incorporators included also M. R. O'Brien, president of the People's State Bank in Detroit, and Samuel Mitchell of Negaunee. Except for Samuel R. Kaufman, the incorporators became the first directors. Of particular influence in the execution of the bank building project was Nathan M. Kaufman (1862-1918). Born to pioneer settlers Samuel R. Kaufman and Juliette Graveraet, the young Kaufman carried on the family dry-goods business before investing in iron mines and entering the financial industry.⁷¹ The Kaufmans stood just outside the city's elite.

Not until all stock, amounting to \$50,000, was subscribed and paid for, and not until the company was organized fully under the laws of the state did the promoters of the bank reveal their plans. The Marquette Mining Journal announced on 5 July 1890 the organization of the Savings Bank, noting that "it is probable that no enterprise of equal magnitude was ever before organized so quietly and quickly in Marquette." With such ample financial backing and strong management the new bank would "enjoy the entire confidence of the public and . . . secure a volume of business." Moreover, the bank would be "a useful agency in promoting the growth and prosperity of the town." It would collect small deposits and make small real estate loans.

By August 1890 the Marquette County Savings Bank opened in the Manhard Block on Front Street, but within four and one-half months the bank had deposits of \$106,000. Then the directors made plans to abandon these quarters and construct a handsome, fireproof bank. In January 1891 they purchased for \$14,000 a site at the southeast corner of Washington and Front streets known as Peck's corner and then occupied by a block which they planned to demolish once the lease on the property expired in May.⁷² The Marquette Mining Journal announced that Demetrius Frederick Charlton currently was preparing plans for a freestanding, three-or-four-story brownstone block equipped with an elevator. The building would do justice to the fine site.

Mr. D. Fred Charlton is now preparing plans for the block which will be built of brownstone and probably three or four stories high, and provided with a passenger elevator. The site is the finest in the city for an office building, as the block will stand alone and can obtain light on every side while the view from the offices on the upper floors will be grand, embracing a wide sweep of the lake and much of the city. The frontage on Front Street will be 44 feet and on Washington about 125 feet. The whole of the first floor will be used for banking purposes, while in the basement where the grade of the street permits it will be a store or office room on the ground level.

It is the intention of the officers to erect a building which will be a credit to the corner and to the city. The site is certainly too fine for anything but a four story structure and as an elevator would make the offices easy of access there is not the slightest doubt but that they would all be leased before the building was completed. The bank has men of progressive spirit and ample means behind it and they will build not for that future which is even now rapidly opening out for the city. It will be a matter of pride to every citizen of Marquette when an elegant building second to none in the city, stands upon that corner and there is also room for pride and gratification in the fact that the business of Marquette is increasing as fast as indicated by the flourishing

condition of all the banks in the city and by the phenomenal success attending the youngest financial institution here, the Marquette County Savings bank.⁷³

By 28 March 1891 the Marquette Mining Journal had enough information about the project to predict that the new bank and office building would be "the finest of its kind in northern Michigan or Wisconsin." In a front page article titled, "We're Climbing Skywards," it explained that the block would exploit the advantages of its southeastward-sloping site, isolated by its position on a corner next to the railroad tracks, and, thus, possessing unobstructed light.

The plans called for five full stories and two full basements on Front Street, and seven stories above ground at the rear where the grade permits. The well-lighted, fireproof structure would have a clock tower, elevators, and all the conveniences and equipment of the most modern city block.

The newspaper claimed that the building would be "the pride of Marquette and of the county . . . another evidence of the fact that Marquette has attained the full dignity and importance of a city of the live, progressive order." The newspaper incidentally noted that Barber and Barber of Duluth and Marquette had prepared the plans. For some reason the directors by then had dismissed Charlton, the most prominent architect in the city, and had commissioned the Duluth firm.⁷⁴ Quite likely the directors preferred a firm associated less closely with the city's establishment and more closely attuned to her working people.

On 28 February 1891, just as Barber and Barber won the commission for the Savings Bank, the Marquette Mining Journal reported in the following article that the firm would open offices in Marquette.⁷⁵

Mr. C. A. Barber of the firm of Barber and Barber, architects, Duluth is in the city and after looking over the town well has decided to open an office here and is now in search of suitable office rooms. The firm consists of three brothers, one of whom will locate in Marquette permanently. The firm has a splendid reputation at the head of the lakes and last year designed buildings in Duluth which cost over \$350,000. Marquette will soon have an opportunity to judge of the work of which the firm is capable and that there is no doubt.

On 18 April 1891, after bids had been opened, the Marquette Mining Journal fully described and illustrated the business block. About the stone and brick building materials, the newspaper had this to say:

The building up to the level of the second story from Front Street will be of very heavy construction, rock-faced sandstone with smooth cut jambs. Above that the lintels and sill courses will be of smooth cut stone and the rest pressed brick. Between the windows of each story from bottom to top will be a carved stone panel and all the ornamentation in the block will be of carved stone.

The carved stone panels thus described are displayed on the Front Street facade; the Washington Street facade highlights sections of recessed brickwork; and the east and south facades are devoid of ornament.

The local newspaper termed the architectural design "modern American with Gothic feeling."⁷⁶ Brown or red sandstone and pressed brick would be used on the Front and Washington streets sides and selected Menominee brick (nearly equal to the pressed) on the

east and south sides. Special attention would be paid to making the building fireproof. The building would stand alone and isolated from others, and construction with iron columns, steel beams, and fireproof tiling for the floor arches and partitions would extend through all the floors, the upper ceiling, and the roof. The only combustible materials would be the oak window and door casings, and one-inch-thick maple flooring laid on cement. Care also would be given to installing in the building all modern conveniences. It would be heated by steam, ventilated by a system that ensured the constant change of air in each room, piped for gas and water, and wired for electric lights and telephones. The newspaper summed up the intent of the architects and the client in erecting this modern stone and brick office building.

The site could not be bettered for an office building and it has been the aim of the architects to produce a building just as complete in all respects for office purposes as any first class office building in the great cities. This was the desire of the officials of the bank and for it they deserve the thanks of the city, for they have provided for the principal street intersection in Marquette an ornament which will always be a matter of pride to all citizens and a monument to the enterprise and thorough belief in Marquette of the Marquette County Savings Bank.⁷⁷

Noble and Benson of Merriam Park, St. Paul, won the construction contract over eight bidders from Duluth, St. Paul, Chicago, and Marquette. Hager and Johnson Manufacturing Company of Marquette furnished the interior finish of quarter-sawn oak. A. I. Morse and Company of Duluth did the plumbing. Wetmore and Company of Marquette wired the building for electricity. H. L. Cooper of Marquette decorated the interior. The Hale Elevator Company installed the

Otis elevator. Including the land, construction, and finishings, the bank represented an investment of \$100,000.⁷⁸

In February 1892, when the Marquette County Savings Bank opened the doors of its "elegant fire proof building" on the main corner of Marquette, it proudly was acknowledged to be "the first thoroughly modern and metropolitan fireproof business and office block ever built in this part of Michigan."

The building is not only a credit to Marquette, but to the entire upper peninsula, and it will be long before it will have a peer in this part of the state. It is a monument to the faith in the future of Marquette felt by the officers of the bank, especially by the vice-president, N. M. Kaufman, who with President Call is deserving of the credit for the bold and masterly move which has placed this young giant among the financial institutions of the peninsula, the Marquette County Savings bank, where it must necessarily be fully abreast of the times in Marquette for many years to come.⁷⁹

This wild and flamboyant modern bank building of pressed brick and Rock River brownstone symbolized the soundness and permanence of this financial institution and the role the working man played in the growth and prosperity of Marquette. It told even more about Nathan M. Kaufman, whose background had permitted him to risk leading the other directors into the choice of a creative but less conventional solution to the problem of bank design.

By 1893 Marquette had all of the amenities necessary to a city of 9,000 except one. It had an excellent school system, a public library, electric lights, public transportation, fire protection, a public water system, and a public park on 400 acres at Presque Isle. But it had no municipal building.

That year the people of Marquette began plans to build with local labor and local materials a city hall. Designed in 1893 by Andrew W. Lovejoy and Edward Demar of Marquette in an eclectic blend of the Second Empire, Renaissance Revival, and Richardsonian Romanesque styles of architecture, and constructed in 1894 by Emil Bruce of Minneapolis, the red brick and brown sandstone Marquette City Hall (Figure 22) demonstrated confidence in the solidity of the city and its future. City officials hoped this monument to the progressive spirit of Marquette's citizens would usher in a new era of commercial and industrial prosperity in the Marquette Iron Range. In 1977 the city moved its offices to a new building and sold city hall to a private developer, who adapted it to new use as a professional office building.

In the spring of 1893, when Peter White notified the Common Council of the City of Marquette that the city's rent-free lease on his building on Spring Street it then occupied as a city hall had expired and that the city would need to vacate the building, the council decided the city should build a "suitable building . . . for the general uses of the city and its various departments."⁸⁰ The council instructed the Committee on Parks, Cemeteries, Public Buildings, and Grounds to obtain plans and estimates for "a spacious and conveniently arranged City Hall."⁸¹

Within one month, on 25 May 1893, Nathan M. Kaufman, newly elected mayor of Marquette, called a special council meeting to consider the subjects of building a city hall and of bonding the city to raise the funds necessary for this purpose. At this meeting the



Figure 21.--Marquette County Savings Bank. Detail of foliated carving at front entrance.



Figure 22.--Lovejoy & Demar, Marquette City Hall, Marquette, 1893-94.

council resolved to build a city hall. The council reached this decision not so much because the city had to vacate its present quarters and find another place to hold meetings and safely keep records, but because, as the council explained, "cities of less size, wealth and importance than the City of Marquette own a handsome city building," and because Marquette had "reached a point in its history when it is a matter of both public economy and public necessity that there should be built by the city a city hall." The city hall the council envisioned would be "constructed of sandstone and brick and be fireproof."⁸²

A sandstone and brick city hall would stand among governmental and cultural buildings of similar beauty and elegance. The city hall would occupy a site on West Washington Street just west of the red brick and red Portage Entry sandstone United States Custom House, Post Office, Court House, and Government Building (1888-89) by M. E. Bell and Will Freret, supervising architects of the United States Treasury Department, and the red Portage Entry sandstone Marquette Opera House (1890-91) by Demetrius Frederick Charlton. This street, formerly comprised of residences, was transformed in the 1890s into a promenade of masonry public buildings. The council granted the Committee on Parks, Cemeteries, Public Buildings, and Grounds more time to call for other plans for a city hall, since none suited to its wishes yet had been submitted. The council decided to hold a special election to win the approval of the voters for borrowing \$50,000 and for issuing bonds to pay for the construction of a city hall.

Townpeople disagreed over the soundness of constructing a new city hall during the economic recession then in progress. The Panic of 1893 had depressed the iron industry and a scarcity of outside capital for loans had halted building activity. The unemployed met mortgage payments and living expenses with difficulty. This, in turn, slowed down retail business. On 6 April 1893 Sidney Adams, outgoing mayor of Marquette, had presented his valedictory address to the council. Adams, an investor in real estate and lumber, and a man of conservative views, feared spending public monies on the construction of a public building during the period of high unemployment. He summarized the public improvements made under his tenure and made recommendations for the future. Concerning the city hall, Adams had this to say:

The city will soon need a new city hall, but before undertaking the outlay required for an expensive public building, I would suggest that in view of the present uncertainties of the immediate future of the city, it may be wise to postpone for another year the erection of such a building. The truth is we must have permanent employment for the population now residing in the city very soon, or the city will retrograde, in which case a large and expensive public building would be unwise. If, on the other hand, Marquette shall grow as rapidly as we all hope it may, such growth will warrant the erection of a better and finer building than otherwise, but in view of the present outlook I would advise conservatism in the matter of public expenditures and particularly with references to the erection of a city hall. The building now occupied may, perhaps, be leased for a year or two longer, but if not, other quarters could undoubtedly be procured.⁸³

Despite the recession and Adams' words of caution, the people of Marquette wanted a new city hall. On 11 July 1893 six-sevenths of the voters elected to issue bonds of the city of Marquette for \$50,000 to build a city hall.

Less than three months earlier the electorate of Marquette had placed in its top office Nathan M. Kaufman, who was known locally as a capitalist and a progressive, and whose administration eventually would be recalled as "excellent and progressive." As president of the Marquette County Savings Bank and as manager of the Edward Breitung estate, one of the largest holders of Upper Peninsula mineral lands, Kaufman became acquainted with Mary Breitung, Edward Breitung's widow, marrying her in 1888. Thus, by 1893, when elected mayor, Kaufman was a man of considerable means, influence, and stature.

Early in September 1893 the council approved the recommendations of the Committee of Parks, Cemeteries, Public Buildings, and Grounds to accept the plans for the new city hall submitted by Andrew W. Lovejoy and Edward Demar, architects of Marquette. On 9 September 1893 the Marquette Mining Journal announced that the council had accepted the city hall plans and described them in detail, thus giving the townspeople the first glimpse of city hall.

The new building will present an appearance when finished that will be a credit to the designers and the citizens of Marquette who so long have felt the need of more satisfactory accommodations for the use of their officials. The building will be three stories and a basement. The general lines will be classical, relieved by several colonial features, particularly that of the main entrance fronting on Washington street. The front will show a stretch of ninety-two feet backed by a depth of seventy-two. The basement and first story will be of Lake Superior sandstone laid up in ashlar work, and the second and third stories will be of pressed brick. A hip roof will surmount the whole and in the center of the front wall will rise a handsome French dome and the flag staff, the roof being finished with iron cresting. The entire outer appearance will suggest massiveness and grace combined.

The newspaper also elaborated on the interior. Steps would rise from Washington Avenue to the main entrance spanned by a large archway supported by polished granite columns, which, in turn, would lead inside to a wide hall that would run the full depth of the building. From the main hall of the first floor would open the mayor's office, recorder's office and vaults, police court room, and treasurer's office and vaults. A broad flight of stairs would rise to the second floor. This floor would contain offices for the street commissioner, health officer, city attorney, and city engineer, and would contain the council chamber. Called one of the "handsomest and most attractive features of the entire building," the council chamber would rise two full stories in height and would feature a spacious gallery and decorative ceiling frescoes. The third story would contain a large assembly hall. The basement would hold the police department, which would open directly outside on the west, and a hall, boiler room, coal bins, and store room.⁸⁴

The newly established architectural firm of Lovejoy and Demar would design other public buildings in the Upper Peninsula: St. Patrick's Convent and School, Hancock (1893); S. D. North and Son Store, Quincy (1894); Luce County Sheriff's Residence and Jail, Newberry (1894). Andrew W. Lovejoy had come from Kalamazoo to Marquette to supervise for Wahlman and Grip the construction of the prison. In Kalamazoo Lovejoy had associated with Alexander Menzie in a construction firm known as Lovejoy and Menzie, builders.⁸⁵ Edward Demar had practiced architecture with E. E. Grip in Ishpeming before associating with Lovejoy. By 1895 Demar worked in a

partnership with William Gilbert and Demetrius Frederick Charlton, called Charlton, Gilbert and Demar.⁸⁶

On 7 August 1893 the council adopted an ordinance to issue bonds of the city of Marquette for the purpose of building a city hall. The Marquette Mining Journal called the subsequent floating of the city hall bonds "the most significant thing that has happened recently as evidencing confidence in the solidity of the city and its future."⁸⁷

The council accepted by 16 October 1893 the full plans and specifications prepared by the architects and authorized the controller to advertise at the earliest possible date for bids for construction, provided the city hall could be fully built for the sum of \$50,000.⁸⁸ To place itself in a position from which compromise was possible, the council had instructed the architects to draw up supplementary specifications "substituting Lake Superior ashlar work to pressed brick, wherever it occurs, the stone not to be less than six inches in thickness."⁸⁹ The use of brick would represent a money saving compromise to keep the cost within the \$50,000 allocated for the project. This was not without precedent. Indeed, the citizens of Marquette had compromised earlier on the Custom House when they secured the agreement of the federal government to decorate the brick building with as much local stone as the budget would allow. By 1893 the use of brick combined with stone was an accepted practice looked on by many as desirable.

The council opened the first construction bids on 22 November 1893, but rejected all of them because they exceeded the

appropriation. The bids were as follows: Chaussee Brothers, Negaunee, \$54,565 (for Spanish tile roof, \$53,500); Emil Bruce, Minneapolis, \$57,500 (for a steel rather than copper tile roof, \$56,000; for all stone, \$2,500 more); Charles Van Iderstine \$60,739 (for all stone, \$63,669).⁹⁰ The council opened and tentatively rejected on 18 December 1893 a second round of bids because they also exceeded the appropriation. These bids were as follows: Emil Bruce, \$52,437 (for a steel roof, \$50,973); Chaussee Brothers, \$54,000 (for a steel Spanish tile roof, \$52,700). After a recess the council accepted the bid of Emil Bruce for the construction of city hall with a steel roof for \$50,937, but within the next ten days the project was revised so that the costs came to \$49,983 and, thus, were within the appropriation. A contract for the construction of city hall was executed between the council and Emil Bruce on 28 December 1893. A building committee was established and Lovejoy and Demar were appointed superintendents of construction.⁹¹

Of particular importance and interest was the effort by the council to use local materials and labor. The exterior featured local Lake Superior sandstone; the interior was finished in native birch and hardwoods. The Marquette Mining Journal explained that every effort had been made to use local materials and labor.

It has been the aim of the designer from the outset to, as far as consistent, use in the building matter furnished by this locality.⁹²

Townpeople viewed both the construction of the city hall and the use of local materials as a means of creating work for the unemployed.

In regard to the stone, the council instructed the building committee to confer with Emil Bruce to amend provision ten of the contract as follows:

The said Emil Bruce shall and will in the construction of said City Hall purchase and use only stone quarried within the limits of the City of Marquette, so far as he is able to purchase the said stone for the same price that it can be purchased outside and laid down in the City of Marquette.⁹³

The Marquette Mining Journal for 10 February 1894 attributed employment at the brownstone quarry to the demand for this material by the new city hall. "The gang saws out at the quarry are now at work sawing stone for the city hall Before beginning on this work not a man was employed at the quarry." In letting subcontracts Bruce favored Marquette firms whenever they offered the lowest bid and first class materials.⁹⁴ For example, James Sinclair of Marquette won the subcontract for the stonework. The local newspaper noted that he had begun cutting and dressing the stone and that this activity symbolized renewed activity in the city.

It was a very pleasant sound yesterday to hear the merry ring of the anvil in the tool repairing shop and the duller echo of the heavy mallets and hammers as they drove home the wedges that split the big blocks of stone into proper sizes. All day long a crowd of interested idlers hung around the stone cutting shed as though each move made at this point meant a general resumption of activity in our city.⁹⁵

As the building went up the local newspaper noted, "Its erection has furnished much employment for her artisans when it was most

needed and the structure will stand as a lasting monument to Mayor Kaufman's administration."⁹⁶

A gala occasion marked the laying of the cornerstone of the Marquette City Hall in May 1894. Citizens from Marquette, Negaunee, and Ishpeming celebrated with festivities that included a parade and dinner. Benjamin O. Pearl, president of the council and acting mayor in Kaufman's absence, called the event one of the most important in Marquette's history, noting that "the public spirit, the public pride, the public taste, even the commercial enterprise of every metropolis, is measured in a great degree by its public buildings." The construction of the city hall placed Marquette fully abreast of the times, set her forth as a full-fledged city, demonstrated her confidence in the future, expressed her hope in new commercial and industrial prosperity, and stood as a monument to the progressive spirit of her citizens.

At this cornerstone ceremony Pearl stated in his own words the ability of Lake Superior sandstone to express symbolically the meaning of city hall. Pearl said that the work of early builders of the city "stand[s] on solid foundations of stone chiseled from quarries that underly[sic] this imperishable city." Thus, this "municipal temple" to "the Goddess of Progress and Enterprise" was dedicated, and the people of Marquette were called on to rejoice over the prosperity of the past, and to hope for the speedy passing of the financial shadow that hovered over the city.⁹⁷ F. O. Clark, a Marquette attorney who also spoke at the cornerstone ceremony said:

It is an illustration of our faith in the iron hills and in the imperishable foundation upon which our twin sister cities to the west now stand, and we believe today that this iron country has but begun its development and that in the near future much of the great wealth that is being mined in this county will here be transformed into structural shape and from this point transported to the great west in manufactured form; and that the time has come when instead of sending our ores from our county to more eastern cities to cause them to grow with phenomenal rapidity, the twin cities of our county will unite in one harmonious effort with our city in the building of furnaces, rolling mills, nail factories, stove works, everything in which iron and steel may be employed, and here the raw material may be converted into structural form and transported to the great undeveloped empire to the west of us as manufactured appliances by which the prairies shall be developed. Then shall the city of Marquette, in unison with our sister cities take on their commanding position as a portion of the great state of Michigan and of the nation. Let us then with persevering energy, frugality and economy rise above the depression⁹⁸ of the times and behold the star of hope on the horizon.

The dedication of City Hall took place on 4 February 1895 at a regular meeting of the common council with "ceremonies of democratic simplicity" appropriate to a building of the people. After the transaction of regular business, Mayor Kaufman delivered the dedicatory address. He congratulated the citizens of Marquette on their ability to fulfill their need for a public building despite the hard times. He called the event a "milepost showing the rate and character of advancement" in the progress of the municipality.

Most of the labor which has entered into the building has been performed by Marquette men. The stone was quarried within the limits of this city. The brick were made by Marquette men. Marquette factories have prepared the inside finish, and so on from foundation to roof, outside and inside, the building today stands as a monument to Marquette enterprise and skill.⁹⁹

With the new city hall the mayor, the council, and the electorate denied the economic decline and anticipated a brighter future based on a solid foundation. The sandstone and brick city hall illustrated the confidence of the people of Marquette in the future progress of the city and of the iron industry on which it was based. For the rest of the decade few sandstone structures were built in Marquette. Not until 1902-1904, when a citizens' building committee selected Charlton and Gilbert's Neo-classical Revival design for the Marquette County Court House was another major structure built of "the stone of the North Country."¹⁰⁰ By then, however, red Lake Superior sandstone was about to lose out to white stone.

In 1904 the building of the Peter White Library (Figure 23) provided a sharp contrast to the predominantly Gothic, Italianate, and Richardsonian Romanesque-inspired red and brown sandstone structures which preceded it. The imposing Neo-classical Revival building of white Bedford limestone stands well back on a spacious lot at the intersection of Front and Ridge streets. The library's 100 foot by 60 foot rectangular massing features a raised foundation, hipped roof, ornamental cornice, round-arched windows with keystones on the first level, and rectangular windows on the second level. Four columns distinguish the advancing plane of the east entrance.

The library was named for Marquette's foremost philanthropist. Peter White had established a public library in Marquette in 1872 and continued to support and promote it for thirty years in various temporary quarters. The new library cost \$60,000,



Figure 23.--Patton & Miller, Peter White Library,
Marquette, 1902.

including the site, furnishings, and landscaping. It was financed by the generous contributions of several leading citizens--White, Nathan M. Kaufman, and John M. Longyear--and tax monies. The architects, Patton and Miller of Chicago, had designed numerous libraries and collegiate buildings across the country. When the Peter White Library opened, the Marquette Mining Journal for 22 September 1904 described it as

a notable architectural adornment for the city, taking rank at the head of the various public buildings. It and the new courthouse are generally conceded to be the finest public structures north of the straits. . . . The building is Bedford limestone throughout, with the exception of the walls of the stackroom projection, and the results have abundantly justified the stand of the directors in favor of the imported stone. It is of a beautiful whiteness, and as it is the only structure of this material in the city, it has a distinctive air that would have been hopelessly lost had Lake Superior sandstone been used. The Bedford stone is particularly adapted to the style of architecture. The red tile roof lends an effective touch of color.

In their decision to select the Neo-classical Revival design of Patton and Miller in white Bedford limestone, the Board of Directors embraced the American fashion for whiteness and academicism made visible ten years earlier at the World's Columbian Exposition in Chicago. Undoubtedly White, himself a member of the World's Fair Commission, had admired the buildings at the fair. The shift to classicism and whiteness in this major public building, even if only one-third the cost and two-thirds the size of the Marquette County Court House, represented a drastic change in taste. Rejection of the native stone for the library and selection of imported limestone from Ohio perhaps expressed a desire to return to an earlier known

era--the era of neo-classicism and formality of the early nineteenth century.

Situated in the midst of a fierce wilderness and harsh climate, Marquette's growth was attributable to eastern and urban investors from New England, New York, Cleveland, and Lower Michigan who speculated in the region's iron and timber resources and its land, and who developed the city into a major shipping, financial, and commercial center. Immigrant groups, in particular, Cornish, Scandinavian, Scots, and English, provided the labor force. The rush of industrial, business, and commercial activity created the demand for buildings. Marquette achieved an architectural unity and distinctiveness because its architects, builders, and quarrymen extensively promoted and used the native Jacobsville sandstone building material. Both professionally trained and untrained architects, contractors, and builders eagerly chose the readily available reddish brown sandstone and clients and townspeople alike developed a romantic interest in it.

Except for a brief three-year period in the 1870s, no professionally trained architect resided permanently in Marquette until nearly 1890. Architects from Detroit, Chicago, and other urban centers routinely were called upon to design public and private buildings beginning in the 1870s when the city had progressed socially and economically. In 1872 Henry Lord Gay of Chicago drafted plans for the Superior Block. Two years later Gordon W. Lloyd, Detroit's foremost fashionable architect, designed St. Paul's Episcopal Church. In 1887 William Scott of Detroit planned the

Marquette Prison. Gay, Lloyd, and Scott represent those architects who had attended schools, traveled and studied abroad, and worked in the offices of eastern and midwestern cities. These men with established professional reputations, were familiar with the high styles in architecture, and, thus, were awarded commissions for Marquette's important public and private buildings. They fulfilled their clients wishes for architecture in the cultivated style. They recognized the uniqueness of the Marquette environment, adapted to the local situation, and freely elected the easily available Jacobsville sandstone for their building material. They exercised restraint in the use of the high style, and scaled their projects and designs to conform to Marquette's economic and social conditions. Gay, Lloyd, and Scott guided the fashion for stone and styles in architecture.

Frequently supervision of projects was assigned to an employee of the Chicago or Detroit firm who opened a branch office in Marquette to oversee construction. At times it was given to a builder already on location. Thus, Gay dispatched Carl F. Struck to Marquette to superintend the construction of the Superior Block. In turn, the building committee of St. Paul's Church selected Struck, then on hand, to execute Lloyd's plans for the new church. And Scott sent Demetrius Frederick Charlton to Marquette to superintend the construction of the prison. Struck and Charlton remained in Marquette, the one for three years and the other for the rest of his life, where they pursued their careers independently, often working in stone. Both were European-born and had acquired architectural skills in

Norway and England, respectively. The contractors and builders to whom the supervision or construction was delegated played key roles in interpreting the design of the architect. Often they were more skilled in the use of stone than the designer.

For the most part, men with little or no professional training built the architecture of Marquette in the 1870s and 1880s. Frequently they were carpenters, stone masons, or draftsmen who were elevated to contractors and architects by the burgeoning prosperity of the 1880s. Hampson Gregory, a skilled stone mason, applied his experience in handling rock as a miner and apprentice builder in Devonshire to the rocky environment of Marquette. His design and his execution of the Harlow Block and the Merritt House display his native ability in working with stone. The rock-faced stone of the Merritt House conveys his intuitive feeling for the strong, coarse stoniness of stone.

The group of untrained craftsmen, who learned by practice and observation and who responded intuitively and directly to the stone building material due to emerging needs, produced a native vernacular tradition in architecture. In this way, Stephen R. Gay, superintendent of the Pioneer Furnace, built stone blast furnaces, George Craig erected the roundhouse and machine shops of the Marquette and Ontonagon Railroad, and mining companies put up utilitarian rubble stone industrial and mining buildings and warehouses.

Easterners and urbanites who managed businesses and industries sought a high degree of sophistication in this wilderness

city. Having broader experiences and greater finances than the local men, they employed the more highly trained architects and used the purest sandstone. Thus, the clearest, most finely dressed and carved red and brown sandstone carefully was seated on the walls of St. Paul's Church and the Longyear House. School boards and long time residents of Marquette chose the variegated or mottled stone because it suited their budgets and appealed to their more modest tastes.

A regional architecture characterized by the persistence of the vernacular tradition emerged in Marquette. The solid, simple stone buildings standing on this rugged and rocky Lake Superior shore display restraint in decoration and only faint echoes of the high style. Skilled hands quarried and carved Jacobsville sandstone and set stone upon stone to create this regional architecture. In the 1890s writers regarded Marquette as "the best built, wealthiest, and most beautiful city on the south shore of Lake Superior." Despite the city's highly civilized character, however, the dense wilderness still surrounded it. A handbook to the south shore of Lake Superior noted that at Marquette "the highest civilization is in strange juxtaposition with the fiercest wilderness."¹⁰¹ This civilized character can be attributed in large part to its handsome buildings of Lake Superior sandstone.

FOOTNOTES--CHAPTER III

¹A. T. Andreas, History of the Upper Peninsula of Michigan (Chicago: Western Historical Co., 1883), p. 412.

²Everett (1804-1892) was born in Winchester, Connecticut. He came to Michigan in 1840, settling first in Jackson where he secured partners for the mining company. In the 1860s, he made money in merchandising, banking, and insurance, but lost much of it during the financial panic and depression of the 1870s (Memorial Record of the Northern Peninsula of Michigan [Chicago: Lewis Publishing Co., 1895], pp. 83-84).

³Heating ore to a high degree of temperature in forges or in charcoal-burning blast furnaces and pounding it to remove impurities produced iron bloom. Formed into four-inch-by-eighteen-inch rods, it could be reheated and drawn into wire or rolled into rods or plates.

⁴Harlow (1815-1890) was born in Shrewsbury, Massachusetts. He platted the Village of Marquette in 1850 and recorded it with revisions made by the Cleveland Iron Company on 8 September 1854. Harlow served as postmaster, township supervisor, highway commissioner, and justice of the peace. After the Marquette and Cleveland iron companies consolidated in 1853, Harlow diversified his business interests by investing in lumbering, farming, and real estate (Memorial Record of the Northern Peninsula of Michigan, pp. 5-10).

⁵Citizens' Association, Marquette, Michigan (Milwaukee: Cramer, Aikens, and Cramer, 1891), p. 3.

⁶The local newspaper regularly called attention to supplies of rubble stone for building foundations, rough walls and the like. In 1880 when the building of the D M & M railroad opened up some brownstone quarries in the vicinity of Sucker Bay the Marquette Mining Journal predicted that "it will come to pass that we'll all be able to live in a brownstone front . . ." (24 January 1880). Seven years later when the city blasted out rock from a quarry at Fifth and Ohio streets for macadamizing streets, it sold the rubble to builders for foundations (17 December 1887). Marquette's rich timber resources supplied builders with ash, maple, walnut, birch, oak and elm hardwoods and a wood building tradition paralleled the sandstone building tradition.

⁷For a list of blast furnaces in the Upper Peninsula with their location and names of owners, see A. P. Swineford, History and Review of the Copper, Iron, Silver, Slate and other Material Interests of the South Shore of Lake Superior (Marquette: Mining Journal, 1876), p. 214. For a sketch of Gay's activities, see T. R. Brooks, "Iron-Bearing Rocks (Economic)," Geological Survey of Michigan Upper Peninsula 1869-1873, vol. III (New York: Julius Bien, 1873), p. 37; and Ralph D. Williams, The Honorable Peter White (Cleveland: Penton Publishing Co., 1905), pp. 132-37.

⁸For descriptions of the Bay Furnace and the Bay Furnace Company, see Marquette Mining Journal, 11 September, 11 December 1869, 16 April 1870, and 2 June 1877. The company organized in 1869 and had offices in Marquette. John Outhwaite of Cleveland served as president and treasurer, James Pickands as secretary, and R. A. White as superintendent (Marquette Mining Journal, 13 November 1869).

⁹(Marquette) Lake Superior Mining Journal, 21 November 1868.

¹⁰Marquette Mining Journal, 4 June 1870.

¹¹Burt (1814-1885) was born in Wales, Erie County, New York the son of William A. Burt, who invented the solar compass. From 1840 to 1851 he conducted linear and geological surveys of the Upper Peninsula for the federal government. As an explorer, financier, and organizer, Burt facilitated the development of the mineral resources of the Upper Peninsula. He served as director of the Lake Superior Iron Company for thirty years, president of the Peninsula Iron Company for thirty years, and president of the Carp River Furnace Company. He was president of the Burt Freestone Company (Andreas, History of the Upper Peninsula of Michigan, pp. 416-28).

¹²Craig (1819-1892) was born in England. In 1871, after a brief career constructing furnaces, railroad buildings, rolling mills, and cuts leading to the ore docks, he opened a quarry at Laughing Whitefish (Rockport), some twenty miles east of Marquette, but later abandoned this venture because the stone was of poor quality. In 1876 he accepted and held for ten years an appointment as keeper of the lighthouse at Portage Entry. Here he discovered red sandstone and interested Furst, Jacobs and Company in extracting it (Marquette Mining Journal, 1 July 1871 and 29 October 1892).

¹³Ibid., 28 May 1870 and 21 September 1872.

¹⁴(Marquette) Lake Superior Mining Journal, 14 November 1868. The building up of towns and congestion in cities brought disastrous fires that drove townspeople to practice fire prevention and fire protection. Carl Bridenbaugh has noted that a series of great fires in Boston in 1653, 1676, and 1679 precipitated the adoption of fire codes, regulation, and defense. The great fire of 1676 which

destroyed 150 houses motivated the General Court of Massachusetts to order that all new houses be built of "stone or bricke, & covered with slate or tyle" (Carl Bridenbaugh, Cities in the Wilderness, 2nd ed. [New York: Alfred A. Knopf, 1955], pp. 56-61). Fires in towns of the Lake Superior region brought the enactment of codes that restricted building materials to stone or brick.

¹⁵Col. Chas. D. Robinson, ed. of the (Green Bay) Advocate in Marquette Mining Journal, 17 September 1870.

¹⁶(Marquette) Lake Superior Mining Journal, 21 November 1868.

¹⁷In 1873 the Marquette and Ontonagon Railroad merged with the Houghton and Ontonagon Railroad Company. In 1886 the Marquette, Houghton and Ontonagon Railroad merged into the Duluth, South Shore and Atlantic Railroad. A complete inventory of the Duluth, South Shore and Atlantic Railroad properties indicates stone passenger depots at Sault Ste. Marie and Marquette (Henry E. Riggs, Report on the Valuation of the Duluth, South Shore & Atlantic Railway as of June 30, 1911 [Ann Arbor, Mich., 1911]).

¹⁸Marquette Mining Journal, 10 August 1872.

¹⁹Ibid., 16 September 1871.

²⁰Marquette Since 1864 (Marquette: Guelff Printers, 1964).

²¹Gay may have designed Mather's house in 1867, and surely remodeled it in 1871. From 1880 to 1883 Gay lived in Europe and placed second among 293 entries in a competition at Rome for the national monument of King Victor Emanuel. He served as secretary of the Western Association of Architects, organized the Builder's and Trader's Exchange and published The Building Budget (A. T. Andreas, History of Chicago: From the Early Period to the Present [Chicago: A. T. Andreas Co., 1886], III, 68-69; Journal of the American Institute of Architects, 9 [August 1921], 282).

²²An agreement of 12 June 1872 between Alfred Green, Henry R. Mather, and Peter White called for Green to "do all of the work and furnish materials in the erection and finishing complete of a block of stores and Bank building with offices over" to the plans, drawings, and specifications made by Henry L. Gay for \$50,000. By mid-November Gay hinted to White that Green may have been extravagant in some instances, paying more for labor and materials than necessary and could expend the amount of the contract without completing the work. Gay assured White that Struck, then in the employ of Green, would inform him in advance if this seemed likely (Alfred Green, Henry R. Mather, and Peter White Agreement, 12 June 1872; and Henry L. Gay to Peter White, 16 November 1872, Peter White Papers, Michigan Historical Collections, Bentley Historical Library, University of Michigan, Ann Arbor, Mich.).

²³Beard's Directory of Marquette (1873), p. 64. The firm also advertised offices at 90 LaSalle Street in Chicago, and Watson's building in Marquette in the Marquette Mining Journal.

²⁴In November 1872 Alfred Green advertised as a contractor, builder, supplier of lumber, and superintendent of buildings who could make drawings and construct anything from his Cleveland and Marquette offices (Marquette Mining Journal, 23 November 1872). One year later he managed the Lake Superior Building Company: William H. Parks, president; A. B. Taylor, secretary and treasurer. The firm had \$150,000 of capital stock broken into 6,000 shares of \$25 each. It claimed the newest and best in patterns of wood working machinery for producing their plans (Marquette Mining Journal, 10 January 1874).

²⁵Marquette Mining Journal, 7 February 1885; First National Bank Centennial (Marquette, Mich.?: n.p., 1964).

²⁶Marquette Mining Journal, 6 and 13 June 1885.

²⁷Ibid., 6 June 1874.

²⁸Ibid., 20 June 1874.

²⁹Struck designed the Opera House (1874-77), the Ripka House (1875), the Traverse House (1875-77), and the steeples of the First United Methodist Church (1870-73). He supervised the construction of the Superior Building (1871-73) and St. Paul's Episcopal Church (1874-76).

³⁰Marquette Mining Journal, 24 April 1875.

³¹Ibid., 18 July 1874.

³²Ibid., 10 July 1875. Twenty-five years later, when the school burned to the ground, the people of Marquette still regarded it as "Marquette's handsome brownstone high school building" (Marquette Mining Journal, 24 February 1900). The only changes immediately contemplated in the new school were to separate the boiler from the main structure, to place the entrances at the west and south to avoid a draft, to increase the size, and to add a manual training department.

³³Ibid., 13 June 1874.

³⁴Vestry Minutes, 12 March 1874, St. Paul's Episcopal Church, Marquette. For detailed descriptions of the church and its construction, see Minutes, 1856-1903, St. Paul's Episcopal Church, Marquette; Lloyd and Pearce, architects, Detroit, Drawings of St. Paul's Church (August 1873), St. Paul's Episcopal Church, Marquette; Gordon W. Lloyd, Drawings of the Proposed Finish to the Tower (undated), St. Paul's Episcopal Church, Marquette.

³⁵Minutes, 29 May 1874, St. Paul's Episcopal Church, Marquette.

³⁶Marquette Mining Journal, 17 April 1875.

³⁷*Ibid.*, 8 January 1876.

³⁸The tower was erected in two stages. Original and modified plans called for it to rise from the ground to a height of between fifty and sixty feet and to be surmounted in turn by a spire of nearly equal height. When built in 1876, the tower rose only thirty feet. In 1903 it was completed according to plans drafted by J. D. Chubb of Chicago when Lipsett and Sinclair, contractors of Marquette, added a twenty-eight-foot section topped with an embattlement.

³⁹Marquette Mining Journal, 12 April 1884.

⁴⁰*Ibid.*, 29 May 1880.

⁴¹The A. R. Harlow Block of 1883 was designed by William Farrell, architect, Ishpeming (Marquette Mining Journal, 24 March 1883).

⁴²The rehabilitation was for adapting the great hall of the First Opera House (1874-77) into offices and flats and adding an adjoining three-story structure that would be similar in style and would contain a new entrance and elevator (Marquette Mining Journal, 10 May 1890).

⁴³*Ibid.*, 11 October 1890.

⁴⁴A. H. Holland and E. H. Dwight, 1886-7: Hand-Book and Guide to Marquette, L. S. Mich. (Marquette: Mining Journal Book and Job Print, 1886), p. 12.

⁴⁵Marquette Mining Journal, 28 April 1888.

⁴⁶The complex also contains a wing of cell blocks which extend south from cell block B (1923), a separate additive service building and a school (1938) just south of the rotunda and cell block B, Brooks Center Hospital (1971) on the site of cell block A east of the rotunda, and numerous other service buildings, houses, workshops, and recreation facilities which have been added over the years both within the prison yard and outside the walls.

⁴⁷E. P. Royce, P. A. Van Bergen, John Duncan, E. L. Mason, J. M. Wilkinson, and C. H. Hall of the Board of Commission of the State House of Correction and Prison, U.P., to the Honorable R. A. Alger, Governor of Michigan, 15 December 1886, Marquette County Historical Society, Marquette, Mich.

⁴⁸John H. Jacobs to J. M. Wilkinson, 13 September 1885, Marquette County Historical Society, Marquette, Mich.

⁴⁹Ibid. The board visited the penal institutions at Jackson, Ionia, and Detroit, and met with the State Board of Corrections and Charities and with prison wardens to learn about prison architecture.

⁵⁰The William Scott, John Scott, and Scott and Charlton companies designed the Edward Breitung House (designed in 1887, but unexecuted), the Edward Breitung Mausoleum (1887), the Herman Ely School (1889), the Abraham Mathews House (1889), and the Campbell and Wilkinson Bank (1889) in Marquette. They designed Hubbell Hall at Michigan College of Mines and Technology (1889), Houghton, and the Gogebic County Courthouse (1888), Bessemer. First conceptions of John Scott's Wayne County Courthouse (1896-1902), Detroit, called for Jacobsville sandstone, although Wayne County Commissioners ultimately chose Berea sandstone.

⁵¹Charlton went by the name D. Fred rather than Demetrius Frederick Charlton (Michigan Department of Licensing and Regulation, D. Fred Charlton, Application to Practice Architecture, Filed at Michigan State Board for Registration of Architects, 13 October 1915).

⁵²C. Frederick Charlton (Chicago) to Kathryn Eckert, 7 November 1977; Marquette Mining Journal, 27 February 1892, 31 August 1918, 27, 28 January 1941.

⁵³Act 148 of the Public Acts of 1885 appropriated \$150,000 of which \$128,888 went for the erection of the administration building, rotunda and cell block wing, dining room and hospital building, and boiler and engine house by 1 December 1888. Act 125 of the Public Acts of 1887 appropriated an additional \$75,712.09 for completing and furnishing the work. This included constructing cell block No. 2, and putting in the boiler stack and conduit,

water supply, steam heating, ventilation system, and lighting. For a detailed statement of disbursements under the 1885 and 1888 acts see Report of the Board of Commissioners of the State House of Correction and Branch of the State Prison in the Upper Peninsula (Lansing: Darius Thorp, State Printer and Binder, 1889).

⁵⁴Proposals for furnishing materials and for the construction of the prison were as follows: Thos Fairbairn, Detroit, \$226,080.80; R. D. Silver, Chicago, \$200,141.27; Louis J. Dacgling (?) and Oscar Tammlan (?), Chicago, \$195,516.50; Dawson & Anderson, Toledo, Ohio, \$157,863; J. A. Moralp & Son, Detroit, \$156,445; W. H. Myers, Hillsdale, Michigan, \$146,123.09; Lake & Howind, Jackson, Michigan, \$139,192.05; Gaffney & Wetman, Cincinnati, Ohio, \$137,958; Joslin Robson & Co., Marquette, \$136,750; and Wahlman & Grip, Ishpeming, \$135,817 (Royce, Van Bergen, Duncan, Mason, Wilkinson and Hall to Alger, 15 December 1886, Marquette County Historical Society).

⁵⁵Prison population, cost of maintenance of prisoners, convict workshops, and labor contracts are discussed in the following: Biennial Report of the Inspectors and Officers of the State House of Correction and Branch of the State Prison in the Upper Peninsula for the Two Years ending June 30, 1892 (Lansing: Robert Smith and Company, State Printers and Binders, 1893); Marquette Mining Journal, 13 October 1894. The means of employment of prisoners in penal institutions and the adoption of a system of labor which reduces competition with free labor to a minimum is discussed in the following: Michigan. Bureau of Labor and Industrial Statistics. Fourth Annual Report. "Convict Labor," 2 January 1887.

⁵⁶Marquette Mining Journal, 25 January 1890.

⁵⁷The Marquette Mining Journal for 24 January 1903 explained that Longyear's decision to move the house to Brookline was "prompted by his desire to make his home in the east and the fact that no purchaser for the house has appeared." The same newspaper for 9 November 1901 had predicted that "the loss of the house would be deeply felt by every resident of the city." Under the supervision of Charlton and Van Iderstine, the architect and contractor who had built it originally, the house was dismantled, loaded on railroad cars, and transported to Brookline where it was rebuilt.

⁵⁸For reminiscences of Longyear's experiences as a land explorer and timber examiner in the wilderness of the Upper Peninsula, see James Munro Longyear, Landlooker in the Upper Peninsula of Michigan (Marquette: Marquette County Historical Society, 1960). For information on his later dealings, see the Longyear Papers, Marquette County Historical Society, Marquette, Mich.

⁵⁹Working from a photograph and a ground plan, in 1886-87 Gardner (1836-1915) had planned the addition and alterations to Longyear's frame house at 424 Cedar Street, originally built for A. P. Swineford by J. B. Sweatt in 1883 (Marquette Mining Journal, 17 July 1886 and 15 January 1887). Trips and contacts in Chicago probably familiarized Longyear with the residential designs of Samuel Atwater Treat (1839-1910) and Frederick Foltz (1843-1916) for clients such as George Armour, Martin Ryerson, C. B. Farrell, and Charles Libby. Scott and Charlton had designed a bowling alley for the house on Cedar Street in 1889 (Marquette Mining Journal, 19 October 1889).

⁶⁰Longyear to Gardner, 14 February 1890, Longyear Papers.

⁶¹The development of the house can be traced in Longyear's instructions to the architects and in his reactions to their proposals. See Longyear to Gardner, 22 February 1890; Longyear to Gardner, 19 March 1890; Longyear to Treat and Foltz, 22 February 1890; and Longyear to Treat and Foltz, 7 March 1890, Longyear Papers.

⁶²Longyear to Gardner, 19 March 1890, Longyear Papers.

⁶³Longyear to Treat and Foltz, 25 March and 28 March 1890, Longyear Papers.

⁶⁴Longyear to Gardner, 25 April 1890, Longyear Papers.

⁶⁵Marquette Mining Journal, 17 January 1891.

⁶⁶Charlton explained that he had one bid for the ironwork on the backstairs ten dollars under and another seventy-five dollars over and "knowing you would prefer it made here I waived the lowest bid and gave it to Holly" (Charlton to Longyear, 2 May 1892, Longyear Papers).

⁶⁷For initial correspondence see Longyear to Codman, 27 September 1890, Longyear Papers.

⁶⁸Longyear to Olmstead, 14 July 1891, Longyear Papers. Olmsted's landscape plan is summarized in the Marquette Mining Journal, 23 April 1892.

⁶⁹Memorial Society of Michigan, In Memoriam: Founders and Makers of Michigan (Detroit and Indianapolis: S. J. Clarke Publishing Co., n.d.), p. 270.

⁷⁰Marquette Mining Journal, 5 July 1890.

⁷¹Men of Progress (Detroit: Evening News Association, 1900), p. 468; Memorial Record of the Northern Peninsula of Michigan, pp. 113-15; Marquette Mining Journal, 27 November 1917.

⁷²Marquette Mining Journal, 2 August 1890.

⁷³Ibid., 10 January 1891.

⁷⁴The decision to use the plans of Barber and Barber rather than those of Charlton is mentioned but not discussed in detail. However, Charlton revealed his fear of displacement by the Duluth firm in a letter of 30 March 1891 to John M. Longyear, then on vacation in California while Charlton was supervising construction of his house. The loss of the Savings Bank commission probably provoked his anxiety. "You will probably remember my telling you about another architect arriving here and capturing the New Bank Building. Well his arrival is part of my trouble but not all. I find there is a combination formed, of all the builders (except Van Iderstine) and alledged architects in town, for the purpose of driving me out and they couple my name with Van Iderstine in a very nasty manner. Now false as their insinuations are, it has already had effect, for they have evidently used it to such advantage that I have been unable to get hardly any new work this season, and the prospect to me is very serious. This new architect has been brought here by this combination, for the express purpose as I have stated, and I have found out positively that he is what is called in the profession a 'tramp' architect and of no professional reputation what ever, but his class of man is ominous to a strictly professional man, for just about one season only. To give you one instance that I know of of the way he is proceeding the Mining Journal Company accepted my plans, and even had the working drawings delivered. This man, even after having been told of the receipt of plans, hung on and hung on offering to do the work cheaper & etc, until as Mr. Hornstein told me he became a perfect nuisance round the office, now I think you know Mr. Longyear that that kind of thing is not to be tolerated amongst professional men, and it will not be here if I can only hold on long enough. I do not want to leave Marquette, for I have made my home here, because I like the place very much and believe that it is bound to grow to a fair sized place and likely to be a very good field for my business, and I can't bear the thought of having to give it all up because I am cut out of one season's work, by one whom I feel positive cannot affect me in the long run, but yet I cannot see any prospect of staying here, on account of being in bad shape financially owing to losses and unexpected calls for money, unless I obtain some assistance" (Charlton to Longyear, 30 March 1891, Longyear Papers). Longyear apparently decided against assisting Charlton by allowing him to draw \$250 a month, for Charlton wrote, "I thoroughly appreciate your reason for not acquiescing to my request, it was I know asking

a great deal and I would not have done so, had the circumstances not required active measures" (Charlton to Longyear, 24 April 1891, Longyear Papers).

⁷⁵In 1891 Charles A. Barber and Earl W. Barber had offices in Duluth, Minnesota. The two previous years, from 1889 to 1890, and in subsequent years, beginning in 1892, the firm operated out of offices in Superior, Wisconsin. By 1892, however, Charles Barber had moved to Winnipeg. During its short stay in Marquette the firm seems only to have designed the Savings Bank.

⁷⁶Marquette Mining Journal, 18 April 1891.

⁷⁷Ibid., 13 February 1892.

⁷⁸Ibid.

⁷⁹Ibid.

⁸⁰The city occupied rent-free the First National Bank building, a little sand-and-cement-brick structure erected by Peter White after the Great Fire of Marquette in 1868. This had served as temporary quarters for the bank until its building on Front Street could be built (Marquette Mining Journal, 9 February 1895).

⁸¹Minutes of the Common Council of the City of Marquette, 25 April 1893, City of Marquette, Marquette, Mich.

⁸²The resolution to build a city hall was stated as follows: "That a city hall be built on the property owned by the city on West Washington street to wit, the west twenty (20) feet of lot number one (1) lot number two (2) and the east twenty-five (25) feet of lot number three (3) of Harlow's addition number one (1), at the earliest possible moment; that the building be constructed of sandstone and brick and be fire-proof, that the cost of said building be borrowed and that the bonds of the city to the amount of (\$50,000) fifty thousand dollars be issued for that purpose; that a special election be held on Monday, the third day of July, A.D. 1893 for the purpose of obtaining the approval of the qualified electors of the city to the making of said loan and the issuing of said bonds" (Minutes, Common Council, Marquette, 25 May 1893).

⁸³Minutes, Common Council, Marquette, 6 April 1893. On 12 June 1893 the council president appointed a committee of James M. Wilkinson, A. Kidder, and Leroy W. Medlam to confer with the supervisors about the advisability of erecting a combined city hall and court house, but this came to nothing (Ibid., 12 June 1893).

⁸⁴Andrew W. Lovejoy and Edward Demar, architects, Marquette City Hall, 1892, Drawings, 10 pages (Peter O'Dovero, Marquette, Mich.).

⁸⁵Kalamazoo City and County Directory (Detroit: R. L. Polk and Co., 1885-86, 1886-87).

⁸⁶Born in Vermont in 1864, Demar had studied and practiced architecture in Toronto, then moved West. He worked as a draftsman in Winnipeg, Manitoba, and in 1884 moved to Brandon and Regina, where he probably also worked as a draftsman. Demar and Lovejoy associated in the practice of architecture in November 1891. Edward Demar was considered "one of the best known draughtsman in the upper peninsula." He had worked as the draughtsman in J. B. Sweatt's office in Marquette during the height of Sweatt's extraordinary building career in the 1880s, then with B. H. Pierce and Company in Hancock, and, later, with E. E. Grip and Company of Ishpeming (Marquette Mining Journal, 7 November 1891; Alvah Sawyer, A History of the Northern Peninsula of Michigan and Its People [Chicago: Lewis Publishing Co., 1911], pp. 1267-68).

⁸⁷Marquette Mining Journal, 26 August 1893; Minutes, Common Council, Marquette, 7 August 1893.

⁸⁸Minutes, Common Council, Marquette, 2, 7, 16, 18 October 1893.

⁸⁹Ibid., 9 October 1893.

⁹⁰Ibid., 22 November 1893.

⁹¹Ibid., 16 January 1894. Lovejoy and Demar earned \$1,249.50 for drawing plans and writing specifications (Ibid., 6 January 1894).

⁹²Marquette Mining Journal, 9 September 1893.

⁹³Ibid., 16 January 1894.

⁹⁴Ibid., 5 May 1894.

⁹⁵Ibid., 10 February 1895.

⁹⁶Ibid., 10 November 1894.

⁹⁷Ibid., 19 May 1894.

⁹⁸Ibid.

⁹⁹Ibid., 4 February 1895.

¹⁰⁰The Marquette County Court House is the inspiration for Robert Travers' Iron Cliffs County Court House whose courtroom held the murder trial of Lieutenant Frederick Marion in Anatomy of a Murder. Of the Iron Cliffs County Court House Travers said: "Few structures in the Peninsula presented a more startling pile of stone and slate and marble and mortar. . . ."

¹⁰¹Julian Ralph, Along the Bowstring or South Shore of Lake Superior (Duluth: South Shore and Atlantic Railway, 1892).

CHAPTER IV

THE SANDSTONE ARCHITECTURE OF THE COPPER COUNTRY

Sandstone architecture first appeared in Michigan's Copper Country in the late 1880s, when the mines in the region produced large profits after a long period of exploration and development, and when the red sandstone quarries at Portage Entry first produced blocks of stone after several years of preparation.

The copper deposits of the Copper Country lie along a mineral range that runs some one hundred miles along the entire length of the Keweenaw Peninsula, a forty-mile-wide point of land that extends seventy miles northeast into Lake Superior. This central ridge, called the Copper Range, is flanked by sandstone and stretches in a belt, four to six miles in width, through what is today Ontonagon, Houghton, and Keweenaw counties. The Keweenaw Waterway, pierced by the Portage Lake and Lake Superior Ship Canal opened in 1873, virtually severs the Keweenaw Peninsula from the mainland. It improved transportation for Portage Lake communities and afforded easy transportation for supplies for the mines and quarries and their products.

From the southern shores of Portage Lake the land rises abruptly to a gentle incline that accommodates the business district

of Houghton. From the northern shores the land rises more gradually from the village of Hancock to an elevated plateau that extends beyond to Keweenaw County and contains one of the richest copper fields in the world. The area was known as the Portage Lake Mining District, one of four mining districts in the Copper Range, and held the rich Pewabic amygdaloid and Calumet conglomerate lodes. At its northern boundary the villages of Laurium and Calumet, once made up of Red Jacket, Blue Jacket, Yellow Jacket, Limerick, Tamarack and other settlements named after mine locations, merge into one continuous community. The earliest discoveries of copper were made at the tip of the Keweenaw Peninsula in the northern third of the mineral range, and in the Ontonagon vicinity in the southern third of the mineral range. Later discoveries occurred in the South Range area, just southwest of Houghton.

Although red sandstone architecture appears with frequency throughout the Copper Country, and with some frequency in major public buildings throughout the Upper Peninsula, it appears most prominently in the towns in the vicinity of Portage Lake. The period of substantial growth in the mining industry, in particular in the giant Calumet and Hecla, the Quincy, and the Copper Range mining companies, occurred between 1885 and 1904. The extraction of sandstone at Portage Entry coincided with the related growth and prosperity of Houghton, Hancock, Calumet, Laurium and the South Range communities. Large mills and manufacturing plants at water's edge connected by rail to the mines supported the mining companies. Around the mills and mines grew towns and villages.

Prehistoric Indians had taken copper from the Lake Superior region and French explorers had noted the existence of this red metal in the seventeenth century. In 1772 Alexander Henry prospected for copper on the Ontonagon River near Victoria. His Travels, published in 1809, reported the occurrence of a large boulder of copper near the mouth of the Ontonagon River. This led in 1841 to Julius Eldred's well-publicized campaign to remove the Ontonagon boulder from the Ontonagon River and display it in Detroit, and its subsequent removal to the Smithsonian Institution in Washington. Further attention was drawn to the area in 1841 when state geologist Douglass Houghton submitted his fourth annual report describing the location and extent of the copper deposits of the Keweenaw Peninsula. Congress purchased the lands from the Chippewa in 1843 and a speculative craze, encouraged by the federal land policy, began and lasted three years.¹ The government abandoned the leasing policy in 1846 because it was difficult to administer. In 1847 it called for an identification of Lake Superior mineral lands and then sold the permits at \$2.50 an acre, subsequently reduced to \$1.25 an acre in 1850.

In 1845 the Cliff Mine near Eagle River was discovered and in 1854 the Central vein was discovered, both located at the tip of the Keweenaw Peninsula. In 1847 the Minnesota Mine and in 1848 the National Mine in the Ontonagon vicinity were opened and working. Eventually exploration was pushed to Portage Lake and the district became the busiest and most prosperous center of the copper mining interest. In 1864 Edwin J. Hulbert, a civil engineer for the

Cliff Mining Company, John Hulbert, and Amos H. Scott discovered the rich Calumet conglomerate lode. Hulbert persuaded Quincy Adams Shaw and other Boston investors to purchase interests and options in the Calumet Mine, which was incorporated in 1871 as the Calumet and Hecla Mining Company. This company was an enormous economic and social success because of the rich vein of copper located here and because of the business ability and character of its first president, Alexander Agassiz. With technical skill, shrewd economic practices, and compassionate concern for the miner, Alexander Agassiz began to develop this mining property in 1866. Practicing innovative economics, Agassiz installed the most expensive hoisting engines to save fuel, duplicated machinery and buildings to guard against disaster and insure steady work, and anticipated future conditions by keeping the mine opened up well ahead of the work. The Calumet and Hecla Mining Company, under Alexander Agassiz's direction, paternalistically cared for the community and enhanced the quality of the miner's lives. With a sense of noblesse oblige, the company built community facilities.

The mining industry was aided by the opening of the locks at Sault Ste. Marie in 1855, and the completion of the Portage Lake Shipping Canal in 1873. Railroads also contributed to the development of the mining industry. The Mineral Range Railroad connected Houghton with Hancock in 1873, the Duluth, South Shore and Atlantic reached Houghton in 1883, and in 1885 a railroad over a drawbridge connected Hancock and Houghton, the major commercial centers of the region.

The city of Houghton was named for Douglass Houghton. Ransom Sheldon, father of the Portage Lake Mining District, arrived in the summer of 1846 and in 1847 settled at Portage Entry, at the mouth of the Portage River, trading with the Indians and exploring the mineral range. Sheldon and Douglass purchased many sections of mineral land. He and his brother-in-law, Columbus Christopher Douglass, a geologist and engineer who assisted and worked with Houghton on the scientific survey of the region in 1844, purchased many sections of mineral land and eventually became two of the largest and wealthiest landholders in the Upper Peninsula.² They owned all the land occupied with mines along Portage Lake as well as the sites of present-day Houghton and Hancock. In 1854 Sheldon opened a store at the Houghton site. The year before W. W. Henderson had erected a sawmill here. Others came and Ernest F. Pletschke surveyed and platted the area in 1854. Three years later when Houghton, with a population of 854, incorporated as a village, it contained "40 buildings including shanties." Growth in the next decade was slow but the population reached 2,062 by 1890, 3,359 by 1900, and 5,113 by 1910.

The city of Hancock, named for John Hancock, signer of the Declaration of Independence, was laid out and platted in 1858 by Samuel W. Hill, agent of the Quincy Mining Company, a New York-based company that opened a mine and offices here on land it acquired from Columbus Christopher Douglass. Hancock developed after Douglass established a store at the townsite in 1859. Ten years later a disastrous fire destroyed three-fourths of the

settlement. Hancock incorporated as a village in 1875. Both Hancock and Houghton grew when the Quincy and the Calumet and Hecla Mining companies reached their periods of greatest productivity.

The copper mining industry underwent a pattern of exploration, growth, and decline that affected the life and economy of the region. During the period of discovery, risks were high, profits low, and the investment of capital high. During the subsequent period of growth, the scale of particular mining enterprises and the number of successful mines grew substantially, and earnings were reinvested in the industry. During the period of maturity productivity stabilized, new investments were unpromising, companies consolidated, and earnings remained high. Finally, in the period of decline, the mines produced less, required deeper and more expensive shafts, and experienced competition from new copper discoveries in the West.

The fortunes of the copper industry bore directly on the well-being of those towns and villages which were so dependent upon this one industry. In turn, within them the sandstone architecture documented the rise and fall of the copper fortunes. Civic halls, churches, educational buildings, and commercial blocks of red Portage Entry sandstone expressed the character, hopes, and anxieties of the Copper Country's varied population of eastern speculators, investors, and managers and of Cornish, Finnish, German, Irish, Swedish, Italian, Croatian, and French-Canadian workers.

Between 1887 and 1889 the state of Michigan erected the first building for the Michigan Mining School on a slope above

Portage Lake at East Houghton. Once named Science Hall (Figure 24), and later named Hubbell Hall for Jay A. Hubbell, its primary benefactor, the building contained all departments of the school--laboratories, classrooms, offices, and the library. It was designed by the Detroit architectural firm of John Scott and Company in the summer and fall of 1887, constructed by the Ishpeming contracting firm of Wahlman and Grip in 1888 and 1889, and fully furnished and equipped in the winter of 1890. The building was demolished in 1968 to make way for an eleven-story mechanical engineering structure. Constructed in the Richardsonian Romanesque style of architecture of red Portage Entry sandstone trimmed with brown Marquette sandstone, this solid and substantial structure gave credence to the importance of the Lake Superior region's mineral resources to the nation and demonstrated the commitment of the state to their development.

The rectangular structure was three stories on a raised foundation. The main (south) facade displayed a square-shaped central tower topped with a pyramidal roof. The building was constructed of rock-faced sandstone from the Furst, Jacobs and Company's quarry at Portage Entry. The stone was evenly coursed in large blocks on the foundation, and randomly coursed in smaller blocks on the upper levels. The composition achieved verticality by means of the upward thrusting tower and pairs of symmetrically arranged double-hung windows that terminated with round arches and voussoirs at the third floor. It was united horizontally by means of a water table that encircled the structure between the foundation and first floor, a belt course that encircled it between the

second and third floors, and bands of decorative checkerwork and carving in the tower. The building had a steeply pitched hipped roof, intersected at each end by a small gabled wall dormer.

The Michigan legislature established the Michigan Mining School to prepare men to assist in the development of the country's mineral resources.³ The school would teach "the science, art, and practice of mining, and the application of machinery thereto" by offering students a practical and a theoretical knowledge of geology, mineralogy, chemistry, mining and mining engineering. Act 70 of the (Michigan) Public Acts of 1885 established the school in the Upper Peninsula and appropriated funds for this purpose.⁴

To manage the school, Governor Russell A. Alger appointed a board of men who had participated in the exploration and development of the iron and copper ranges and who knew the requirements of the state's geological and mineral interests. The six-member Board of Control included James North Wright of Calumet, Thomas L. Chadbourne of Houghton, Alfred Kidder of Marquette, John Senter of Eagle River, Charles A. Cady of Iron Mountain, and John H. Forster of Williamston. Although half of its members died or resigned during the period when the school was established, built, and equipped, men of similar backgrounds were appointed to fill the vacancies. Cady and Forster resigned in 1887, and James N. Wright died in 1888. Charles E. Wright of Marquette and Graham Pope of Houghton were appointed in 1887, John M. Longyear of Marquette in 1888, and Jay A. Hubbell of Houghton in 1889.⁵ Hubbell was singularly prominent in promoting the school. A

lawyer, judge, and statesman, he served as a state senator for two terms beginning in 1886. Hubbell introduced the bill to establish the school, secured appropriations for it, and donated land next to his house as a building site.⁶

At its first meeting on 15 July 1885 in Houghton, the Board of Control established the site of the school "in or near the village of Houghton." Houghton was a logical choice for a school devoted to the practical and theoretical study of mining technology. The mines, smelting works, foundries, and rolling mills in the Portage Lake vicinity of the Copper Range furnished students with a practical mining laboratory. For the first few years the school occupied rented space in Houghton's engine house, in the Odd Fellow's Building, and in a large skating rink building.⁷

Numerous problems plagued the fledgling mining school. It lacked curriculum, faculty and staff, space, equipment, and reputation. Most discouraging of all, a statewide attitude held that the school was an experiment. In 1887 the board acted to overcome these obstacles and to place the school on solid footing. Only ten days before school was to open that fall, it appointed a Harvard-trained natural and physical scientist knowledgeable in the geology of the Lake Superior region and experienced in developing courses of study, Marshman Edward Wadsworth, to direct the school.⁸ Then the board launched a campaign for a building.

Seeking an appropriation from the legislature for a building, the board set forth its ideas of a structure suitable to house the program of the school and to establish its image. The board employed

J. B. Sweatt, a Marquette architect and builder, who had designed many public and private buildings in the immediate area.⁹ At that very moment Sweatt was constructing in Houghton the Houghton County Court House, a gaudy, polychromatic, three-story, Second Empire style creation of Upper Peninsula materials. Sweatt prepared preliminary plans for a sandstone school building that could accommodate the anticipated number of pupils and be built in a year for \$75,000. When completed in January 1887, the plans were exhibited at the architect's office and a reporter for the Marquette Mining Journal described them to the public in this way:

The plans are termed "preliminary," but in appearance they were anything but the rough drawings one would expect from the use of that term, being finely executed and of great architectural beauty. They are for a building 152 x 122 feet in extreme dimensions and three stories high, apart from a large basement, the building to be of Lake Superior sandstone, the basement of the Portage Entry red stone in regular courses and the walls of the same stone in broken ashlar, with all the cut stone trimmings of Marquette brownstone. In architectural style the building will partake largely of the renaissance with an adapted Queen Anne roof that style of roof having been found most suitable for this climate. . . .

According to the plans the basement will be 10 feet high and will contain the coal room, boiler room, machine shop, fire assay, and three laboratories with the necessary equipments of vapor chambers, etc., and with one or two large halls. The boiler and engine rooms will have concrete floors and will be fire proof. The first story will be 45 feet high and will contain a carpenter shop, model room, metallurgical room, geological shop, museum, director's room, office, central hall, reception room, library, chemist's room, balance room, two baths, janitor's room, closets, laboratories, etc. The second story will be 13 feet high and will contain a gymnasium, spectroscopy room, two mathematical recitation rooms, surveyor's office, drawing room with closets, blow pipe room, central hall corridors, storerooms, lavatories, closets, etc. The third story will be 20 feet high and will contain the main lecture hall, hall, workroom and

storage rooms and hydraulic elevator will run from the basement to the attic.

The interior walls will be of brick and wood with iron lath. The floors will be deadened and will be of hardwood, while the interior finish will be of southern and native pine finished in all. The roof will be a truss of wood and iron and the roofing will be copper. The plans for the front windows will be plate and the remainder the best double strength. The plumbing will be of the most modern kind, complete in all its parts; gas pipes will be installed throughout the building and a gas machine put in. The plans provide for all the departments of a well equipped mining school, and the building will be first class in all its appointments and in the manner in which it is situated. . . .¹⁰

It is worth mention that the Marquette Mining Journal commented on the suitability of the style of architecture, "renaissance with an adapted Queen Anne roof" for the climate of northern Michigan. It is also noteworthy that the choice of Lake Superior sandstone as the building material needed no explanation at all. Sweatt's preliminary plans probably showed a building equally as pretentious as the Houghton County Court House and impressive enough to sway the legislature.

With plans in hand, Hubbell introduced a bill to appropriate \$75,000 for the construction of the school. Hubbell succeeded. On 24 June 1887 the legislature appropriated \$75,000 for the erection and equipment of a suitable building for the use of the mining school, including all permanent fixtures, heating and lighting apparatus, and the like.¹¹ Simultaneously the board accepted a parcel of land in East Houghton donated by Jay A. Hubbell as the site for the school building.¹²

The board then appointed Charles E. Wright, John Senter, and Graham Pope to a committee "to correspond with architects as

to the plan and style of a school building and to refer their conclusions as to the same and as to the architect to be employed in the matter."¹³ On 26 August 1887 this committee reported to the board. Together the committee and board reviewed a written proposal submitted by John Scott and Company of Detroit and then asked the firm to furnish drawings and specifications for the school building.¹⁴ Within a month, John Scott presented sketches and costs for the proposed school building and signed a contract to complete the plans. The board adopted Scott's final plans and specifications two weeks later.¹⁵

The program established by the client and the architect for the mining school building was recalled in Wadsworth's report and the treasurer's report of 1890 to the Board of Control. It stated the following:

In planning the interior of the building every effort was made to economize the space for recitation rooms and laboratories and reduce the halls to a minimum.

The main building is 109 feet by 53 feet, with a wing 37 feet by 25 feet.

The basement floor is used for the boiler room, weighing room, machine and workshops, and assaying laboratory. The first floor contains the Director's room, reading room, library and laboratories of general and economic geology, petrography and mineralogy. On the second floor are situated the mathematical recitation rooms, together with the laboratories for physics, mechanical drawing, surveying and mining engineering. The third floor is devoted to the chemical laboratories, chemical lecture room, chemical supply room, balance room, etc.¹⁶

Later the Marquette Mining Journal enumerated in detail the reasons the Michigan Mining School would become "one of the most

prominent scientific schools in America." One was the fine sandstone school building.

The rooms, apparatus and general equipment of the mining school will soon be appropriate to the position it is destined to occupy. The new building, to be erected of brownstone next summer, will be perhaps the finest educational structure in Michigan. . . . It will be located on a street as beautiful as North Avenue in Cambridge, Mass.¹⁷

The board advertised for bids for constructing and heating the new school in the Detroit Tribune and the Marquette Mining Journal¹⁸ and opened them on 9 November 1887. Five contractors bid on the construction: J. B. Sweatt, Marquette, \$62,879; J. W. Hinkley, Sparta, Wisconsin, \$63,848; Wahlman and Grip, Ishpeming, \$63,500; J. G. Cundy, Houghton, \$64,402; and Donkeling and Company, Chicago, \$64,340. Three firms bid on the installation of the steam heating system: J. B. Dyar, \$5,490; I. E. Swift, \$4,347; and Sam I. Pope, \$4,970.¹⁹

Contracts immediately awarded were to Wahlman and Grip and to I. E. Swift.²⁰ In the same period Wahlman and Grip were executing Scott's plans for several other important sandstone buildings in the Upper Peninsula: the Marquette prison (1885-89); the First National Bank (1888), Houghton; the Gogebic County Court House (1888), Bessemer; and Campbell and Wilkinson's Bank (1888), Marquette. Periodically Scott superintended and inspected the work of the contractors before reimbursement took place.

The Furst, Jacobs and Company furnished the sandstone for the Michigan Mining School. The Marquette Mining Journal for 4 February 1888 noted that the Furst, Jacobs and Company, "the

big brownstone firm" of Marquette, Portage Entry, and Chicago, had the contract for supplying the stone, and, presumably, for building the walls for the Michigan Mining School at Houghton. The newspaper explained, "Mr. Jacobs has gone to Houghton to commence work on the contract immediately and already the firm has masons on the way to the Copper Country from Chicago and other points." Securing the contract against all competition for what it predicted would be "the finest single building devoted to the educational purposes in Michigan" demonstrated the business ability of Jacobs and his associates.

Workmen excavated the foundation for the mining school as soon as spring arrived and constructed the building in a little over a year. By September 1888 they had laid the stonework on all but the tower, and had put on the tile roof, thus, enclosing the building before winter. They finished the interior in the winter and spring of 1889, before funds were exhausted.²¹

A second legislative appropriation for \$60,000 in June 1889 enabled the board to furnish and equip the mining school with books, technical equipment, implements and machinery; to landscape the grounds; and to store and bring to it a supply of water.²²

Finishing and equipping the building took until the spring of 1890. As the installation of the furnishings for the building progressed, the Houghton Daily Mining Gazette for 12 December 1889 summarized the advantages of the school and specifically referred to the building:

The building as a whole is a stately structure, worthy of the beneficent institution for which it is used. . . .

The mining school will take rank in the near future with the long established public institutions of learning that Michigan people regard with so much pride.²³

The local newspaper cited the distinct advantages of the school's location at Houghton:

The Michigan copper district is also unequaled as a place in which to imbibe mining knowledge and enthusiasm from her association with the people. Nowhere else in the world are there greater, richer and more successfully managed mines; and nowhere else in America are the people of a large and important district so exclusively devoted to mining industries. The profession of scientific mining will grow in importance for many years to come. There is more room in it than in other professions. Success in it requires a vast amount of special knowledge and practice. The Michigan Mining school, being the place above all others where that special preparation can be obtained, will in due time attract its full share of all those seeking such knowledge.²⁴

The Michigan Mining School now occupied a sandstone building worthy of its noble purposes. Hubbell Hall, built of native Portage Entry sandstone as the first centerpiece of this school, was instrumental in making the experiment a reality.

Fully equipped and furnished, the Michigan Mining School opened in 1890. The previous June the State Board of Visitors to the Michigan Mining School had inspected the building. It reported its findings to the superintendent of public instruction, noting the mining school's advantageous location in the midst of the copper range and the Menominee, Gogebic, and Marquette iron ranges, its competent instructors, its extensive collection of geological specimens, its well-equipped laboratories and library, and its fully developed curriculum. But above, the visitors found the building "a magnificent one, plain, well built of Portage Entry sandstone,

commodious and well adapted in every way to the work of the school."²⁵

The practical men on the Board of Control knew the geological and mineral resources of the Lake Superior region. In building an educational institution devoted to training the young men on whom their generation and the succeeding generation increasingly would rely to develop these resources, they consciously chose the native red sandstone of the region. The solid sandstone building affirmed the role and position of the Michigan Mining School.

In the 1890s the Suomi Synod of the Finnish Lutheran Church established a college in Hancock on Quincy Street a few blocks from the main business district. The Reverend Juho Kustaa Nikander, who had emigrated from Finland to the Upper Peninsula in 1885, directed both the Synod and the College. Suomi College (Figure 25), now called Old Main, was designed by a local architect, C. Archibald Pearce, in the spring and summer of 1898, constructed by the Calumet firm of Bajari and Ulseth, and dedicated in January 1900. Constructed of native variegated red sandstone quarried locally at Portage Entry in a vernacular interpretation of the Richardsonian Romanesque style of architecture, it was built as a solid, substantial, and permanent structure during the years that Suomi Synod struggled to organize Lutheran congregations in Finnish settlements across the northern section of America in the face of a schism in the Synod and in the face of the assimilation of the Finns into the American mainstream.

In 1890 the Suomi Consistory decided to establish a Finnish college and seminary for the purpose of preserving the Finnish



Figure 24.--John Scott & Company, Michigan Mining School, Houghton, 1887-89, destroyed 1968.



Figure 25.--C. Archibald Pearce, Suomi College, Hancock, 1898-1900.

religion, heritage, and culture, and for the purpose of training pastors to minister to the increasing number of Finnish-American congregations. The Finnish-American theologians who made up the consistory, for the most part graduates of the University of Helsinki and conversant in Swedish, had noted the effectiveness of Swedish-American colleges in meeting similar goals. Swedes had trained men for the work of their church at Augustana College, founded at Rock Island, Illinois, in 1860, and at Gustavus Adolphus College, established at St. Peter, Minnesota, in 1862. Thus, three months after the Suomi Synod was organized on 18 December 1889, its leaders called a convention and chose a committee of Finnish-American laymen and theologians to select a site for a Finnish college and seminary.

The Suomi Synod wanted to organize Lutheran congregations in scattered Finnish settlements in Massachusetts, northern Minnesota and Michigan, the Dakotas, and elsewhere. Shortly after its founding a difference over the authority of the clergy and the authority of the local congregation split the group and led to modifications in the constitution. Nikander led the Suomi Synod and the college from their beginnings until his death in 1919. In that time the Synod grew from 9 to 154 congregations and to 35,264 members, the largest single organization of Finns in America.

While dealing with the establishment of Suomi College, Nikander had to tackle the differences of thought in the Suomi Synod. He carefully separated the two issues. In a letter to the editor of the Copper Country Evening News he clarified the factions.

As to the "two factions" reported in your paper on the Finnish College question, I would like to call your attention to the following points. . .: 1. There may be factions among the finnish people, especially in religious respects, as there are factions among all nationalities in America. 2. But there are no "factions on the finnish college question," as this would mean some discordance and separation into factions among the people, which has decided to start the finnish college, to erect a structure for it and to support it. There has not been any discordance or separation of that people.²⁶

Over a six-year period the Suomi College committee solicited offers and negotiated for a site for the college.²⁷ The committee approached community organizations, businessmen's clubs, and local governments for prospective sites in places with high Finnish populations--in West Superior, Wisconsin, in St. Paul, Minnesota, and in Marquette, Houghton, and Hancock, Michigan. In a letter of 25 October 1895 to the president of the Commercial Club of West Superior, Wisconsin, J. H. Jasberg, business manager for the committee, outlined the proposal:

The American Finnish College have authorized me to obtain offers for a site for the new Finnish Seminary which it proposes to build in the near future.

It is prepared to build a Seminary worth \$30,000 and as it will be the only institution of the kind in the country, it will naturally become the recognized center for the Finnish population of the United States and of great consequent value to the City in which it is located.

We have already had offers of land and cash from other towns but we are desirous of locating in Superior if it can be arranged.

I have been advised to ask the aid of the Commercial Club in this . . . [and] would be glad to have you bring the matter before the club, so that we can meet the members and explain more fully our plans and our needs.²⁸

Jasberg also communicated with the St. Paul Investment and Savings Society, the Businessmen's Association of Marquette, and similar groups in Houghton.

The citizens of Marquette offered the Suomi College Board of Directors its choice of any of nine tracts of land as a permanent location for the college, one "near the Carp River Furnace and the State prison and directly on the main line of the DSS & A to Mackinac," another the Superior Hotel, a huge resort hotel and sanitarium that went bankrupt in 1894, two years after opening. Hiram A. Burt, on behalf of the citizens of Marquette, wrote Nikander and the board of directors with an offer that typified the efforts of a particular city to persuade the college to locate within its boundaries.

The City will deal generously with your institution in the matter of water supply and electric lights--as to financial aid in the matter of building, I will not now say anything. It is a matter that would be determined largely by what site suited you best and can be best considered while the selection of the site itself is under consideration by your board some of our citizens would give liberally--no doubt if it was to be located at a place where their property would be enhanced in value--others would do likewise if it was located in their neighborhood.

Some of these locations are worth many thousands of dollars and it has been intended to give you ground enough for all possible requirements, including ground enough for a small farm for your agricultural school, when you establish it.

Temporary accommodations for your school work will be supplied to you--free for a year pending the erection of your school buildings.

Material. both stone & wood are cheap here and of the best character for building purposes some of which will be donated--All these things can be more explicitly stated to your board of trustees or a com. of same whom we invite to visit our city and confer on the matter before deciding to locate elsewhere.²⁹

The Shelden estate offered a six-acre site in Houghton, which afforded "splendid view of the lake and the natural scenery bordering upon it." The Shelden estate offered the land, valued at \$7,000, for \$1,000, payable by popular subscription.³⁰

Thinking a decision on the location at Houghton was imminent, the Suomi College Board of Directors instructed the building committee to purchase the land and to arrange with W. T. Pryor, a Houghton draftsman, to draw preliminary construction plans.³¹ On 9 October 1897, when the Marquette Mining Journal reported that the building site in Houghton soon would be prepared for construction and the foundation would be built before winter, it described the building. From the outset plans for the school prescribed red Lake Superior sandstone from Portage Entry.³²

Plans for the new college, which call for Portage Entry redstone in its construction, have been furnished by W. T. Pryor, the Houghton architect. The plans are for a three-story building 88x60 on the ground and forty feet in height. The basement will contain the furnace, laundry, gymnasium and storage and dressing rooms. The first floor will be devoted entirely to school rooms. On the second floor will be found the dressing rooms. The third floor will contain sleeping apartments for students, of which there will be seventeen in all in the building.³³

The committee presented Pryor's plans for the building estimated to cost \$7,000 to the board on 7 December 1897. Negotiations failed when the board was unable to secure an additional site adjoining the six-acre site.³⁴

In this manner, the committee reviewed offers of sites in all five communities and it chose a site in Hancock, presumably because the village had a large Finnish population and because the

community wanted the college. In the meantime, in September 1897, the board opened the school in temporary quarters in Hancock.

The board bought three lots along Hancock's Main Street from A. Dittler, Oscar Eliason, and Miss Pearce for \$1,000, \$1,200, and \$1,000, respectively.³⁵ That spring the board acquired additional property adjacent to the parcel it already owned.³⁶ On 18 June 1898 the Copper Country Evening News reported that "the school owns three lots adjoining each other, which is ample room on which to erect the proposed new building."³⁷

Architects in Marquette, Houghton, and Hancock expressed interest in submitting proposals for Suomi College. Edward Demar of Charlton, Gilbert and Demar, wrote Jasberg from the firm's Milwaukee office.

You perhaps remember talking with me while I was in Hancock that you thought perhaps about April 1st you would be able to determine on what you would do in regard to the Finnish Seminary when you are ready. Hope you will let us know and one of our firm will be glad to meet you and Board--if you will let us know what you require in the way of Buildings we would submit you sketches on the terms I submitted to you during our conversation in Hancock.³⁸

The building committee selected C. Archibald Pearce of Hancock as Suomi's architect. Little is known of Pearce's background and training. Pearce advertised his architectural office in the Scott's Block at Hancock in the Marquette Mining Journal for 1899 and in the Michigan State Gazetteer and Business Directory for 1901. He solicited correspondence and stated that he could prepare plans, specifications, and estimates. In 1897 Pearce designed the Finnish Apostolic Lutheran Church in Hancock. In 1899 he designed the

Kerredge Theater, W. H. Mason House, and numerous other buildings in Hancock.

On 8 June 1898 the Copper Country Evening News reported that "plans for the new building are now being drawn by Architect Pearce and no distant date will see the building started. It is thought the cost of erecting the new building will be about \$8,000." Within a month the board approved Pearce's plans and drawings with alterations that placed four rooms on the second floor for the college president and prepared two additional rooms on the first floor by raising interior walls between classrooms. It hired Pearce to superintend the building project and sought bids from contractors.³⁹ In August and in September the ground was excavated by John Paavola and in October a contract to lay the foundation was awarded to William Scott of Hancock.⁴⁰ But the board delayed the erection of the superstructure until Pearce could simplify the plans so as to reduce costs. Nikander explained that

changes were necessary in the drawings to simplify them. The initial thought was that the building would come to cost between \$7,000 and \$8,000. But when it was seen that with this cost we could not get an adequate building it was necessary to abandon that plan and to diminish the plans and provisions for the Suomi College building to the cost figures available.⁴¹

On 10 March 1899 when the board of directors called for construction bids, the Marquette Mining Journal described the plans for Suomi College then on display at the office of C. Archibald Pearce.

The site is a most commanding one on Quincy street, west. . . . The plans call for a building 76 by 63 feet 3 inches in extreme dimensions, while the main portion, excluding

the tower and president's office in the front, will be 76 by 40. Rock-faced Portage Entry sandstone laid at random, with cut stone trimmings, will be used in the construction with cut stone for the basement, and the building, Gothic in design, will be a notable addition to the public edifices of Hancock and the copper country.⁴²

The front portion of the basement would contain the dining room, pantry, and kitchen for the president. The main portion of the basement would hold a classroom, the main dining room, pantry, kitchen, laundry, and fuel and boiler rooms. The first floor, divided by a large hallway which ran from front to rear, would hold the president's reception hall, and six classrooms, two of which could be opened into a large public assembly room by means of a sliding partition and featured a handsome fireplace. The second and third floors would contain student bedrooms and bathrooms, and the attic and infirmary. The upper three floors of the tower would hold the president's parlor, bedrooms and bathroom, and library. The interior would be treated simply, the rooms of the basement finished with oiled Norway pine wainscotting, hallways decorated with burlap wainscotting, and the rooms of the upper floors painted.⁴³

By 31 March 1899 the building committee awarded the contract in the amount of \$10,037.77 for carpenter work to Bajari and Ulseth of Calumet and in the amount of \$4,987 for stonework to William Scott of Hancock.⁴⁴ Within two months the cornerstone was laid.

On Decoration Day 1899 hundreds of Finns traveled to Hancock to participate in the day-long festival to observe the laying the cornerstone ceremony. Special trains carried delegates from Calumet and from the towns of the Iron Range. Two hundred people ate dinner

at Germania Hall, and then, led by the Laurium band, paraded through the main streets of Hancock to the new building where thousands had gathered to observe the ceremonies. Reverend Kaarlo Tolonen of Ishpeming, Professor Ylonen of Suomi College, and prominent Finns addressed the crowd in Finnish. Archibald J. Scott, mayor of Hancock, concluded the speeches by saying that "Marquette has got the normal school and Newberry the asylum, but Hancock has got the Finnish Theological college. . . ."45

In an article titled, "Gala Day for the Finns: Cornerstone of Suomi College at Hancock is Laid with Appropriate Exercises," the Marquette Mining Journal for 3 June 1899 concluded the following:

Besides being an ornament to the village, Suomi College will be a credit to the educational institutions of both Hancock and the county. The site is admirable, in fact, a more desirable piece of property could not be had along Portage Lake anywhere. The structure will be of Portage Entry sandstone, of liberal dimensions, three stories in height, handsomely trimmed and most attractively and conveniently arranged throughout. . . . The Finnish people have every reason to be proud of their undertaking in the direction of higher education, but the work now so well under way was not accomplished without sacrifice. It is such events as these that exhibit the traits of a people as well as exciting the sympathy of all lovers of liberty should their kinsmen in their native land be under the heel of oppressors, as is the case of the Finns, who have flatly refused to yield to the tyranny of the czar of Russia, who, by the way, is first in peace conferences and last to consider the rights of his unfortunate subjects.

As the school neared completion in December 1899, the local newspaper illustrated "the imposing structure" and explained that "the style of architecture is Old English Gothic with eliptical[sic] Gothic arches. . . the walls are built of Portage Entry red sandstone

heavily buttressed."⁴⁶ The style and the stone equalled the vigor and tenacity of the Finns themselves.

The school cost \$30,000 to build. It was ready for occupancy by mid-December and dedicated on 21 January 1900. Some 600 visitors from the copper and iron country towns of Michigan and Minnesota attended the dedication exercises. The president of the college, ministers of several Finnish Evangelical Lutheran churches in Minnesota and Michigan, and the editor of a Finnish newspaper, the American Suometar, spoke. The Houghton Daily Mining Gazette observed that for a day and a half the city of Hancock was practically in the possession of the Finnish people who feasted, sang, and attended services. "The event was one of extraordinary import to that nationality, as it is the only Finnish college in the United States and enters upon its career under the most auspicious circumstances."⁴⁷

The Houghton Daily Mining Gazette reported that the dedication would

mark the founding of their [the Finnish people's] first educational institution of its kind in America soil, which will forever stand as a monument to the enterprise, energy, and thrift of that race. The building is a marvel of completeness and architectural skill . . . a credit to the architect, the builders, and the society.⁴⁸

Classes assembled in the new college for the first time on 22 January 1900.

The Houghton Daily Mining Gazette outlined plans for the dedication which would serve to congratulate the Finnish people on this great undertaking.

The handsome brownstone institution . . . will be an ornament to Quincy Street and a credit to the city for all time. Such an imposing structure, for a purpose so noble and elevating commands the admiration of every resident of the copper country, and of Hancock particularly, and the Finnish people are entitled to the highest need of praise it is possible to bestow for the accomplishment of their plan and the bright promise that the future affords them for the success of their ambitious project.⁴⁹

As soon as the Suomi Consistory decided to establish the college, the board of directors began to raise funds for the project. By July 1895 it had appointed fund raisers who canvassed Finnish settlements throughout the country. Within three years they raised \$7,000. On 12 April 1898 the board instructed the building committee to circulate fund-raising letters to friends of the college, people acquainted with the project, and the public.⁵⁰

After the school had been completed, dedicated and occupied, the treasurer reported to the board on 8 February 1900 a debt of \$22,000 on the buildings and grounds.⁵¹ Fund raising escalated to include great American philanthropists, presidents of mining companies, public officials, and newspapermen who could publicize the cause. Jasberg explained to John D. Rockefeller the necessity for broadening the scope of the fund raising:

Considering the fact that most of our nationality are of the laboring class, and comprising very few of the business or moneyed men, the results of the subscription lists to all the Finnish Colonies of the United States, thus far have been gratifying, indeed, to the College authorities.

The present Finnish population of the United States has practically migrated to these shores within the past twenty years, and the greatest bulk of it within the past few years, in search of employment, and has, by hard and conscientious work, established itself in favor with all classes or employers of labor, but they are still laborers, and cannot be depended upon for the entire support

of our institution. . . . [They] are now supporting a great many churches and temperance halls, which have been established by them within the past 10 years, and more building at the present time in the various Colonies in Upper Michigan, northern Minnesota, Massachusetts, Ohio, North and South Dakota, Washington, Oregon, California and Wyoming, the largest and oldest of which, however, is located in the Upper Peninsula of Michigan, where our people are employed in the iron and copper mining and lumbering industries.⁵²

Jasberg sent this letter to Andrew Carnegie, Helen Gould, Henry C. Frick, John Wanamaker, William A. Paine, A. S. Bigelow and others. It argued the good that would come from supporting the college.

By examining the records of the Bureau of Immigration, it will be found that, a very small percentage of the Finnish immigrants are unable to read or write their own language, and they are all Evangelical Lutherans.

The encroachments of the Government of Russia upon the rights and privileges of the people of Finland have become most severe and far-reaching during the past two years than ever before, and have caused a considerable increase in the immigration of Finnish subjects to the United States, the great majority of whom are between the age of 20-25 years. All of them have reached an age where the acquisition of a foreign tongue with the means at their command, becomes well-nigh impossible. If these people were dependent upon their knowledge of the English language for their enlightenment as to public affairs in this country, they would undoubtedly make a very poor class of citizens, and their attendance of American churches, considering they would not comprehend the teachings, would be reduced to a minimum.

Under the circumstances there is almost a public necessity for school's like ours, as the pulpits of the various churches and the editorial chairs of the Finnish publications in the United States will have to be filled with men educated in our language for a good many years to come.⁵³

The influx of some 200,000 Finns to America was caused largely by the attitude of the Russians toward Finland. The Finnish-American population of Houghton County followed closely

with deep interest the policies and practices of the czar. Discussions of political conditions in Finland drew large crowds in Calumet and Hancock.⁵⁴

Reminiscent of a medieval castle, Suomi College is a bold, robust, fortress-like stone building that expresses great strength and tenacity. The Jacobsville sandstone college building symbolizes the strength and unity of the Suomi Synod, the endurance of the Finnish people against displacement by the Russians, and the validity of Finnish culture, tradition, and values in the midst of the melting pot.

The Hancock Town Hall and Fire Hall (Figure 26) stands on the main business street of Hancock opposite Montezuma Park and overlooking the Portage Canal. It was planned by the village council, comprised of mining company officials and local businessmen, a few years before Hancock was incorporated as a city. The structure was designed by the Marquette and Milwaukee firm of Charlton, Gilbert and Demar in the winter and spring of 1898, constructed by the Ishpeming firm of E. E. Grip and Company, and dedicated in February 1899. Constructed of evenly coursed, rock-faced, clear reddish brown Portage Entry sandstone in an eclectically vernacular mode of architecture that shows the Dutch and Flemish stepped gable, it was built as a stable and ornamental structure, during the years the mining industry of the region achieved one of its greatest growth spurts and during the years of underlying resentment and dissatisfaction among workers.



Figure 26.--Charlton, Gilbert & Demar,
Hancock Town Hall and Fire
Hall, Hancock, 1898-99.

Now called Hancock City Hall, this structure is located on the north side of Quincy Street one block west of Suomi College. A prominent landmark in Hancock, this city hall resembles a Gothic parish church in its plan and composition. The end-gable building, forty-eight feet in width by ninety feet in length, is two stories in height with a square corner tower topped by an open wooden belfry, originally surmounted in turn by a conical roof.

A broad-arched window dominates the main facade and admits light into the council chamber of the second floor. Beneath is a large vehicular entrance flanked by a round-arched door and a round-arched window. The main pedestrian entry at the southeast corner, enframed by Ionic order Roman columns with regularly spaced rusticated banding that support a full entablature, opens to a stairway that leads to the town offices and council chamber. A cross gable intersects the main gable on the east side where a shed-roofed extension runs the full length of the main block. A large, three-part, round-arched window pierces the north wall and admits light into the assembly hall. Wall buttresses adorn the west wall of the structure and the tower. A four-faced clock is visible in the tower everywhere in town.

The first floor contains the fire department, the marshal's offices, and space for vehicles and fire-fighting apparatus, and horse stalls and rooms for firemen in the rear. The basement once held the jail, but now is used for storage. The second floor contains the clerk's office and vault, the council chambers, and the firemen's assembly hall.

In 1897, as the population reached 4,000, the townspeople of Hancock decided they needed a new village hall and fire hall. They had outgrown their old wooden fire house, built at the east end of Quincy Street in 1871, two years after a fire had destroyed three-fourths of the village. Located out of the township and away from the center of town, it could neither serve as a place to vote nor protect from fire property in the rapidly growing and fashionable west end of town. It was too small to house a team of horses and fire-fighting apparatus. Most of all, it was too inconspicuous in its location and appearance to proclaim the social and economic advancement and the independence of the village.

Citizens and city officials wanted a public building that would house the fire department, village offices, and council room. Moreover, they envisioned "a new building, modern in architecture and worthy of this hustling town."⁵⁵ The local newspaper reported that the people of Hancock talked of "a building of red sandstone two stories in height." The article continued:

It would be planned to accommodate the fire apparatus with stables in the rear. The second story would consist of a large room for public meetings such as caucuses, etc., offices for the village clerk and perhaps sleeping quarters for four firemen. The latter would be a good move as that number would be sufficient to get the apparatus to the scene of a fire and probably get on steam to work by the time other members of the department would arrive. Hancock, in the opinion of President Scott and the others who will agitate this improvement, has attained a growth and importance warranting the investment in a building that would besides being so much more convenient and serviceable also be an ornament she deserves. Other towns, with not half the business enterprise and push, possess public buildings such as the one advocated for Hancock and the fact adds to her importance in the eyes of all strangers within their gates. The new building is a necessity and is bound to come.⁵⁶

The citizens of Hancock, whose population had more than doubled in the last ten years, needed a building appropriate to their perception of the town's emerging prominence. A public building constructed of the red sandstone native to the region would summarize and proclaim visually the achievements of this active and ambitious community.

Responding to the practical and symbolic needs of the community, the Common Council of the Village of Hancock acquired a site, selected an architect and contractor, and appointed a committee to oversee construction. In spite of public opinion that favored the employment of designers and workmen local to Hancock, the council selected an out-of-town architectural firm. The council purchased a site for a town hall and fire hall from the Quincy Mining Company for \$2,500 in February 1898. Seventy-five feet in width by 120 feet in depth, the lot was situated on the north side of Quincy Street, where its eastern boundary was in a line with the east side of Montezuma Street.⁵⁷ Then the council relinquished its lease to the land on which the old fire hall was situated, with the understanding the village could occupy it for an indefinite period. The newspaper reported this transaction and noted the excellent location and reasonable cost of the site.

The site secured for the new city hall is centrally located and a better location would be hard to find. The council are to be congratulated on their success in obtaining the site and at so nominal a price.⁵⁸

One week later the council authorized its president, Archibald J. Scott, to receive plans and specifications for a "Town Hall and Engine House at a cost in the neighborhood of Ten thousand dollars."⁵⁹

At least three firms submitted plans for the proposed fire hall. William T. Pryor of Houghton, C. Archibald Pearce of Dollar Bay and Hancock, and Charlton, Gilbert and Demar of Marquette and Milwaukee presented plans to the council in a special session held to review them.⁶⁰ The council dismissed those prepared by Pryor since they were incomplete, having been drafted on a day's notice. It deferred deciding between those prepared by the local firm and the out-of-town firm. The local newspaper reported that popular opinion favored giving the job to a local architect. It claimed that Pearce had drawn an "imposing structure with a pleasing exterior" and a convenient interior, and that with a few changes his design would meet the town's requirements.⁶¹

In anticipation of the council's request for drawings, C. Archibald Pearce had prepared a sketch for the proposed fire hall and intended to submit it. The Copper Country Evening News told its readers that they could see the plans at A. J. Scott's drug store.

Mr. Pearce's plans are very highly thought of by those who have looked them over, and with a few alterations could be just the thing wanted. The sketch of the outside appearance of the building shows it to be a very imposing looking structure, and the high tower for drying hose sets it off to good advantage.⁶²

It elaborated on the eye-catching and colorful appearance of the plans drawn by the out-of-town firm in this way:

The plans furnished by the Milwaukee firm were highly colored and took the eye of most of the councilmen at once, regardless of giving any attention to the convenience of the structure. The arrangement of the second floor of the plans pleased all the councilmen and filled the bill exactly, but to get this arrangement the designers

had to go out of the exact size for which the plans were asked. Plans were asked for a building 40 x 90 feet, but these plans call for a building 48 x 90. The lower floor did not give much satisfaction, the only entrance to which is through the large swinging doors in front. The exterior of the building with its gay colors is pleasing to the eye in the extreme, but as far as appearance and convenience is considered Mr. Pearce's plans are far ahead of the others. While the Milwaukee firm's plans fill the bill to a percentage of 23 percent, Mr. Pearce's plans have a strong 75 percent in its favor to what is wanted. His plans show an imposing structure with a pleasing exterior. The interior being fitted up very conveniently and with but a few changes is just what is wanted.⁶³

The council deliberated in two more sessions before deciding on 23 February 1898 to adopt the plans and specifications of Charlton, Gilbert and Demar. The Copper Country Evening News reported on the deliberations in these words:

There was considerable heated discussion at the special meeting of the Hancock Council held on Wednesday evening over the plans to be accepted for the new city hall. It was a lengthy session lasting three hours. A decision was finally reached by accepting the plans of Charlton, Gilbert and Demar, the Milwaukee architects, subject to alterations suggested by President Scott. Both architects Ed Demar and C. A. Pearce were present at the meeting.⁶⁴

Edward Demar probably played the principal role in designing Hancock's town and fire hall. Born in Vermont in 1864, the Toronto-trained architect had worked as a draftsman in several Canadian and Upper Peninsula offices before forming a partnership with Andrew Lovejoy by 1892 and designing the Marquette City Hall in 1894. After joining Demetrius Frederick Charlton and R. W. Gilbert in the firm of Charlton, Gilbert and Demar in 1895, Demar worked in the firm's Milwaukee office for two years. He had married Kate Hoffenbacher, daughter of a Hancock baker, in 1890. Eventually Demar opened his own office at Sault Ste. Marie, where he designed

several important sandstone structures, among them, the Adams Block (ca. 1902) and the United Presbyterian Church (1902).⁶⁵

Archibald J. Scott, a banker, developer, community leader, and public official, influenced most discussions on the construction of the town and fire hall. Throughout his career he paid special attention to the Hancock fire department. He served as chief of the fire department for more than twenty-five years after it was organized in 1870, established a paid company of twenty men in 1882, and served as president of the Upper Peninsula Fireman's Association. Coming to the Upper Peninsula from Wisconsin and the West at age seventeen in 1865, Scott participated in the growth and development of Hancock: he built more than twenty houses, the Scott Hotel (1880), and other structures; operated a drug store; started a local newspaper; served as vice president of the First National Bank, director of the Superior Trust Company, president of the Eva Mining Company, and director of the Hancock Loan, Mortgage and Insurance Company, and mayor of Hancock.⁶⁶ The townspeople valued Scott's thoughts on the best design for the village hall. As the council reviewed plans presented by architects, the Copper Country Evening News stated the following:

President Scott has given much attention and time in studying the best building for Hancock to have, having visited hundreds of city fire halls throughout the State in search of information from which our townspeople will reap the benefit. Mr. Scott's opinion as to what is best should carry considerable weight with his fellow councilmen in deciding what plans will be accepted.⁶⁷

Later the newspaper expressed the admiration of the residents of Hancock for their president. It said that the village owed much to

Scott, "the hustling president of the village, who had been most indefatigable in urging these improvements and finishing them to a completion for which he certainly deserves much credit."⁶⁸

Scott appointed a building committee to assist him in taking charge of the construction of the town hall. It included Charles A. Wright (later replaced by W. H. Mason) and William Kerredge. Wright served as state geologist, Mason worked for the Quincy Mining Company, Kerredge was a local businessman. Bids for construction of the foundation were advertised on 11 April 1898.⁶⁹

Although the townspeople had wanted the fire hall ready by the first of August, in time for the Fireman's Tournament, the structure was not completed until the following winter. The newspaper blamed the out-of-town firm for the delay.

Much dissatisfaction has been expressed at the architects drawing plans not having been completed in time, the plans should have been completed a month ago, but the detail work of the same have not arrived here yet. This is what becomes of giving work to outside parties, where there is no need of it, for we have architects in our midst who are every bit as competent as the Milwaukee firm, and who could have had the plans ready at the required time.⁷⁰

Again, on 4 May 1898, it reported that the plans had not yet been delivered.

It is safe to say that the contract will be let to local parties, as their bids will be considered first, even if they are a few hundred dollars higher, but should the difference run up to a thousand dollars, as the outside contractor predicted, it will be another question. The building committee will favor home labor and material in every case.⁷¹

Anxious to begin on the structure before the plans were ready, in April the council had awarded a contract for building a

stone foundation and basement for the new city hall to William Scott, a stone cutter in Hancock, who presented the lowest bid, \$1,097.⁷² Scott completed the work on the basement before the architects had submitted to the council the detailed plans. In turn, these were placed in the hands of contractors who were preparing bids.⁷³ Two weeks later the council awarded the contract for construction to E. E. Grip and Company, Ishpeming.⁷⁴ Stone for the city hall was delivered shortly thereafter, probably hauled by scows through the Portage Canal from the quarries at Portage Entry. Stonecutters prepared the stone for seating at the construction site. Grip completed his work that fall. The local newspaper reported that "the job shows excellent workmanship, and will do a great deal for Mr. Gripe [sic] in regard to his getting contracts in the copper country."⁷⁵

The almost ninety-foot-high tower neared completion the end of September. The local newspaper thought the tower would "give an artistic finish to the building." Once the clock was installed and the building was finished the city hall would be one the community could display proudly to visitors.⁷⁶

In finishing the interior, the council again relied on A. J. Scott, under whose "personal direction" decisions were made and work proceeded. Associated Artists of Milwaukee decorated the assembly hall and council chamber. Angus Gillis painted the building and John Funke put in the steam heat. Finally, the council ordered furniture for its own chamber "from below" (i.e., the Lower Peninsula).⁷⁷ The entire project cost some \$15,000.⁷⁸

As workmen cleaned up the structure, and as officials moved in and prepared for the formal opening, the local newspaper described in detail the town hall and fire hall.

The building, of Portage Entry sandstone, is two stories high, with a Venetian clock tower at the corner by the main entrance, and is 48 by 96 in ground dimensions. The front elevation, with its tower and the battlements and the large triple window in the center, presents a splendid appearance from the street and is a credit to the architects, Charlton, Gilbert & Demar of Marquette and Milwaukee.

The first floor is given up to the fire department, with the marshal's office on the east side with a separate entrance, the "cooler" in the basement also being separated from the main basement. In the fire department's headquarters the new hose sleigh, just finished by Paul Exley and a beautiful piece of work, by the way, occupies the place of honor, while in the rear are the snow safety stalls for the team, a room for two of the firemen and a room for the driver. Hardwood floors, pine wainscoting, natural finish, and 16-foot ceilings make the quarters the handsomest of their kind on the peninsula.

At the head of the stairs on the second floor is the clerk's office, with a fireproof vault, and occupying the front of the building is the council chamber, 20 by 30, with a recessed alcove for the president and convenient cloak rooms. In the rear is the firemen's assembly hall, 30 by 60 feet in size, and the handsomest feature of the building. This room, with its hardwood floor, vaulted ceiling and heavy cornices, has been decorated in warm terra cotta, shading into lighter colors in the ceiling and elaborately frescoed. It is a masterpiece in its way, and with the council chamber reflects the greatest credit upon the Associated Artists. The assembly hall is lighted by 120 incandescents set in the ceiling.

A clock tower contains a large Seth Thomas town clock which has kept perfect time from the day of its installation. The bell will be used as a fire signal and also to strike the hours, the Gamewell system of fire alarm telegraph being used.

Taken all in all the building is a great credit to Hancock, to the present village officials and to the architects, Messrs. Charlton, Gilbert & Demar.⁷⁹

The Hancock Town Hall and Fire Hall was built of stone in compliance with a fire ordinance enacted while it was under construction. Thirty years after a fire destroyed three-fourths of the town, on 4 October 1899, the village council adopted an ordinance that prescribed fire limits and required persons about to construct buildings within these fire limits to apply for a permit. The ordinance prohibited the erection, placement, or enlargement of wooden buildings and structures

on the north half of Blocks 3, 7, 11, 13, 14, 15 and 17 and in the south halves of Blocks 4 and 8 and on all that land lying between Ravine Street and the Mineral Range Railroad track bounded on the south by Quincy Street and on the north by a line 120 ft north of Quincy St. extending from said Ravine St. to said Railroad track.

The ordinance required that buildings erected, placed, or enlarged within these limits be constructed

with outer walls of stone or brick, or brick veneer with outer walls of stone or brick, or brick veneer, and the roofs of all such buildings, structures or additions shall be covered with slate, metal, gravel or other non-combustible material, and all windows or other openings . . . provided with proper and sufficient fire shutters.⁸⁰

Over 2,000 people inspected the new city building when it was opened to the public on the evening of 16 February 1899. Accompanied by the Quincy Excelsior Band, the village fathers and the fire company marched through the streets from the old fire house to the new town hall. Scott conveyed the building to the citizens of Hancock as he addressed them from atop the hose wagon saying, "The Calumets and Baltics can come and go but Hancock would go on forever." The substantial stone town and fire hall symbolized the permanence of Hancock in an area of fly-by-night mining towns.

The Copper Country Evening News, in spite of its earlier position favoring local architects, reported that the townspeople inspecting the building declared it beautiful and convenient.

The News can conscientiously say that Hancock has the most up-to-date city hall of any town in the Peninsula, and thanks are due President A. J. Scott for his efforts toward getting the hall. It had long been a hobby of the genial president to get such a place in which to store the fire apparatus and to transact the village business in. That he has well-succeeded is acknowledged for Hancock owns a city hall that a city four times its size could justly feel proud of.⁸¹

The new town hall and fire hall, designed by an out-of-town firm, using local Portage Entry sandstone, overcame the inadequacies of the old firehouse. The new structure was the focal point of civic pride for this growing village. The red sandstone town hall and fire hall symbolized the stability and security of Hancock. People who were losing control over part of their lives to industrialization maintained control of another part through local government.

Between 1899 and 1901 several Houghton businessmen, who successfully had speculated in mines and land, built a group of masonry commercial buildings at the intersection of Sheldon Avenue and Isle Royale Street, the heart of Houghton's commercial district. The Sheldens, Dees, Douglasses, and Calverlys commissioned Henry L. Ottenheimer of Chicago to design the buildings and contracted with Paul F. P. Mueller of Chicago and Houghton to erect them. The James Dee Block, the Sheldon-Calverly Building, the Douglass House Hotel, and the Sheldon-Dee Block (Figure 27), a large commercial building constructed of red Portage Entry sandstone in the Neo-classical Revival style of architecture show the evolution of the preference

for sandstone and brick. The group of structures complemented the prestigious First National Bank, built on the northeast corner of this intersection ten years earlier. The bank, designed by the architectural firm of Scott and Company of Detroit, as a three-story, Richardsonian Romanesque-inspired work of pressed brick and Portage Entry sandstone was the first brick block in the Copper Country. When it was completed on 15 August 1889, the Portage Lake Mining Gazette lavishly praised this new financial symbol in these words:

Nothing equal to their brownstone arched and plate glass front, their massive antique oak counter, doors and wood finish, their long line of side windows, and their great floor space and height of ceiling--can be found in any other banking establishment north of Milwaukee.

The Douglass House Hotel, the First National Bank, the James Dee Block, and the Shelden-Dee Block still stand; the Calverly Building was demolished several years ago to make way for a parking lot.

The Shelden-Dee Block, at the northwest corner of Shelden Avenue, the city's principal thoroughfare, and Isle Royale Street, is opposite the Douglass House Hotel. This three-story commercial building, 100 feet in length by 70 feet in width, is built of brick and smooth-cut, red Portage Entry sandstone. Sandstone, now spalling in many places, covers the Shelden Avenue and Isle Royale Street (south and east) facades, brick the side and rear (west and north) facades. The site slopes north from Shelden Avenue toward Portage Lake, which separates Houghton from Hancock, and reveals an exposed basement at the rear of the structure. Regularly spaced windows and entries contribute to its formal expressiveness.

On the second and third floors, five paired, double-hung, two-over-two, rectangular windows, and three paired similar windows are flanked vertically by giant square Ionic order pilaster strips that extend the full height of the second and third stories. Each window is divided by a smaller, square Ionic order pilaster strip that runs the full height of the window. A single pair of windows separated horizontally by ornamental bracketed sandstone balconies with cut grille work flanks the central windows of the main facade. Single windows flank the paired groups of the east facade. Ornamental bronzework embellishes the four store fronts of plate glass. Two round-arched recessed entries, flanked again by engaged Ionic order pilaster strips, are directly below the first and fifth paired windows of the second and third levels, and lead to the rooms of the second and third stories. A rich copper sheathing ornamented by acanthus leaves tops an ample sandstone cornice decorated with modillions. These crown the flat-roofed structure. The interior of the building is divided into four stores on the first floor and suites of offices, now converted to apartments, on the second and third floors.

George C. Sheldon purchased the property at the northeast corner of Isle Royale Street and Sheldon Avenue, opposite the First National Bank in 1890, soon after the bank opened. The Marquette Mining Journal reported the transaction in these words:

George C. Sheldon [sic] has purchased the corner property opposite the Douglass House now occupied by Dr. Mason as a drug store from Leon Lavaux, of Brussels, Belgium for \$8,500. Mr. Sheldon intends to tear down the wooden buildings and erect a sandstone block as fine as that of the First National Bank.⁸²

Clearly the brick and sandstone bank established the model for commercial buildings to follow.

George C. Sheldon (1842-1897) was born in Walworth County, Wisconsin, the son of Ransom Sheldon and Theresa M. Douglass. In 1878 George Sheldon inherited from his father extensive real estate holdings in Houghton and the adjoining counties.⁸³ Sheldon died seven years after acquiring the building site. His widow, however, collaborated with James R. Dee, manager of the Peninsula Electric Light and Power Company, in building this block. Sheldon had married Mary E. Edwards (1845-1935) in 1867. The Copper Country Evening News announced plans for the block in this report:

Among the new buildings to go up at Houghton the coming summer will be a three-story business block, which will be erected at the corner of Isle Royale and Sheldon streets, where the old Sheldon block now stands, and which will be occupied by B. T. Barry as a drug store. The new building will be 100 x 70 feet and plans for the building are now being drawn by architect H. L. Ottenheimer of Chicago.⁸⁴

Henry Leopold Ottenheimer (1868-1919), the son of Leopold and Lena (Cassell) Ottenheimer, was born in Chicago, where he received his early education. He began the study of architecture with the firm of Adler and Sullivan and completed it in Paris. In the 1880s he began practicing architecture in Chicago, eventually heading the firm of Ottenheimer, Stern and Reichert. He advertised offices in both Chicago and Houghton in the Houghton Daily Mining Gazette of 1899. Ottenheimer designed the Chicago Elks Club and the Chicago Hebrew Institute Gymnasium, among many public buildings, banks, and stores in Chicago.⁸⁵

The people of Houghton received their first glimpse of the proposed Sheldon-Dee Block as construction began in May of 1899 and a sketch of the building was exhibited in the First National Bank Building. The Copper Country Evening News noted that the sketch "attracts much attention. . . . [It] shows a handsome building and one that will be a great ornament to Houghton's business street."⁸⁶ A feature of the building would be its red Portage Entry sandstone. Mary Sheldon and James Dee had instructed the architect to design one large block divided into identical halves. The same article incidentally noted that "the Dee block which is to be similar in architecture to the Sheldon building will also be a beauty."⁸⁷

Several weeks later the newspaper illustrated the Sheldon-Dee Block with a sketch prepared by Ottenheimer. The caption described the building as follows:

The above is a view of the frontage of the store and office building now in the course of erection for James R. Dee and Mrs. Mary E. Sheldon, opposite the Douglass House, Houghton. The plans and the sketch from which the above was reproduced are by H. L. Ottenheimer, architect of Chicago.

The building is to be 100 feet frontage and 70 feet in depth, three stories and basement.

The front is to be of Portage Entry sandstone and the store front of plateglass with ornamental bronze framework. The interior of the building is divided into four stores on the first floor and suites of offices on the second and third. The entire finish is to be made in hardwoods, main corridors, etc., to have mosaic floors, marble wainscoting, etc. The same will also be the case with the public toilet rooms on each floor. The building will be equipped throughout with all the latest devices of a modern building and will be one of the finest in finish and construction in the Upper Peninsula. The entire heating plant is gotten from a central station in the rear of the block, which is to take care of adjacent properties. It is estimated that the cost

will be in the neighborhood of \$75,000 and the completion is expected by October 1. The stores and nearly all of the office rooms of the building are rented to the former occupants of the space and others.⁸⁸

Paul F. P. Mueller of Chicago and Houghton constructed the Shelden-Dee Block and at least three other important structures in Houghton between 1899 and 1900: the James R. Dee Block, the Douglass House Hotel, and the Lake Superior Produce and Cold Storage Plant. Mueller held the reputation of a first-rate contractor.⁸⁹ A local newspaper reported that he had been awarded over half a million dollars in two contracts in Chicago in July 1900 for projects that "involved many delicate problems in engineering." One job required him to erect a six-story addition to the Brunswick-Balke-Collander Company plant without disturbing the ongoing operation and production of the factory. Another, the erection of a nine-story, fire-proof, steel frame store for Mandel Brothers (Holabird and Roche) on Madison Street, required him to place a foundation reinforcement of eight caissons filled with concrete fifty feet into quicksand.⁹⁰

Tenants leased space in the Shelden-Dee Block well before its completion and moved in by 4 December 1899. A restaurant and stores occupied space in the first floor, professional men and business men rented offices upstairs.⁹¹ Tenants viewed their quarters in the new block as desirable places in which to conduct first-rate practices and businesses. The brokerage offices of Paine, Webber and Company, managed locally by Thomas S. Dee, occupied three rooms in the southwest corner of the Shelden-Dee Block, for example. The Houghton Daily Mining Gazette noted the block and suite "would do credit to

a much larger city than Houghton" and permitted Dee "to give his customers all the advantages that could be desired." It elaborated on his well-appointed suite as follows:

The trading room is 18 x 30 feet in dimensions. At the rear of a magnificent banking counter is the bookkeeper's department and in connection with the latter is Mr. Dee's private office. Both these rooms have an entrance also from the main hallway. The banking counter is equipped with a sound proof telephone booth, as well as a booth for the telegraph operator; also other necessary equipment for the business of the firm. The entire counter is quarter sawed oak, trimmed with beveled plate glass and marble. This fixture was specially designed by the architect of the building, H. L. Ottenheimer, and was made by the Phenix Furniture Company of Eau Claire, Wis.⁹²

In like manner, when four suites of rooms on the third floor of the new Dee Building were completed, the Houghton Daily Mining Gazette described them in this way:

The architectural design of these rooms is entirely different from anything in this section of the country. At the head of the grand staircase are four doors each, a separate entrance to the suites. The rooms are connected by archways and if desired one may enter any one of the rooms from the hallways. All the suites are well lighted and provided with shower and tub baths, toilet and wash-rooms, clothes closets, etc. The decorators have made them among the handsomest and costliest in the state. Two suites in front facing Shelden Street are to be occupied by James R. and Thomas S. Dee. Those on the north for Charles J. Hodge and C. C. Douglass.⁹³

A heating plant, known as the Paull system, was installed by Thomas and Company of Chicago in the rear of Dee's portion of the block. James R. Dee paid special attention to the design and installation of the heating plant. Its large boilers, capable of 25,000 to 30,000 feet of radiation, supplied heat through underground steam conduits to adjacent structures, including the Shelden portion of the block, the Douglass House Hotel, the Shelden-Calverly

Building, the First National Bank, and the James Dee Block. By the time the Sheldon-Dee Block opened, its owners had entered into contracts with the owners of over a dozen nearby properties to heat their structures.⁹⁴ The Sheldon-Dee Block cost some \$75,000.

The James R. Dee Building at 65 N. Isle Royale Street is a three-story commercial block, sixty feet by sixty-five feet in size, built of rock-faced Portage Entry sandstone in a style of architecture that shows traces of classicism. It cost \$30,000 and held the post office, the offices of the electric light and power company, the telephone and telegraph company, and a public hall.⁹⁵

The Sheldon-Calverly Building was constructed in 1901 opposite the Douglass House Hotel on Isle Royale Street and adjoining a structure built by the same partnership two years earlier. C. D. Sheldon and W. D. Calverly financed the three-story brick structure, eighty feet by seventy feet in plan. Four stores occupied the first floor, eight seven-room flats the second and third floors.⁹⁶

In July 1899, within weeks after construction began on the Sheldon-Dee Block, eight Houghton investors--J. H. Seager, J. R. Dee, H. S. Goodell, J. H. Rice, C. D. Sheldon, W. D. Calverly, and M. Van Orden--formed a corporation with capital stock of \$100,000 and built the Douglass House Hotel at the southwest corner of the intersection. The four-story hotel, a building constructed of pressed yellow brick and white-glazed terra-cotta with ornamentation derived from Beaux Arts classicism, opened 4 August 1900.⁹⁷

The Douglass House Hotel demonstrates in Houghton the shift from red sandstone to light-colored brick.

Financed by the wealthy descendants of pioneer families who first explored and speculated in the area's resources, the Sheldon-Dee Block, located amidst four other prestigious buildings at an important intersection, symbolized success. Although the Neo-classical Revival style structure in red sandstone stands as a monument to commerce and trade in Houghton, it falls short of the smaller but more robust, Richardsonian Romanesque First National Bank built ten years before.

A single family dwelling erected in the mid-1890s for Paul P. Roehm, the region's preeminent stone mason and supplier, stands on a large lot at the southwest corner of Willow Avenue and First Street in Laurium. The Paul P. Roehm House (Figure 28), now owned by Virginia Zigmond, probably was designed and built by the owner himself between 1895 and 1896. Constructed of randomly coursed, rock-faced, red Portage Entry sandstone in a picturesque eclectic style of architecture, the house was built solid, stable, and durable during the years that Laurium achieved substantial growth as a residential community for managers of the Calumet and Hecla Mining Company, bankers, professional people, and merchants.

The Roehm House at 101 Willow Avenue exemplifies the use of sandstone in a dwelling. The house is two and one-half stories on a raised foundation. A three-story tower with conical roof projects from the asymmetrically arranged, ell-shaped mass. Skillfully laid stone provides the primary decoration. A stone beltcourse



Figure 27.--Henry L. Ottenheimer, Sheldon-Dee Block, Houghton, 1899.



Figure 28.--Paul P. Roehm House, Laurium, 1895-96.

encircles the house at the window sill levels of the first, second, and third floors. Large stone lintels top the double-hung, one-over-one, rectangular-shaped windows. A steeply pitched gable roof covers the building.

A veranda sweeps around the two sides of the house from the front (south) to the side (east). The house achieves a vernacular character from the spindly quality of the tower, seemingly appended to the heavy, massive composition. The heaviness derives, in turn, from the stone building material, in particular, the roughly hewn and tapered stone piers of the porch.

The interior space pivots around central fireplaces placed on a diagonal in the core of the building. The entry hall, dining room, drawing room, and library flow around them, each room with a fireplace vented to the common central chimney. Ample fireplaces and sliding doors permit the closing of rooms and draughts, thereby adapting the house to the climate. The southern exposure of the tower admits light into a reading alcove of the library. The early morning sunlight enters a sunroom at the rear, beyond which is a sitting room and kitchen.

Paul P. Roehm, born at Lake Mine in Ontonagon County around 1855, developed a reputation as a first-class contractor who specialized in stone masonry work in the Calumet and Laurium area, where he operated a coal and building supply yard. His yard became the primary outlet locally for stone from the Portage Entry quarries. Through his almost daily transactions with J. W. Wyckoff, superintendent of the Portage Entry Quarry, and his customers and clients,

Roehm knew that stone was a preferred building material. He built many stone commercial blocks, banks, town halls, and churches. Among his major projects were the Kinsman Block (Charles W. Maass) and the Red Jacket Town Hall and Opera House (Charles K. Shand) in Calumet, and the Sacred Heart Church (Louis Picket) in Laurium, all built between 1898 and 1899.

Little information is available on the construction of the Roehm House. As the house was nearing completion, the Marquette Mining Journal referred to Paul P. Roehm's "palatial" house as a major investment worthy of the community.

If one dozen more buildings of the caliber [sic] of Roehm's and Johnson Vivian's were built, Laurium would have the finest buildings in the peninsula in twelve months. The people who show their faith in the community by investing thousands of dollars in the most substantial buildings are pretty good people to tie to.⁹⁸

Together the Roehm and Vivian houses illustrated W. E. Steckbauer's and Albert Quade's A Souvenir in Photogravure of the Upper Peninsula of Michigan (Brooklyn, New York, the Albertype Company, 1900). The stature of Laurium was reflected in the stature of its stone houses.

By 27 September 1897 the Roehm House was complete. On that date the local newspaper noted that the Lawbaugh house stood next door to the P. P. Roehm House on Willow Avenue.⁹⁹

Red sandstone worked by a skilled contractor contributed to the "palatial" quality and to the prominence of this house. In its simplicity and solidity, the Roehm House expresses the local vernacular tradition. Paul Roehm may have selected sandstone for the building material because it was convenient, but he assuredly chose

sandstone because the material expressed greater substance and luxury than the wood of the area's dominant frame dwellings.

Situated on Sixth and Elm streets in the main business district of Calumet, formerly called Red Jacket, are two municipal buildings that were erected and improved at the end of the nineteenth century and the beginning of the twentieth century: the Red Jacket Fire Station (Figure 29) and the Red Jacket Town Hall and Opera House (Figure 30), now called the Calumet Village Hall and the Calumet Theater. The construction of both the fire station and the town hall and opera house was planned by the Common Council of the Village of Red Jacket under the leadership of John R. Ryan, the council president, and designed by Charles K. Shand. The Red Jacket Fire Station was the first and most flamboyant and vigorous of the two. The fire station was designed in a vernacular interpretation of the Richardsonian Romanesque style of architecture in the spring and summer of 1898, and completed in May 1899. The town hall and opera house was the second of two. Its addition, enlargement, and rehabilitation was designed in the winter and spring of 1899 in what the architect termed the Italian Renaissance style of architecture. The opera house portion of the edifice was dedicated in March 1900, and the town hall portion was completed in the summer of 1900. The fire station was constructed of Lake Superior red sandstone, quarried locally at Portage Entry; the town hall and opera house was erected of tan brick and Portage Entry sandstone. Both were built substantial during the years when the copper



Figure 29.--Charles K. Shand, Red Jacket Fire Station, Calumet, 1898-99.



Figure 30.--Charles K. Shand, Red Jacket Town Hall and Opera House, Calumet, 1899-1900.

production of the Calumet and Hecla Mining Company had reached maturity.

The Red Jacket Fire Station, now used for storage, stands on the west side of Sixth Street, just south of Elm Street. The two-story building has a bell tower at the southeast corner. The sandstone of the west (front) and south walls is evenly colored, top grade, rock-faced ashlar, laid in even courses on the lower story, and in random courses in the upper story. The sandstone of the east (rear) and north walls is variegated, lower grade rubble stone laid in random courses. A nearly flat, low-pitched gable roof covers the fire station.

An open bell tower with a pyramidal roof with flaring eaves extending up the southeast corner of the structure is balanced on the upper front facade by a small projecting gabled pavillion at the northeast corner and a larger projecting stepped gabled pavillion in the center. All three front the almost flat roof and are supported by corbelled brackets. A belt course encircles the structure between the two stories. A corbelled cornice of three string courses separated by two dentilled courses runs between the bell tower and pavillions and advances again on two sides of the bell tower forming bracketed balconettes. A stone in the central stepped gable reads, "1898 Fire Station."

Pedestrian entrances flank three large vehicular entrances on the front. The windows are symmetrically grouped above. All fenestration is round-arched on the east (front) and south facades. That of the rear is rectangular and segmentally arched.

The fire department and village offices formerly occupied a brick and brown Marquette sandstone structure on the southeast corner of Sixth and Elm streets, the site of the present town hall and opera house. It was two stories in height with a tower and copper roof and measured ninety-four feet by fifty-one feet in plan. The first floor contained the office of the village clerk, the council chambers, the fire hall, and the jail. The second floor held a public hall and opera house.¹⁰⁰ The Calumet and Hecla Mining Company leased to the village the lots on which it stood. The structure was designed by J. B. Sweatt in 1885, and built for \$14,272 by Jesse Butler in 1886 and 1887.¹⁰¹

Red Jacket continuously improved its fire protection system. In 1887, for example, it organized a company of paid rather than volunteer firemen. In 1897 it installed fire alarms in the homes of all members of the fire department.¹⁰²

On 6 April 1898, at the first meeting of the newly elected village council, presided over by John R. Ryan, the council discussed building a new fire engine house and enlarging the opera house so as to increase the seating capacity of the auditorium, improve the facility for theatrical purposes, and improve the town hall.

Alderman Knivel brought up the matter by stating that it was a necessity that could not be overlooked much longer that the fire department was laboring under great difficulty in their present quarters and he thought that a building should be looked into at once as the village was losing money right along under the present condition of things. He cited that it cost \$500 each year for new hose simply because there wasn't a proper place to dry the hose after a fire. Alderman Miller thought about the same on the question. He said that the council should take steps at once to get plans and specifications for the erection of a new fire

engine house on the vacant lot which the village had control of almost opposite the opera house on Sixth street. It was decided not to do anything until President Agassiz of the Calumet and Hecla had been seen in regard to the matter. A committee was appointed consisting of the president, Aldermen Knivel, Lisa, Gribble and Clerk Ellis to wait upon Mr. Agassiz on his next visit to the city and see whether he has any objection to the village erecting the engine house on the lot in question. They were also instructed to ascertain his views in regard to the building of an addition to the opera house or enlarging it.

In discussing the new opera house question the aldermen all agreed that it would be unwise of them to do anything in that regard until an expression of the opinion of the people had been obtained on it. Some thought if a mass meeting was called and the question presented and discussed it could be carried, but more were of the opinion that a special election should be held about the matter and then if it were approved they could go ahead knowing that they had the backing of most of the people or the matter would be dropped as the people thought best.¹⁰³

John R. Ryan served on the village council for several years. He owned a livery stable and undertaking business in Red Jacket. Born in 1855 in Wiota, Wisconsin, the son of Irish immigrants, he moved with his family to Ontonagon, and then to Hancock. After completing high school in Hancock, the young Ryan took a job at the Calumet stamp mill and worked in his uncle's general store in Hancock.¹⁰⁴

Thus, the councilmen decided to confer with Alexander Agassiz, manager of the Calumet and Hecla Mining Company, about building a more efficient fire station and to consider holding a special election to determine the will of the people concerning building a new opera house. Agassiz surely supported the program to improve fire protection for on 26 May 1898 the Copper Country

Evening News reported that the village council reviewed the plans prepared by four firms for the new engine house.

The following architects brought in their plans: Messrs. Charlton & Demar, Scott, Shand and Maass. After listening to the good points of each plan, Alderman Kemp made a motion that the council accept the plans prepared by Mr. Shand. The motion was supported and carried, and this adds another feather in Mr. Shand's cap, as it is a victory to be proud of and Mr. Shand is now receiving the congratulations of his friends.¹⁰⁵

Charles K. Shand, an itinerant architect who arrived in Calumet to participate in the building rush of the late 1890s, advertised his architectural services in the Calumet, Houghton, and Hancock City Directory from 1895 to 1904. First alone, and later in association with George D. Eastman, a draftsman who ran a branch office in Calumet for Saginaw architect Clarence L. Cowles, he worked in Calumet, Laurium, Lake Linden, and Houghton and designed several commercial blocks, banks, fraternal halls, and town halls.

As soon as Shand completed the plans and specifications for the fire station on 11 July 1898, the council advertised for bids. It opened them on 2 August 1898 and awarded contracts to Procissi and Company for stone mason work at \$6,927, and to Bajari and Ulseth for the carpentry work and materials at \$7,378.¹⁰⁶

Subsequently, the council awarded to Frank J. Zoberlin a contract in the amount of \$1,160 for the heating work and materials. It awarded to John F. D. Smith a contract in the amount of \$1,000 for the plumbing work.¹⁰⁷ Work on the structure began by mid-August under Shand's supervision. Then, the local newspaper described for the first time in detail the fire hall and predicted that

it "will without a doubt be the finest of its kind in the northwest."

The structure which will be 54 x 83.6 feet will be built entirely of clear brown Portage Entry building stone of the first quality. From the outside the appearance of the building will be simply beautiful and imposing with its high and substantial bell tower running up in the southeast corner of the building. The style of the structure is Romanesque architecture and is purely ornamental. Calumet without a question will have not only the most artistic fire hall, but the most convenient and complete in the state of Michigan and in fact in the northwest. Detroit cannot boast of such a hall,¹⁰⁸ neither can Duluth, of whose fire hall so much is said.

The interior would be arranged for the efficient operation of a modern fire fighting service. The apparatus and horses would be housed on the first floor and in the basement, each easily accessible to the street through large doors at the front and rear of the building respectively; the basement would be divided into a boiler and storage room for trucks and village-owned vehicles, and the first floor would contain the engine room, fifty feet by fifty-four feet in plan, with one box and eight single horse stalls and a harness room. Firemen would live on the second floor in comfortable quarters that included a large recreation room, a reading room, a sleeping apartment for twelve, a bathroom, and the marshal's office. From this floor, hay and feed would be dropped to the horse stalls below. The building would be steam-heated throughout, lighted by electricity, and supplied with plumbing.¹⁰⁹

The stone masons completed their work on the fire hall by mid-November and other contractors finished that winter and spring. Early in May the decorators and painters put on the finishing

touches, the electricians finished the wiring, and the council prepared to accept the fire station. It cost \$20,100. The local newspaper generously praised the new facility, stating that the visitors

are unanimous in stating that the Red Jacket fire engine house is the finest thing of its sort in the State. They did not expect to find anything like it in copper country and they pronounced it the equal of anything they had ever seen in the large cities. Not only is the building fitted up in elaborate style, but the idea of making it an ideal fire engine house with respect to the perfect working of the fire fighting apparatus has been uppermost in arranging the interior of the building. . . . All in all, the new fire hall is a model in every detail and one which the city may well feel a certain pride in.¹¹⁰

The new fire station stood in the midst of Red Jacket's Fifth and Sixth streets business district, adjacent to the Calumet and Hecla Mining Company. At the turn of the century, twenty-five years after it had organized, the village of Red Jacket, with a population of 3,078, served a larger mining community of 40,000. Built of the Portage Entry sandstone of the region, the Red Jacket Fire Station was thought to equal any fire station from Detroit to Duluth. The sandstone structure in the Richardsonian Romanesque mode proclaimed the importance and position of the town and the region.

On 26 November 1898 people in the village of Red Jacket elected to borrow \$25,000 to enlarge their town hall. Although the ostensible reason for the building program was to enlarge the hall, the real reason was to erect a new opera house. For more than a year the village council and taxpayers had debated the issue. At regular meetings of the common council on 2 November and 15 November

1898, the councilmen summarized their views. An addition to the building on the city lot adjoining the existing building would provide a large, comfortable auditorium and proper offices for village officials, Alderman Michael Kemp maintained. He urged the council to advertise for plans and initiate steps immediately. He argued that the village must assume the responsibility for the construction of the much needed opera house, since the Calumet and Hecla Mining Company would lease the lot to the village but require a private party or corporation to purchase a site. Kemp added that businessmen favored the project. Alderman E. R. Miller and several citizens thought the improvements were necessary if Red Jacket was to surpass Laurium. He said, "If Red Jacket didn't get a big hustle on in the matter Laurium would secure an inside track." Alderman Joseph Vertin suggested that the council proceed with plans to enlarge the village town hall, but let the voters decide on the opera house project. Mayor John R. Ryan concluded that, despite the council's authority to decide the issue itself, a vote was prudent when spending \$25,000 of the taxpayer's money. The council agreed.¹¹¹ The council passed a resolution to hold on the 26th day of November 1898 a special election "for the purpose of ascertaining by ballot the will of a majority of voters as to whether or not the village should borrow \$25,000 or thereabouts to be expended for the enlarging of the present town hall."¹¹²

People disagreed over the soundness of erecting a new opera house when the existing one had been refurbished recently. The

installation of new stage lights and opera chairs in the fall of 1896 and other improvements in the existing facility provoked one taxpayer to write a scathing letter to the editor of the Copper Country Evening News questioning whether the president and council had "any power to build an opera house or right to spend the taxpayer's money on such a purpose particularly after they have lately expended so much money in decorating and enlarging the present accommodation at the present opera house."¹¹³

However, the voters approved the proposal. The council prepared to give the city what the newspaper termed "a good building and an opera house that would be a credit to the town."¹¹⁴ In reporting the election results, the Copper Country Evening News discussed the primary objective of the building program.

Although on the ballot the vote was on the question of making improvements to the town hall it is generally understood that the principal part of the improvement will be in making a modern opera house out of the present building as well as building proper offices for the village officers and the common council. . . . The opera house will probably be in the second floor of the addition while the entire first floor will be for municipal offices. The new opera house will be a modern one in every particular and large enough to accommodate theater-going people of the community. One point in the building that will be particularly well taken care of will be the stage, which will be sufficiently large to allow any company to place the most elaborate scenery upon it.¹¹⁵

Five architectural firms, three with "well-known reputations outside this city," responded to the village's immediate call for plans for the enlargement of the present town hall and submitted plans to the council on 3 January 1899. After reducing the choice

to those drawn by Charles K. Shand and those drawn by Charlton, Gilbert and Demar of Marquette and Milwaukee, the council selected the former.¹¹⁶ It deliberated in two meetings and sought the advice of John D. Cuddihy, manager of the opera house, before making a decision.

The Copper Country Evening News announced that the plans furnished by Charles K. Shand had been selected, and described them in detail. Shand's plans proposed an addition, sixty-six feet in width by ninety-eight feet in depth. The existing hall was fifty-five feet in width by ninety-eight feet in depth. The plans called for remodeling the north and west facades of the existing structure so as to unify the sandstone composition featuring two towers.

Plans for the interior showed some changes to the existing structure. No changes were planned for the second floor; the space occupied by the opera house would be used as a hall for dances, public meetings, and small theatrical productions. They converted the fire department quarters into a kitchen and dining room. They enlarged the council room and jail, provided an ample office for the village clerk, and moved the vaults. The plans for the opera house, the principal part of the improvement, were "very elaborate and call for a house that will be a model in every particular."¹¹⁷ A large triple entrance on Sixth Street would lead through a vestibule to a loggia. The plan of the lower floor held the saucer-shaped auditorium with seats that slanted toward the stage. The main hall, four boxes, and balcony would seat 1,200. The stage, which the newspaper anticipated would be "the largest and best

appointed this side of Milwaukee," reached a height of sixty feet and could accommodate dropped scenery. Its proscenium extended thirty-five feet. Ample dressing rooms stood backstage. The newspaper felt that the addition to the building and the changes proposed for the old hall would give the community a model village hall and opera house:

It will come high but the council think [sic] that it is what the people want and now that they have the backing of the people as voiced at the recent election concerning the matter, they feel justified in going ahead and putting up an opera house and making a city building that Red Jacket will always be proud of.¹¹⁸

Shand revised these plans in June, because the council reacted to citizens who criticized that the extensive improvements gave little or no consideration to town offices. The council asked Shand to reduce the dining room and provide an office for the marshal, sleeping apartments for the janitor, and a committee room adjoining the council room, and to move the jail from the basement to the first floor.¹¹⁹ The Copper Country Evening News stated that Shand's changes in the remodeling plans of the town hall "gives the town building more the air of a city hall than of an Opera House. . . ."¹²⁰

When awarded the commission to plan the town hall and opera house, Shand persuaded Byron Pierce, a Hancock architect and builder, to assist him with the increasing number of jobs. Shand then traveled to Chicago, Detroit, and "other large cities" to study opera houses and stages.¹²¹ The designer of the fire station and the town hall and opera house soon advertised public works as his

specialty and illustrated the ad in the city directory with a sketch of the Red Jacket Town Hall and Opera House.

On 11 March 1899 the council appointed Shand to superintend the construction work. And it awarded the major contracts for constructing and finishing the town hall and opera house to the following firms: Paul P. Roehm, Calumet, stone and brick masonry and excavation, \$19,538; Bajari and Ulseth, Calumet, carpentry, lumber, millwork, \$17,987; Frank B. Lyon, plumbing and heating, \$3,123; Keelyn and Smith, Milwaukee, wiring and electrical fixtures, \$4,529; William Eckart and Company, Chicago, decorating, \$3,289; Heywood Brothers and Wakefield Company, opera house seating, \$3,913; and Associated Artists of Milwaukee, scenery, \$2,350; and John F. D. Smith, plumbing.¹²² Although the council, on reviewing Shand's proposal on 6 January 1899, initially had anticipated that the project, including "modern up to date" furnishings, would cost no more than \$30,000, it cost more than twice that amount.

When the building was completed and open for the first time to the inspection of the public, the local newspaper noted the credit those viewing the building gave the architect:

Charles K. Shand, who superintended the construction of the building and made the plans, was the recipient of a great deal of praise for the success he made of it, for much of the credit rightfully belongs to him.¹²³

As "the theater and city hall, the finest north of the Straits of Mackinac" neared completion, the Copper Country Evening News elaborated on the building.

The front is of finely cut Portage Entry sandstone for the most part. The style of architecture is the Italian renaissance. Cream-colored hydraulic-pressed brick from Illinois forms part of the front. The cornices will all be of copper and the top of the tower will also be of copper, so that in the copper and sandstone, copper country products form a conspicuous part of the building.¹²⁴

The theater opened on 21 March 1900 with a Broadway opera company performing The Highwayman to an audience of Copper Country society. The local newspaper recorded the event:

The only municipal theater in the United States of America was opened last evening in a blaze of glory when the new Calumet theater built and furnished by the village of Red Jacket was the scene of the first-night performance. . . . The opening was a big success. . . . The new theater in its complete entirety is something exceptionally elaborate for this section of the country.¹²⁵

Before the curtain went up John R. Ryan, president of the common council, under whose direction the new building was completed, called upon William R. Parnall, superintendent of the Bigelow mines. Parnall spoke of the lasting benefit of the theater to the city and expressed his disbelief that the theater in its appointments could have been built for the price.¹²⁶

The town hall was completed by the end of the year. The council awarded a contract to Paul Roehm in May and authorized Shand to instruct Eckart to begin decorating the building in July.¹²⁷

Red Jacket now had its showpiece, the town hall and opera house. Made of local sandstone and other Copper Country products, it expressed through its materials Red Jacket's commitment to civic and cultural pride. The appeal of Charles K. Shand, prolific and essentially self-taught, lay in the unassuming character of his

designs using sandstone in a frank manner. Never spectacular, Shand was selected for various commissions because he understood the needs of the community and designed in a material familiar to its inhabitants. The town hall and opera house, not of the prevailing European architectural mode, symbolized to a multi-ethnic population of miners, managers, and businessmen, the importance of culture in an industrial community on the edge of the wilderness. Solidity, stability, and permanence are expressed in both municipal buildings, but best in the all sandstone, Richardsonian Romanesque fire station.

Standing on a prominent site at the southwest corner of Scott and Fifth streets at the entry to the business district of Calumet is a large church that was erected at the end of the nineteenth century. Ste. Anne's Church (Figure 31), one of the many ethnic churches in Calumet, was built by a French-Canadian parish that had separated from other Catholics as their numbers increased. The French-Canadians were in great demand by the mining companies for their skill as woodsmen. The church was designed by the Marquette and Milwaukee architectural firm of Charlton, Gilbert and Demar in the winter of 1899, constructed by the Chicago contractor Prendergast and Clarkson in 1900, and dedicated in June 1901. Built of red Portage Entry sandstone in a twentieth century version of the Gothic style of architecture, Ste. Anne's was built solid and substantial during the years the workers felt growing antagonism toward the companies.

When the contract was let for the construction, the local newspaper reported that "a brownstone church on the corner of Scott



Figure 31.--Demetrius Frederick Charlton,
Ste. Anne's Church, Calumet,
1899-1901.

and Fifth streets will be an ornament to that end of the street and will greatly improve its appearance."¹²⁸ Once construction began, the newspaper took the occasion to comment further on its expectations:

The site of the new church is one of the best in the village of Red Jacket or in all of Calumet, and when it is completed and dedicated next May, not only the French residents but every citizen in the town will feel a just pride in this beautiful edifice, for architecturally it will be one of the handsomest buildings in the copper country.¹²⁹

One of the largest projects of the building season, Ste. Anne's was constructed quickly and efficiently, and nearly paid for upon completion. The church became a source of pride for the French-speaking people and the community at large. This new structure replaced a hall converted into a church that had been founded by the French-Canadian Catholics in 1884 and named St. Louis.

Ste. Anne's Church is one of four extant red sandstone churches in Calumet and one of many built for immigrant groups. Its prominent tower and the double spires of St. Joseph's Austrian Church, a large, Richardsonian Romanesque, red sandstone edifice (Erhard Brielmaier, 1902-1908) on Eighth Street rise over the village in a manner reminiscent of the cathedrals of medieval Europe. Ste. Anne's Church, additionally, separates the residential and commercial from the industrial areas of the community.

The church is a rectangular-shaped structure with a north front facade. Fifty feet in width by 150 feet in length, it has a tower that rises 130 feet at the northeast corner. It is constructed

of top grade red sandstone quarried at Portage Entry. The randomly coursed, rock-faced, square-and-rectangular-shaped blocks diminish in size towards the upper portion. Smooth-cut stone is employed in the trim. Wall buttresses are used between the windows of the long walls of the nave, between the triple doorways of the front facade, and at the corners of the lower two-thirds of the bell tower. A water table encircles the building five feet above the ground. A gable roof, supported by steel trusses, covers the church.

The entry porch on the main facade extends the full width of the building (Figure 32). An open railing of two sections, on either side of the short flight of stairs leading to the central double doors, is at the front of the porch. A triple entrance, the largest in the center, provides access to the church as did the triple portals of Romanesque and Gothic churches of medieval times. The recessed, pointed-arch portals are topped by small bell-cast roofs. Lancet, stained glass windows pierce all walls of the church. There are seven large windows evenly spaced between the buttresses of the nave, ten small windows in the apse, and paired lancet windows in the gable of the north front. The attached campanile rises in three stages to an open belfry surmounted by an octagonal spire. Pier buttresses are on the corners of the first two stages of the tower, and conical-capped turrets ornament the four corners of the octagonal-shaped third stage. Belt courses encircle the bell tower, its piers, and its turrets.

Three small vestibules on the main floor lead directly from the triple doorway into the nave proper. A choir loft approached

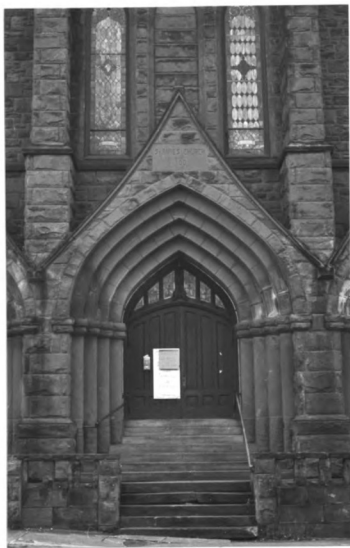


Figure 32.--Ste. Anne's Church. Detail of entry.

by a stair at the northeast corner of the church is above the vestibule and extends twenty feet into the nave. At the south end of the nave, which seats 400, is an octagonal apse flanked by two side altars. A circular baptistry is at the northwest corner. The fourteen large windows are predominately dark, purplish blue, russet golden brown, and green.¹³⁰

In the 1880s French-Canadian Catholics who worked principally at supplying timber to the copper mines for shaft supports, construction, and fuel, seceded from the Sacred Heart Church. In 1885 they secured Alexander Agassiz's permission to use for religious purposes the site at the corner of Fifth and Scott streets on which St. Patrick's Hall (1874) stood. The hall was purchased for \$3,500 and converted into a church.

In the fall of 1883 the diocese sent a priest, the Reverend Vermar, to oversee the parish and on 1 August 1886, Bishop Vertin of the Marquette Diocese consecrated the converted hall St. Louis. The parish used this for its religious services, then moved it to a vacant lot when construction on the new church began.¹³¹

The members of the St. Louis Roman Catholic French-Canadian congregation long had wanted and needed a new church. Early in 1899, when the parish had grown from 104 to 375 families, and when it had raised funds sufficient "to build one [church] that would be all that could be desired in every particular," the building committee selected an architect and announced its intent to build a new church. The Copper Country Evening News for 7 March 1899 discussed the

improvement the proposed structure would represent to the congregation and the community. It described the church this way:

The location on the corner of Scott and Fifth streets opposite the Union Building, is a fine location and the new church . . . will be an ornament to the locality. The plans call for a building of solid sandstone and the style of the architecture will be Gothic. . . .

The building will be 47 by 130 feet in extreme ground dimensions and a large tower, calculated to hold a chime of bells, will rise from its southwest corner to a height of 130 feet while the rear or north corner of the building will be marked by small ornamental turrets.

The basement will contain a chapel and three large class rooms, besides the heating plant, while the main floor of the church will seat 400 people, the octagonal sanctuary, flanked by two side altars, being lighted by windows above similar to those in the sanctuary of the cathedral at Marquette. Three large entrances will give admission to the church, which will adjoin the present priest's residence, the lot being 100 by 150 feet in size.¹³²

Charlton, Gilbert and Demar were the architects. By this time, this firm had offices in Hancock, Sault Ste. Marie, and Marquette, Michigan, as well as in Milwaukee, Wisconsin. The building committee selected them because, as the local newspaper explained, these plans "exactly suited their ideas."¹³³

A building committee composed of Joseph Desjardins, Alex Ethier, Joseph Chatet, and Joseph Ouelette had been formed shortly after a new priest, J. R. Boissonault was assigned to the parish in 1898. On 3 March 1900, after a substantial portion of the necessary funds had been raised, the bishop granted to the parish permission to build. He forbade them to incur a debt greater than \$10,000. The debt was retired within three years after the church was completed.¹³⁴

In March 1900, Prendergast and Clarkson of Chicago received a contract for \$28,000 for the construction of Ste. Anne's. Paul F. P. Mueller of Chicago and a Milwaukee firm each submitted a bid for \$30,000, while the bids of two local firms greatly exceeded the low bid.¹³⁵ Prendergast and Clarkson were not unknown in the area for the firm had built "several of the largest buildings in the copper country, including the new Copper Range passenger station and general offices in Houghton, and some of the new and more pretentious blocks in Hancock."¹³⁶ W. T. Graham managed the firm locally.

The Copper Country Evening News reported regularly on the progress of the building, after work began on 3 May 1900. On 12 June 1900, it noted that "the walls of red Portage Entry sandstone are arising as by magic." Prendergast and Clarkson used a labor-saving device for hoisting building materials never before seen in the Copper Country. It attracted the attention of the community and local builders who carefully observed the laying of the masonry. The device consisted of a steam hoisting derrick which enabled a large force of stone masons quickly to put up the walls. It elevated the huge stone blocks, three and four at a time, as well as boxes of mortar, from the ground and swung them to any position on the wall. The newspaper stated that the device

consisted of a 20 horse power upright boiler and two drums. The action of these drums controls a mast and beam. At the base of the mast is a wheel placed horizontally with a cable in a groove on the rim, so arranged that by winding from either side the mast will partially revolve, carrying with it the beam. . . . The engine and derrick is placed in the center of the floor of the building.¹³⁷

Ste. Anne's Church was dedicated on Sunday, 16 June 1901.

Throughout the week before this event, the Copper Country Evening News carried articles outlining the preparations for the consecration of the "magnificent church edifice."

The hearts of the people of St. Anne's Roman Catholic congregation are glad with the pleasing anticipation that tomorrow their beautiful church home will be dedicated in the presence of a stupendous throng of devout worshippers and many of the divines high in authority. . . . The beauty of the new edifice together with the magnificence of the dedicatory ceremony will no doubt draw thousands of visitors from all parts of Houghton and Keweenaw counties. . . . The church building is now complete, the last final touches having been done and as it stands it is unquestionably one of the handsomest religious structures in the State and is certain to be liberally inspected by all classes of our citizens.¹³⁸

This newspaper noted the importance of the dedicatory services in Catholic church circles. It said that "hundreds of people could be seen entering the village from all directions. . . . The dedication of the substantial and handsome new St. Anne's French Catholic church was a great and important event in the history of the copper country churches."¹³⁹ Over 500 persons attended the ceremony. Clergy from as far away as Montreal and Iowa officiated in the over three-hour-long ceremony. Some 800 members of Catholic societies--Croatians, Polish, Italian, French St. Jean Baptiste societies, and St. Anthony Court of Catholic Foresters, and the Ancient Order of Foresters of America participated in the services. Filling Fifth Street as far back as Elm Street in the largest parade ever seen in Calumet, the members of the societies marched in full regalia into the church by the main entrance and out

by the side entrance, each contributing money as he passed through. Invited guests and the public were admitted until the nave, gallery, and standing room were filled with more than 1,100 people. Following the dedication, the Ladies of Ste. Anne's Church served dinner, also an occasion to raise funds.¹⁴⁰

This beautiful and magnificent sandstone church proclaimed the importance of religion and the importance of ethnic origins to the French-Canadian Catholics of Calumet. Although the Gothic style is evident in the structure's pointed arches, the overall heaviness and simplicity attest to the continuing presence of a strong vernacular tradition. Today, just as it did at the turn of the century, the church, one of the last solid sandstone edifices ever built in Calumet, stands like a sentinel marking the entrance to the Calumet business district.

By the close of the century many builders in Calumet and other cities and towns of the Copper Country built with brick rather than sandstone. A "well-known local builder and contractor" explained the switch to brick in the Copper Country Evening News for 16 February 1899.

A large number of those who are planning on putting up stone buildings this summer have decided to build of brick instead. This is because of the sharp advance in the price of sandstone which was recently made. Nearly all those who figured on erecting new business blocks had contemplated building them with stone, but have changed their mind and now find that it would be just as advantageous to them to have brick buildings unless the price of stone comes down. This seems all the stranger on account of the fact that we are situated in such close proximity to the quarries where the very best sandstone in the country is taken out.

In 1902 Painesdale, the location of the Champion Mine, had 4 mine shafts, 100 company houses, and a school, and had attained a population of 3,253. Painesdale, destined to be the largest town on the South Range, grew rapidly. This mining community developed after Lucius L. Hubbard, former state geologist, explored the region and discovered copper here. Painesdale was named for William A. Paine, a Boston stockbroker who had established Paine, Webber and Company, and who founded the Copper Range Company in 1899. This company promoted and developed a section of the mineral range southwest of Portage Lake which included the Atlantic, Baltic, and Isle Royale lodes and which had received little attention up to that time. The company acquired mineral land, built a railroad through the South Range, cleared the area of hardwood forests, erected two mine shafts, and constructed roads and houses.

William A. Paine built a library at Painesdale. The library was designed by Alexander C. Eschweiler of Milwaukee in 1902, constructed by Prendergast and Clarkson of Chicago between 1902 and 1903, and dedicated to the memory of his mother, Sarah Sargent Paine, in November 1903. It was constructed of fine-quality red sandstone in a Tudor Revival-inspired style of architecture to serve as an educational and social center for the workers of the Champion, Trimountain, and Baltic mining companies. The Copper Range Consolidated Mining Company, owner of the three mining companies, wanted to maintain a contented work force.

The Sarah Sargent Paine Memorial Library (Figure 33) was built not only for the benefit of the employees, but also as a memorial to William A. Paine's mother. In his deed to the trustees of the library, Paine set forth these two purposes:

In memory of my mother, Sarah Sargent Paine, I have caused to be erected at Painesdale, in the Township of Adams, County of Houghton, and State of Michigan on land belonging to the Champion Copper Company, a stone building, primarily intended for use as a library building.¹⁴¹

With a stone building Paine executed these noble purposes.

Boston capital was employed to develop this copper mining venture and to turn it into profit for New Englanders. F. L. Collins, writing for the American Magazine of June 1928, summarized this New England connection with the mines of the Copper Country in stating that "the four greatest words in the annals of New England are: Concord and Lexington and Calumet and Hecla. The first two made New England history and the last two made New England fortunes."¹⁴² Boston capital invested in the development of the Copper Range Company yielded profits for Boston people. But not without some guilt.

Paine selected Alexander C. Eschweiler (1865-1940), an architect thoroughly familiar with the Copper Country, to draft plans for the library. Born in Boston, the son of a mining engineer, Eschweiler had spent his early childhood and youth in this area. In 1882 he moved with his family to Milwaukee where he attended Marquette College. Eschweiler studied architecture at Cornell University and worked as a draftsman in several offices in Milwaukee. In 1892 he established the firm of Eschweiler and



Figure 33.--Alexander C. Eschweiler, Sarah Sargent
Paine Memorial Library, 1902-1903,
destroyed 1964.

Eschweiler in association with his three sons. During his career Eschweiler designed numerous churches, schools, offices, industrial buildings, hospitals and houses.¹⁴³

When the contract for construction of the Sarah Sargent Paine Memorial Library was awarded, the Marquette Mining Journal described the building as follows:

It is to be a two and a half story structure, with basement. The length will be 86 feet and the width 37 feet. The library will be built of Portage Entry sandstone. The interior finish will be of polished oak. A. C. Eschweiler, a Milwaukee architect, made the plans.

Work on the construction of the library will commence at once. The site selected is opposite the new school house. The building will serve not only as a library, but for amusement purposes also, as a large auditorium will be included in the interior arrangement.

The library proper will take up the main floor of the building. It will have a general reading room, a stack room for the books, a smoking room and a reading room for children. The rooms will be provided with chess and checker tables and with outfits for other games. On the second floor will be the auditorium, which will be equipped with a stage. It is the intention to install a full equipment of stage settings later on and the stage has been planned to provide for it. The auditorium will be a story and a half in height. In the basement, public baths will be installed. Two other rooms may be used for gymnasium purposes although that has not yet been decided upon.¹⁴⁴

The Marquette Mining Journal, sensitive to the needs of Painesdale, added that "it is needless to say that it will be well appreciated."¹⁴⁵

The dedication ceremonies for the library at Painesdale took place in the auditorium on the second floor on 14 November 1903.

F. A. Jeffers, superintendent of the Adams Township schools, addressed the audience that included friends and members of the Paine family, and members of the community. Jeffers lavished praise on both the library and William A. Paine.

On this spot, through the months that are past, there has been slowly rising, not a useless granite shaft or marble column, but an attractive and useful building that will stand amid the homes of people who do not need to wait till their benefactors pass from their midst to manifest their gratitude and appreciation. May they ever honor with the same enthusiasm shown today this architectural evidence of the affection of a faithful son and the philanthropy of a generous citizen. May they share with that son the pride he justly feels for the worth of a noble parent, and support that citizen in his every undertaking.

Block upon block, and beam alongside beam, this Sarah Sargent Paine Memorial Library building has arisen from the foundations till its walls in their finished symmetry and beauty now enclose the completed structure. Fitting emblem of a mother's helpful life, a type of her sacrifices and services. As around that monument of old there entwined the honor of Cornelia of the Gracchi and of the Roman populace, so may there encircle this building today the respect and honor and love of community, mother and son.¹⁴⁶

The responsibility to hold, control, and manage the library was vested jointly among Paine; Lucius L. Hubbard, general manager of the Champion Copper Company of Houghton County; and Frederick W. Denton, general manager of the Trimountain Mining Company, also of Houghton County. The three mines in the area--the Atlantic, the Baltic and the Trimountain--were obligated to contribute financial support to the library. At regular intervals, cash donations would be received and, in turn, books in large wooden trunks would be carried from mine offices to mine offices for the workers.

The labor unrest in the Copper Country in the 1890s and early 1900s culminated in a general strike called by the Western Federation of Mines on 23 July 1913 of all the members employed in the Copper Country and resulted in massive unemployment for some 14,300 men, including over 2,700 at Painesdale. Among its

grievances were the poor living conditions. Through the erection of a substantial stone library for the miners of this region William A. Paine and the Copper Range Company intended to alleviate and avoid dissatisfaction among workers, and to state symbolically the benevolent and paternalistic attitude of the mining companies. Through the use of a design derived of cultivated, high style, and through the use of the native sandstone quarried at Portage Entry, the management tried to convey the worthiness of the community for such an investment, and the capability of the company in looking after its welfare.

Michigan's Copper Country, more rugged in appearance and more severe in climate than Marquette, was settled and developed when eastern and urban investors from Boston, New York, Chicago, Marquette, and Lower Michigan speculated in the region's mineral resources and its land. After prospectors and geologists had identified the location and extent of the mineral resources, men such as Alexander Agassiz, Quincy Adams Shaw, William A. Paine, and W. H. Mason established, developed, and finally consolidated companies, such as the Copper Range, Quincy, and Calumet and Hecla, into giant mining operations. Towns grew up around the mines and mills and at transportation centers like Houghton and Hancock. Hordes of Cornish, Irish, German, French-Canadian, and Scandinavian immigrants, followed by waves of Finnish, Austrian, Hungarian, and Italian immigrants, flocked to the region to work as miners, trammers, and laborers. Trained mining engineers and technicians arrived from the east to supervise and manage them. The rush of

of industrial, social, commercial, and educational activity created a demand for buildings. Copper Country architecture achieved a harmony and sympathy with its environment because its architects and builders used the materials of the area--native Jacobsville sandstone taken from the site or quarried locally at Portage Entry, and poor mine rock discarded from the mines.

Like Marquette, no professionally trained architect arrived in the Copper Country until the 1890s. Clients called upon architects from Chicago, Milwaukee, and Detroit to design the region's major public buildings. In 1889 John Scott of Detroit designed the Michigan Mining School and the First National Bank of Houghton. In 1899 Henry L. Ottenheimer of Chicago designed the Sheldon-Dee Block and a group of commercial buildings in Houghton. In 1902 Arthur C. Eschweiler did the Sarah Sargent Paine Memorial Library at Painesdale. These men were well-trained professionals, some with European travel experience, who had developed reputations as first-rate architects. They were selected by sophisticated easterners--men with taste, vision, money, and power, who were land speculators, stockbrokers, mining company engineers and managers, scientists, investors, and lawyers. Although the architects had offices in eastern and midwestern cities, they developed ties with the Upper Peninsula. Scott and Ottenheimer did a number of public buildings here and opened offices here, the one in Marquette, the other in Houghton. Eschweiler, who had grown up in the Copper Country, later did the old Painesdale High School. They and their clients, people who had profited from the geological resources of

the area, realized the appropriateness of the native sandstone building material and used it in their cultivated designs. These men and their works guided and influenced the taste of the others who had little formal training.

Local governments, businessmen, and religious groups called on Demetrius Frederick Charlton, the first trained architect in the Upper Peninsula, to design their city halls, court houses, churches, banks, and commercial blocks. In 1898 Edward Demar of Charlton, Gilbert and Demar designed the Hancock City Hall. One year later Charlton designed St. Anne's Church for a French-Canadian parish at Red Jacket. For a client seeking the services of a well-trained architect, Charlton was the man to turn to. The trip from Marquette to Hancock, Calumet, Lake Linden, and Laurium was an easy one by train, and he could visit the building site. Moreover, Charlton actively and successfully competed for the important commissions in the region.

Men with little professional training but experienced as builders built most of the Copper Country's architecture. In the 1890s C. Archibald Pearce designed Suomi College, modeled to some extent after the Michigan Mining School, by then standing in Houghton, but treated it more directly in an unaffected way. Between 1898 and 1899 Charles K. Shand designed the Red Jacket Fire Station and an addition and alterations to the Red Jacket Town Hall and Opera House. In 1897 Paul Roehm, a skilled stone mason, designed and built his own house in Laurium.

Everywhere in the region the industrial structures are of Jacobsville sandstone, some carefully squared blocks of stone, but

most rubble stone and mine rock. Mining buildings of all kinds-- rock houses, machine shops, power houses, stamping mills, foundries-- stand vacant today, a cluster of red and black rock. They were constructed by the engineers and workmen of the mining companies themselves. The company office buildings, libraries, bathhouses, and schools are often of carefully squared and finished blocks of stone after the designs of trained architects. Quincy Mining Company Office (Robert C. Walsh, 1895-97), for example, matches in skill the designs of the region's churches, banks, and commercial blocks, but lacks in feeling their vigor and vitality. This is because, in part, its designer in Morristown, New Jersey, never had experienced the ruggedness of the place.

The architecture of the Copper Country region, to an even greater extent than that of Marquette, is persistently of the vernacular tradition. These stone buildings in their rocky environment equal the eternal solidity and vitality of the place from which they seem to spring. They belong in their harsh and rugged setting.

FOOTNOTES--CHAPTER IV

¹The mineral land policy of the federal government, a leasing policy set forth in an 1807 law, determined the pattern of land exploration and development of the copper lands in the 1840s. In 1843 the Secretary of War dispatched an agent to Copper Harbor to issue permits to prospectors. This enabled the holder to explore a nine-square-mile area for a period of one year and to mine it for nine years. In return, the lessee agreed to pay the federal government six percent of the value of copper taken in the first three years and ten percent thereafter.

²Columbus Christopher Douglass was a geologist and engineer with considerable experience in the Copper Country. After serving as an assistant to his cousin, Douglass Houghton, on a geological expedition in Michigan's Saginaw Valley in 1837, he had worked with Houghton on a land survey of the Keweenaw Peninsula in 1844. In 1847 the Quincy Mining Company hired Douglass to visit the mines and to report on their condition. He served as an explorer and agent for several mining companies.

³The school was named Michigan Mining School in 1885, Michigan College of Mines in 1897, Michigan College of Mining Technology in 1927, and Michigan Technological University in 1964.

⁴The Act charged the board with the duty of obtaining a suitable location for the school; leasing or erecting buildings; procuring books, furniture, apparatus, and implements; appointing a principal and teachers--all without incurring indebtedness. It instructed the board to obtain, establish, and classify a complete collection of the minerals of the Upper Peninsula and to obtain statistical and scientific information on them and all important discoveries and improvements in developing them. To carry out the act, the legislature appropriated \$25,000 from the general fund.

⁵James Wright was general superintendent of the Calumet and Hecla Mining Company; Chadbourne had studied and practiced law with Hubbell; Charles Wright was state geologist; Pope served as agent for the Franklin Mining Company; Senter worked for the Lake Superior Mining Company, acted as a blasting powder agent for E. I. DuPont and Company and speculated in mine stock; Forster served as superintendent of several copper mines and as construction engineer on the Portage and Lake Superior Ship Canal.

⁶Jay Abel Hubbell (1829-1890) was born in Avon, Oakland County, Michigan. Educated at the University of Michigan, Hubbell practiced law in Ontonagon before opening an office in Houghton in 1873. He served as district attorney for the Upper Peninsula, prosecuting attorney of Houghton and Ontonagon counties, member of the United States House of Representatives, state senator, and circuit court judge for Baraga, Keweenaw, and Houghton counties (Copper Country Evening News, 15 October 1900; Memorial Record of the Northern Peninsula of Michigan [Chicago: Lewis Publishing Co., 1895], pp. 381-83).

⁷Minutes of the Board of Control of the Michigan Mining School, 15 July 1885, Michigan Technological University, Houghton, Mich.; Michigan Superintendent of Public Instruction, Fifty-Fourth Annual Report of the Superintendent of Public Instruction of the State of Michigan, with Accompanying Documents for the year 1890, "Report of the Director and Treasurer, Michigan Mining School," pp. 266-96.

⁸Minutes, Board of Control, Michigan Mining School, 17 August 1887. Born in East Livermore, Maine, in 1847, Wadsworth had taught at Boston Dental College, Harvard, and Colby, and had conducted geographical and geological surveys of New Hampshire and Minnesota. He served as state geologist of Michigan from 1888 to 1893, in addition to directing the Michigan Mining School. (National Cyclopaedia of American Biography, vol. XIII [New York: James T. White and Company, 1906], s.v. "Wadsworth, Marshman."

⁹Sweatt designed and built the Houghton County Court House in Houghton of Upper Peninsula materials in 1886-87. As the structure was going up, the Houghton Daily Mining Gazette for 22 July 1886 thought it would be "one of the handsomest and most convenient of any similar institution in the Upper Peninsula." The newspaper described the materials as follows: "The external part of the walls will be of the celebrated Milwaukee cream brick, the trimmings of sandstone from the quarries of Marquette and Portage Entry. In the erection of this building the materials used with the exception of the facing brick, are the product of the Upper Peninsula, the brick used on all inside work being from the yard of Mr. W. P. Seager, Ripley; iron and wood work from Marquette, stone from Marquette, L'Anse and Portage Entry, and last, though not least, the entire building would be covered with Lake Superior copper." Sweatt also designed the Baraga and Delta county court houses and the Red Jacket Town Hall in 1885-87.

¹⁰22 January 1887. The board paid Sweatt \$100 for the preliminary plans for the building (Minutes, Board of Control, Michigan Mining School, 9 February 1887).

¹¹Act 239 of the (Michigan) Public Laws of 1887; Minutes, Board of Control, Michigan Mining School, 7 July 1887.

¹²The site, described as "lots one (1) two (2) three (3) five (5) and six (6) [of] William Condon's addition and . . . Lot six (6) of Section thirty-one (31) of Township Fifty-five (55) north of Range Thirty-three West," came with the right to make a reservoir on Hubbell's property on the south side of the road near the dam. (Minutes, Board of Control, Michigan Mining School, 7 July, 26 August 1887).

¹³Ibid., 7 July 1887.

¹⁴Ibid., 26 August 1887.

¹⁵Ibid., 23 September 1887. J. B. Sweatt was not selected even though his preliminary drawings were responsible for the legislature's initial favorable action. Sweatt was an unsuccessful bidder for the construction contract.

¹⁶Fifty-Fourth Annual Report of the Superintendent of Public Instruction of the State of Michigan with Accompanying Documents for the Year 1890, "Report of the Director and Treasurer," pp. 287-88.

¹⁷4 February 1888. Other reasons cited were its location in a mining locale, the credentials of the director and faculty, the favorable attitude of the community, and the resources of the mining industry.

¹⁸Minutes, Board of Control, Michigan Mining School, 7 October 1887.

¹⁹Marquette Mining Journal, 22 November 1887.

²⁰Minutes, Board of Control, Michigan Mining School, 9 and 10 November 1887.

²¹Marquette Mining Journal, 11 January 1890.

²²Act 136 of the (Michigan) Public Acts of 1889. In the fall of 1889 the board awarded a contract in the amount of \$2,642.05 to the Detroit Heating and Lighting Company to wire the mining school building for electrical lights and furnish all necessary fixtures (Minutes, Board of Control, Michigan Mining School, 20 September 1889).

²³Michigan Mining School advertised its program in the Michigan State Gazeteer and Business Directory for 1895/1896 with an engraving of Hubbell Hall (p. 969).

²⁴Houghton Daily Mining Gazette, 12 December 1889.

²⁵Fifty-Fourth Annual Report of the Superintendent of Public Instruction of the State of Michigan, with Accompanying Documents for the year 1890, "Report of the Board of Visitors to the Hon. Joseph Estabrook, Superintendent," p. 296.

²⁶Nikander to Mackenzie, 29 April 1897, Suomi College Papers, Finnish-American Historical Library, Suomi College, Hancock, Mich.

²⁷The membership of the committee changed annually from 1890 to 1896 when the first board of directors was appointed. The board consisted of members of the consistory who served ex-officio and included the Reverends J. K. Nikander, K. L. Tolonen, Johan Bäck and Kaarlo Huotari. In addition, this board included seven laymen, all business leaders in the Hancock and Calumet area: O. J. Larson, Victor Burman, Alex Leinonen, Jooseppe Riipa, J. H. Jasberg, August Pelto, and Andrew Johnson. In 1898 it appointed Carl Hensa (Minutes of the Suomi College Board of Directors, Suomi College Papers).

²⁸Jasberg to Sunderland, 25 October 1895, Suomi College Papers.

²⁹Burt to Nikander, 1 June 1897, Suomi College Papers.

³⁰Marquette Mining Journal, 9 October 1897.

³¹Minutes, Board of Directors, Suomi College, 7 September 1897, Suomi College Papers.

³²Finns supplied the work force at the Portage Entry quarries. They had come from Kemi and Oulu to the mining towns of the Copper Country, but moved to Jacobsville near the invigorating air of Lake Superior. After the quarry industry ceased, many Finns remained to raise cattle and strawberries.

³³Marquette Mining Journal, 9 October 1897.

³⁴The Marquette Mining Journal reported that "those interested in promoting the affair believed that to buy the adjoining property was asking too much and though they were desirous of locating the college in Houghton, they felt they had been most liberal in presenting a site valued at, say, \$7,000, and this was all that could be expected" (13 November 1897). Pryor was not asked to finalize the drawings. (Minutes, Board of Directors, Suomi College, 7 December 1897, Suomi College Papers.)

³⁵Minutes, Board of Directors, Suomi College, 7 December 1897, Suomi College Papers.

³⁶Ibid., 3-4 February, 12 April, 8 June 1898.

³⁷18 June 1898.

³⁸Demar to Jasberg, 29 March 1897, Suomi College Papers.

³⁹Minutes, Board of Directors, Suomi College, 6 July 1898, Suomi College Papers; C. A. Pearce to Alex Leionen, 15 March 1899, Suomi College Papers.

⁴⁰Copper Country Evening News, 29 August, 12 October 1898.

⁴¹J. K. Nikander, "Suomi-Opiston Johtajan Kertomus Suomi-Synoodin firfollisfo foufjelle vuonna 1899." (In Suomi-Opiston Luetto Lukuvuonna 1898-99. Hancock, Mich.: Baimen-Sanomain firjapainosja, 1900).

⁴²Marquette Mining Journal, 10 March 1899.

⁴³Ibid.

⁴⁴Competing bids were as follows: Procissi & Martini, Calumet, masonry, \$9,632.65; L. E. Chaussee, Negaunee, carpentry, \$10,723; Henry Ferge, Milwaukee, carpentry, \$10,900 and complete building, \$19,750; A. E. Dowswell, Hancock, masonry, \$6,821, carpentry, \$13,000; E. E. Grip, Ishpeming, complete building, \$14,775; McCurdy Bros., Houghton, complete building, \$16,195; Wilson & Sampson, Duluth, complete building, \$21,713; Albert Hall, Hancock, masonry, \$6,321; Gauthier Bros., Hancock, masonry, \$6,321 (Copper Country Evening News, 31 March 1899).

⁴⁵Ibid., 31 May 1899.

⁴⁶Houghton Daily Mining Gazette, 18 December 1899.

⁴⁷21 January 1900.

⁴⁸20 January 1900.

⁴⁹13 January 1900.

⁵⁰Minutes, Board of Directors, Suomi College, 6 and 8 July 1898, Suomi College Papers.

⁵¹Houghton Daily Mining Gazette, 21 February 1900.

⁵²Jasberg to Rockefeller, 20 March 1900, Suomi College Papers.

⁵³Ibid.

⁵⁴Marquette Mining Journal, 17 June 1899.

⁵⁵Copper Country Evening News, 23 September 1897.

⁵⁶Ibid.

⁵⁷Minutes of the Common Council of the Village of Hancock, 2 February 1898, City Hall, Hancock, Mich.

⁵⁸Copper Country Evening News, 26 January 1898.

⁵⁹Minutes, Common Council, Hancock, 2 February 1898.

⁶⁰The Copper Country Evening News for 4 February 1898 reported that "Architect Byron Pearce is busy drawing up plans and specifications for the new city hall building which will be submitted to the council at their next meeting next Wednesday." He may have drawn them for C. A. Pearce or for himself. Byron H. Pierce (also spelled Pearce) worked in Hancock as a contractor, builder, and supplier of millwork, first in association with Lewis F. Pearce, later with L. H. Ruggles. From 1887 to 1890 Pierce advertised "large public and private buildings a specialty." In 1891 he listed himself as an architect and superintendent rather than architect, contractor, and builder, and from 1893 to 1896, when associated with Ruggles, he listed the firm as an architectural one (Michigan State Gazetteer and Business Directory (Detroit: R. L. Polk and Company, [1887-1888], p. 945, [1889-1890], p. 1051, [1891-1892], p. 857, [1893-1894], p. 865, [1895-1896], p. 927).

⁶¹Copper Country Evening News, 11 February 1898.

⁶²25 January 1898.

⁶³Copper Country Evening News, 11 February 1898.

⁶⁴25 February 1898; Minutes, Common Council, Hancock, 23 February 1898.

⁶⁵Alvah H. Sawyer, A History of the Northern Peninsula of Michigan and Its People (Chicago: Lewis Publishing Co., 1911), p. 1267-68.

⁶⁶Ibid., pp. 1012-14; Men of Progress (Detroit: The Evening News Association, 1900), p. 392.

⁶⁷11 February 1898.

⁶⁸Copper Country Evening News, 4 May 1899.

⁶⁹Minutes, Common Council, Hancock, 11 April, 15 October 1898.

⁷⁰Copper Country Evening News, 20 April 1898.

⁷¹Ibid., 4 May 1898.

⁷²Ibid., 20 April 1898.

⁷³The council paid Charlton, Gilbert and Demar \$385 (Minutes, Common Council, Hancock, 1 June 1898).

⁷⁴Minutes, Common Council, Hancock, 1 June 1898.

⁷⁵Copper Country Evening News, 23 August 1898.

⁷⁶Ibid., 26 September 1898.

⁷⁷Marquette Mining Journal, 30 January 1899.

⁷⁸Copper Country Evening News, 4 November 1898, 5 January 1899.

⁷⁹Marquette Mining Journal, 30 January 1899.

⁸⁰For Ordinance No. 37, see Minutes, Common Council, Hancock, 4 October 1899.

⁸¹17 February 1899. The people of nearby Calumet, struggling to convince their council that a town hall should be devoted to governmental rather than social activities, pointed to the Hancock Town Hall and Fire Hall as a model of a sensible public building. The Copper Country Evening News wrote, "It would look as if the town council of Red Jacket [Calumet] need have gone no further than Hancock to have obtained an idea of what a Town Hall should be. The one there contains on the ground floor a fire engine room with stalls at the back for the teams. On the east side of the building is a wide staircase which leads to a very fine hall on the upper floor where the firemen give socials, it being reserved for their use, other entertainments being given in the public halls. On the east side of this hall is a very convenient office with a large safe for the village clerk (Justice Finn) and last but certainly not least a council chamber, which is a council chamber, and fitted up as such, the seats for the presiding officer and clerk being on raised dais, while the chairs for the councilmen are arranged within a semi-circular railing and not like the so-called Town Hall at Red Jacket, where everything has given way to the idea of an Opera House and assembly rooms as the space reserved for actual town purposes in the old building of the Red Jacket Town Hall is less than it was before as the part formerly used for the fire engine is to be turned into a banqueting hall and kitchen while the addition is pure and simple an Opera House" (4 May 1899).

⁸²Marquette Mining Journal, 13 September 1890.

⁸³Sawyer, pp. 1012-1014.

⁸⁴28 February 1899. The druggist was probably V. T. Barry, the Shelden's son-in-law (Sawyer, p. 1013).

⁸⁵Albert Nelson Marquis, ed., The Book of Chicagoans (Chicago: A. N. Marquis and Co., 1911), p. 519; Henry F. and Elsie Rathburn Withey, Biographical Dictionary of American Architects (Deceased) (Los Angeles: New Age Publishing Co., 1956), pp. 450-51; William Reichert, "The Work of Ottenheimer, Stern and Reichert, Architects," The Western Architect (December 1914), pp. 127-79.

⁸⁶17 May 1899.

⁸⁷Ibid.

⁸⁸Copper Country Evening News, 6 June 1899.

⁸⁹Paul F. P. Mueller is notable as an engineer for Adler and Sullivan and for Frank Lloyd Wright. Born in Neuenkirchen, Germany, Mueller (1865-1934) studied structural engineering after immigrating to the United States at age sixteen. While working for Adler and Sullivan, he superintended construction of the Chicago Auditorium and built the Schiller Building. While working for Wright, he built the Larkin Soap Company's Office Building, Buffalo; Unity Church, Oak Park; Midway Gardens, Chicago; and the new Imperial Hotel, Tokyo (Illinois Society of Architects Monthly Bulletin, 18 [April-May 1934]: 7).

⁹⁰Copper Country Evening News, 31 July 1900.

⁹¹Houghton Daily Mining Gazette, 4 December 1899.

⁹²4 December 1899.

⁹³19 January 1900. The Gazette sensitively noted that the building was designed for efficiency as well as for beauty, and that the architect-designed rooms provided a distinct contrast to other rooms of the time.

⁹⁴Houghton Daily Mining Gazette, 4 December 1899; Copper Country Evening News, 6 June 1899.

⁹⁵Houghton Daily Mining Gazette, 30 October 1899.

⁹⁶Copper Country Evening News, 24 October 1900.

⁹⁷Ibid., 20 May, 26 June 1899, 3 August 1900.

⁹⁸12 October 1895. The Johnson Vivian, Jr. House is a large red sandstone and shingle structure designed by Demetrius Frederick Charlton in the Colonial Revival style of architecture. Located several blocks from the Roehm House, it was built for the son of a Cornish-born mine agent and investor who also established the J. Vivian Mercantile Company (Memorial Record, pp. 308-309; and Men of Progress, p. 173).

⁹⁹Copper Country Evening News, 27 September 1897.

¹⁰⁰Marquette Mining Journal, 21 November 1885. Earlier the town offices had occupied a wooden building on Fifth Street.

¹⁰¹Minutes of the Common Council of the Village of Red Jacket, 22 May 1885, 19 February, 19 March 1886, and 17 June 1887, Village of Calumet, Calumet, Mich.

¹⁰²Copper Country Evening News, 4 March 1897. For the account of the organization of the fire department, see Minutes, Common Council, Red Jacket, 2 November 1887.

¹⁰³Copper Country Evening News, 7 April 1898.

¹⁰⁴Memorial Record, pp. 583-84.

¹⁰⁵Donald M. Scott advertised as a civil engineer and architect in the Copper Country Evening News for the period. He had offices in the O'Neil Block, Laurium. One such ad appeared in the News for 27 February 1900. Charles W. Maass (1871-1950s) practiced in Laurium for eleven years, seven of them in partnership with his brother Fred A. H. Maass, and in Houghton for six years. He was born in Green Bay, Wisconsin and worked as an architect in Menominee for seven years before coming to the Copper Country in about 1896. Here he designed several sandstone buildings: the Kinsman Block (1898), the addition to Vertin's Department Store (1899), and the Hermann Block (1898) in Calumet; the Masonic Building (1910) in Houghton (see Charles W. Maass, Application for Registration to Practice Architecture, 15 October 1915, Michigan Department of Licensing and Regulation, Lansing).

¹⁰⁶Minutes, Common Council, Red Jacket, 3 August 1898. Although "some of the bids were lower than those of the contractors receiving the contract . . . they were not considered responsible by the councilmen." The other bidders were as follows: Grip and Company, \$11,900; L. E. Chase [Chausse], complete, \$15,469; J. D. Gribble, complete, \$14,763; J. A. Sallack, mason work, \$7,600; Jesse Butler, complete, \$17,757, Paul P. Roehm, mason work, \$7,968 (Copper Country Evening News, 3 and 4 August 1898).

¹⁰⁷Minutes, Common Council, Red Jacket, 13 October 1898.

¹⁰⁸Copper Country Evening News, 16 August 1898.

¹⁰⁹Ibid.

¹¹⁰Ibid., 2 May 1899.

¹¹¹Ibid., 2 November 1898.

¹¹²Minutes, Common Council, Red Jacket, 15 November 1898.

¹¹³15 September 1897. For accounts of improvements to the old town hall and opera house, see Copper Country Evening News, 10 October and 21 November 1896. For discussion that led up to the special election, see Copper Country Evening News, 2, 16 and 18 November 1898.

¹¹⁴Ibid., 28 November 1898.

¹¹⁵Ibid.

¹¹⁶Ibid., 7 January 1899.

¹¹⁷7 January 1899. Later the newspaper elaborated: "The city hall will be a model municipal building and the new theater will be the largest and finest north of the Straits of Mackinac. . . . There is but one theatre in Milwaukee, the Davidson, that will be its equal, and but one in Detroit that will be ahead of the new Calumet theater" (Ibid., 2 October 1899).

¹¹⁸Ibid., 7 January 1899.

¹¹⁹Ibid., 7 June 1899.

¹²⁰8 June 1899.

¹²¹Copper Country Evening News, 19 January 1899. From 1898 to 1900 Shand had eight jobs in Calumet, Laurium, and Lake Linden, in addition to the town hall and opera house and the fire station: the Ernest Bollmann Block, First National Bank, Ryan Block, and Curto Building, all in Calumet; the Odd Fellows Building in Lake Linden; and the Bernard Bracco Building, Elizabeth Nankerria House, and John O'Neil Block in Laurium.

¹²²Copper Country Evening News, 13 and 15 March 1899. Minutes, Common Council Red Jacket, 11 March 1899. Six local firms submitted bids for the masonry and carpentry work on the town hall and opera house. Those submitting bids on the excavating and stone and brick masonry were as follows: G. Procisse and Company, \$20,320; P. J. Donahue, \$18,000; Paul Roehm, approximately \$19,000. Those submitting bids on the carpentry work were as follows: Bajari and Ulseth, \$17,987; Seabold and Gribble, \$17,235; L. E. Chausse, \$16,985. One out-of-town firm, Henry Ferge and Company of Milwaukee, bid \$39,650 on the entire job (Minutes, Common Council, Red Jacket, 11 March 1899).

¹²³Copper Country Evening News, 21 March 1900.

¹²⁴2 October 1899.

¹²⁵Copper Country Evening News, 21 March 1900.

¹²⁶*Ibid.*, 21 March 1900.

¹²⁷*Ibid.*, 9 March, 7 April, 2 June 1900.

¹²⁸*Ibid.*, 15 March 1900.

¹²⁹*Ibid.*, 12 June 1900.

¹³⁰When the church was deconsecrated in the 1960s and sold to a private individual, much of the interior furnishings and fixtures were removed.

¹³¹Antoine Ivan Rezek, History of the Diocese of Sault Ste. Marie and Marquette, vol. II (Chicago: M. A. Donahue and Co., 1907), pp. 280-82.

¹³²There is a discrepancy in the location of the tower in the citation above which indicates "southwest" corner. The tower is actually on the northeast corner. Either the church was completely reoriented or the writer for the Evening News incorrectly identified the location.

¹³³Copper Country Evening News, 7 March 1899.

¹³⁴Kevin Harrington, "Photo Data Book for Ste. Anne's Church," Historic American Building Survey, July 1975.

¹³⁵Copper Country Evening News, 15 March 1900.

¹³⁶*Ibid.*, 12 June 1900. The firm built the Wright Block in Hancock.

¹³⁷Ibid., 12 June 1900. This article gave slightly larger dimensions for the church, 50 by 140 feet, compared to the dimensions given in the 7 March 1899 issue. It also noted that it faced north.

¹³⁸Ibid., 15 June 1901. The church cost approximately \$40,000. Identified expenditures were to Prendergast and Clarkson, \$28,000; decorating, \$2,000; altars, \$2,000; furniture, \$1,500; and carpet and extras, over \$2,000 (Copper Country Evening News, 1 April 1901). For finishing, decorating, and furnishing the church, contracts were awarded to the following: the Phoenix Chair Company, Eau Claire, Wisconsin, the pews, chairs, sanctuary, and rail; Alex Ross of Laurium, interior and exterior painting; Associated Artists, Milwaukee, decorating the interior; and Joseph Svoboda of Kewaunee, Wisconsin, three altars and statues (Copper Country Evening News, 12 December 1900, 3 May 1901). The Peninsula Heating and Plumbing Company of Calumet was awarded the contract for steam heating apparatus.

¹³⁹Copper Country Evening News, 17 June 1901.

¹⁴⁰Ibid.

¹⁴¹Quoted from the deed for the library in Jane C. Lucchesi, History of Sarah Sargent Paine Memorial Library (South Range, Mich.: n.p., 1968), p. 5. The building was destroyed in 1964.

¹⁴²Quoted in Houghton Daily Mining Gazette, 29 November 1952.

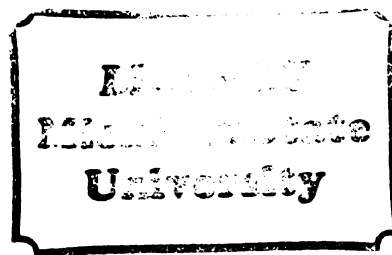
¹⁴³Withey, p. 199.

¹⁴⁴22 September 1902.

¹⁴⁵Marquette Mining Journal, 22 September 1902. A few years earlier the Calumet and Hecla had built a library and baths for its workers, designed by George Russel Shaw of Shaw and Hunnewell of Boston and constructed of mine rock. When this library opened, the Copper Country Evening News commented that "No mining company in the world treats its employees better than the Calumet and Hecla. It has just completed a large library building which will be provided with a fine collection of books, many new ones having been added to the old list, which is free to the employees. There are baths in the building and many comforts for the workingmen to enjoy. . . . President Agassiz in a letter to the library committee says: All regulations tend to induce the men and their families to make the freest possible use of the library" (16 September 1898).

¹⁴⁶Houghton Daily Mining Gazette, 14 November 1903.

THESIS
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CHAPTER V

THE SANDSTONE ARCHITECTURE OF THE CHEQUAMEGON BAY AREA AND SUPERIOR

Major settlements on Lake Superior west of Keweenaw Bay cluster around two large natural harbors: Chequamegon Bay, 350 miles west of Sault Ste. Marie; and Duluth-Superior harbor at the end of the lake. Ashland, Washburn, and Bayfield are situated on Chequamegon Bay, and protected against the turbulent waters of Lake Superior by the Apostle Islands. Chequamegon is French for the Chippewa word Shaugawaumekong, which means "a long narrow strip of land running into a body of water."

Bayfield, with a current population of less than 1,000, lies twenty-two miles north of Ashland on a forest-covered hillside of rock down which streams run into the lake. Named for Lieutenant Henry Bayfield of the British navy, who first charted Lake Superior in 1823-25, Bayfield was platted in 1856, after the Bayfield Land Company was formed to finance the construction of a railroad between the wheatfields of the West and this Lake Superior port.

Henry M. Rice, a friend of Bayfield and a member of the Minnesota territorial legislature, recognized the economic

advantage of connecting Minnesota with a port on Lake Superior. Rice obtained a federal land grant to build a railroad from St. Paul to Chequamegon Bay and convinced a group of investors from Washington, D.C. to form the Bayfield Land Company.¹ Visions of a settlement at Bayfield that would rival Chicago in commerce and in grain shipping attracted speculators to the "Harbor City." However, the Panic of 1857 ruined the Bayfield Land Company, and the Chicago, St. Paul, Minnesota, and Omaha Railroad did not arrive until 1883. In the meantime investors developed and exploited the area's timber, fish, and sandstone. In 1869 R. D. Pike opened a sawmill that produced millions of board feet, shingles, and barrels by the 1880s. In 1870 the Boutin family established a commercial fishing business that eventually employed 150. In 1880 the Booth Fisheries opened and within ten years employed 500. By the 1880s seven sandstone quarries operated in the area, the first having been opened in 1868. In fact, one writer noted that "large quantities of some of the finest building material in the West, are obtained from the red sandstone quarry in the harbor."²

The first sandstone building erected in northern Wisconsin was the Old Bayfield County Court House. It anticipated other structures of the local brownstone material. The Old Bayfield County Court House stands in a public square on the highest plateau in the center of the village of Bayfield, overlooking the Bayfield harbor and the Apostle Islands³ (Figure 34). Designed by John Nader of Madison, and constructed by Cook and Hyde of Milwaukee during the summer and fall of 1883 and the spring and summer of

1884, the court house was completed and turned over to the county in July 1884. The Bayfield County Board of Supervisors, comprised of Bayfield businessmen, commissioned the erection of this solid brown Bayfield sandstone public building on the most prominent site in town at a time when Bayfield lost to nearby Washburn its pre-eminence as the principal deep-water port on Chequamegon Bay.⁴

The Old Bayfield County Court House is a symmetrically arranged, rectangular, two-story public building on a raised foundation. It measures some seventy feet in width by fifty feet in depth. Built of rough-cut, variegated Bayfield sandstone laid in even courses, and trimmed with smooth-cut pieces of the same sandstone, it stands massive and solid in the center of one full block. Pedimented central pavillions project slightly from all four facades. The facades are divided into five bays on the front and rear, and three on the sides. A hip roof with deck, originally surmounted by a cupola containing a four-dial clock and bell, tops the structure. Wooden steps lead to entries in the center of all but the rear facade. The arched main (south) entry is surmounted by a fanlight and stone cornice and flanked by stone pilasters. Windows, segmentally arched on the ground and first stories, and round arched on the second story, increase in height as the building rises from the basement to the second story. The word "Bayfield," carved in bold letters in the central front pediment, accentuates the building's noble majesty.

Originally offices for the register, treasurer, clerk, judge, sheriff, and district attorney flanked a central corridor

that ran the full depth of the building on the first floor; the courtroom, and rooms for the judge, jury, and witnesses occupied the second floor; and the jail and a boiler room took up the basement. The building was heated with steam and supplied with water from a spring in the hill north of the building.

On 14 February 1883 fire destroyed the first Bayfield County Court House, a frame structure built by a local carpenter builder ten years earlier.⁵ Within days the people of Bayfield agitated for a new court house. The Bayfield Businessmen's Association and the Bayfield County Board of Supervisors quickly met to plan a new building. Although officials and citizens disagreed over the style, cost, and location of the new building, most agreed that work should begin at once. In the ensuing weeks they developed a scheme for a prominent fireproof public building within the means of the budget that would solidify the stature of Bayfield and promote one of her natural resources. From the first it was clear that a court house executed in native brown Bayfield sandstone would symbolize the aspirations of the people of Bayfield.

The Bayfield Businessmen's Association adopted resolutions concerning the urgency, cost and location of the proposed court house and submitted them to the county board. The association urged the county board to build immediately a court house and jail. It felt that no more than \$20,000 should be spent in improving the site and in building the structures. It thought the court house and jail should be placed on the public square.⁶ Inherent in the resolution was the commitment to build in native brown sandstone.

That spring several members of the businessmen's association ran for seats on the county board. Their "court house" campaign platform swept them into office. The new board included the following locally prominent businessmen: Frank Boutin, Sr., a fish dealer and lumberman; William Knight, Indian agent, banker, investor, and horticulturist; Fred Fischer, a timber speculator and merchant; and R. D. Pike, a lumberman, sawmill operator, real estate investor, and owner of a nearby, yet to be developed, brownstone quarry. Pike, Bayfield's leading businessman and citizen, served as chairman of the newly elected board.⁷ In their normal, daily activities these men promoted the growth and development of Bayfield just as the chamber of commerce does today. Naturally, they assumed this same attitude toward their involvement in the court house project.

The pride in local growth and the promotion of local development appeared in the Bayfield County Press for 29 December 1883, which advertised in large print on its front page, "A FEW REASON WHY PARTIES IN SEARCH OF NEW LOCATIONS FOR THE ESTABLISHMENT OF BUSINESS ENTERPRISE SHOULD PITCH THEIR TENTS IN THE HARBOR CITY."

1. Because it is located on the largest, safest and most accessible harbor on the entire chain of lakes.
2. The natural advantages it offers for the erection of large docks, elevators, etc. are superior to all other points at the head of this lake.
3. It is the lake terminus of that great trunk line, the C., St. P., M. & O. RR [Chicago, St. Paul, Minnesota, and Omaha Railroad].
4. The fall of '84 will witness the completion of the Northern Pacific R. R. and will have connections with the Great Northwest tapped by that road.

5. It is backed by country rich beyond ordinary comprehension in timber and minerals and finely adapted for agricultural purposes.
6. Its proximity to the Apostle Islands renders it THE summer resort of the Lakes.
7. It is the seat of the largest fish packing industry on the lake.
8. It has immense quarries of the very best fire proof building stone.

The businessmen of Bayfield perpetually struggled to secure the investment of outside capital in their town in the West. The development of its resources required money. But eastern and urban investors needed assurances that their investments were sound. The businessmen seized the opportunity to demonstrate the solidity of Bayfield through the construction of a prominent, solid, and substantial court house of native Bayfield sandstone. Moreover, the businessmen, and R. D. Pike, in particular, seized the opportunity to advertise their newly developing sandstone industry through the construction of a public building of fireproof stone from their immense sandstone quarries.

The day after the fire, on 15 February, the board decided to erect a temporary building on the site of the ruined court house. It invited and studied proposals for a new court house from several architects and conferred with others engaged in erecting public buildings. It solicited a sketch from Edward T. Mix, a fully trained and experienced Milwaukee architect, who specialized in public buildings, and who, for five years in the 1870s, as state architect for Wisconsin, had supervised the construction of state

buildings.⁸ Apparently not fully satisfied with Mix's sketch, the board corresponded with the Houston County, Minnesota, commissioners to inquire about the kind of court house that county was constructing.⁹ And it reviewed a plan from "a St. Paul architect." Finally, on 19 April 1883, presumably after reviewing his draft plans, it asked John Nader of Madison, an engineer and surveyor, to come to Bayfield to discuss the plans and construction of the building.¹⁰

The program for the new court house, however, emerged from the plans proposed prior to Nader's involvement in the project. Several plans for the new court house were exhibited in the village in the last week of March. The Bayfield County Press remarked on those procured by a Mr. Patterson which showed "an elegant two story, with basement, brown stone court house, which the architect says can be erected for \$20,000."¹¹

Two weeks later the newspaper described another set of plans:

The county board is in receipt of a plan for a brown stone court house, from a St. Paul architect, which can be erected for \$20,000. It contemplates a large two story building, with basement and fireproof vaults, and would be an ornament to any town in the northwest. We believe the board has not decided to accept any one of the several plans received all of which are good but propose to make haste slowly, thereby insuring no mistakes. We venture the prophecy, however, that Bayfield county will have a stone court house and at a cost that will not prove burdensome to any tax payer in the county.¹²

In selecting John Nader, Pike, Boutin, and Knight kept the promise made during the campaign, to erect the new building of native brown sandstone in the public square and equip it with all modern improvements.¹³ Locating the new court house in a more commanding position was a principal consideration of the board.

Formerly the court house had stood on the flat, "a position in which it showed off to a very poor advantage."¹⁴ The board considered two sites--block ninety-five on the corner of Rittenhouse Avenue and Sixth Street, and the public park, a one-square-block site higher up the hill donated to the village by Henry M. Rice, who had founded Bayfield. It chose the latter.¹⁵ Nader supported the board's choice of the site. While conferring with the board on the plans for the building, he inspected the grounds. The Bayfield County Press for 5 May 1883 stated: "Mr. Nader reported the public square by all odds the finest location in the village for the court house and the board has decided to locate it thereon."

During the visit Nader assured the board that for \$20,000 the county could have "a handsome fireproof building." The local newspaper elaborated further, stating that the court house will be

one that will not only be an ornament to the place and last for generations, but also be an advertisement for one of our chief resources--our brownstone, of which he [Nader] is outspoken in pronouncing the best building stone in the country, and in fact about the only really fire proof stone known, having stood the test of the Chicago fire where all others failed.¹⁶

Within two weeks Nader had completed his plans. He conceived a rather tight and limited expression of the Italianate style of architecture, resembling that style only in its round-arched fenestration. Nader interpreted the board's wishes by carefully calculating and designing a restrained, plain, and simple structure, one that might be expected from a trained and experienced engineer and surveyor.

Nader (1838-1919) was born in Westchester, New York, and educated there and in Brooklyn. Before coming to Wisconsin in 1868, he designed and built marine fortification structures in the East. He served as assistant United States engineer in charge of the Wisconsin River Improvement, headquartered in Portage in the early 1870s, and served as city surveyor for Madison from 1876 to 1880, and again from 1884 to 1887. Nader first listed himself as an architect in 1883, the very year he designed the Old Bayfield County Court House. In 1887, after designing his best-known work, St. Patrick's Church, constructed at Madison in 1888, he left Wisconsin for Virginia and New York City.¹⁷

The first elaboration of Nader's plans for the court house appeared in the Madison Democrat for 5 June 1883. This article stressed again the employment of the native sandstone as a means of promoting the native resource and industry.

The county court house, a modest frame building, was consumed by fire last winter, and the commissioners decided to rebuild in stone and in this respect the county is unanimous and while supplying a necessity, to develop one of the resources of the country. The superior sandstone is located here in abundance, and will provide the north with building material for several years.

Architect Nader, of this city, has provided the plans for the new building which will be erected during the present season. The masonry of the building will be entirely of brown sandstone obtained on the main land. Private contributions will place a bust of Capt. Bayfield, the first explorer, of the region, over the main entrance, to be done in the native sandstone. A clock will also be contributed, to be placed in the tower with five and one-half foot dials, 63 feet above the main floor.

The location of the building is chosen so that it will present a fine appearance from the bay south and east of

Bayfield. A spring was discovered of sufficient head to provide the highest point of the building and the architect has made the most of it for all purposes.¹⁸

The board examined, discussed, and approved the plans, all on 21 May 1883. Then the county clerk advertised in the (St. Paul) Daily Press, the Daily Milwaukee Sentinel, and in the Bayfield County Press for bids to build "a Stone Court House at Bayfield."¹⁹

On 22 June 1883 the board awarded the contract for the construction of the court house to Cook and Hyde of Milwaukee, operators of the sandstone quarry on Basswood Island. Their bid of \$29,000 included the full erection of the structure but did not include the heating apparatus, vault fronts, jail doors, and burglar-proof chests.²⁰ On 30 June 1883 the Bayfield County Press recapitulated the events leading to the erection of the new court house and presented a plan of the building as well. It noted that the rough-cut, native brown sandstone for the court house was taken from Pike's Quarry at Van Tassell's Point, and the cut stone from Cook and Hyde's Quarry at Basswood Island, a fully established quarry with a saw mill.²¹ Both quarries were at water's edge and their products easily transported by ship to Bayfield.

Construction on the Old Bayfield County Court House began in the summer of 1883. Workmen, under the supervision of a man named Gleason, completed the basement by the first of September. They laid the stone work, put on the roof, and hung the windows and doors that fall, thereby enclosing the structure before work was suspended for the winter. Work resumed in mid-April and was completed by July 1884. The project cost approximately \$31,000.²²

By 1883 two towns on Chequamegon Bay, Ashland and Washburn, emerged as rival deep-water ports on Lake Superior and challenged Bayfield's preeminence. That year the arrival of the Wisconsin Central Railroad at Washburn established that town as a principal port on Chequamegon Bay. Eventually, in 1892, Washburn was designated as the county seat. Six year earlier the same railroad had connected southern Wisconsin with Ashland at the tip of Chequamegon Bay.

Through the efforts of William F. Dalrymple, brother of Oliver Dalrymple, Bayfield attempted to regain its prestige by planning to build a railroad north along the shore of Lake Superior to the Dalrymple "bonanza wheat farms" in the Red River area of North Dakota and Minnesota. The death of William F. Dalrymple and the Panic of 1893 ended Bayfield's attempt to recapture its past glory. Only three and nine-tenths miles of track were laid. The timber was exhausted by 1924. Fishing declined as pollution from logging and sawmills destroyed spawning grounds, and was ultimately finished in the 1940s, when the sea lamprey decimated the lake trout population.²³

The comments of visitors to Bayfield demonstrate the success of the court house in expressing the values of Bayfield. Investors from St. Paul and New York City, assessing Bayfield's prospects for commerce, business, and tourism in December 1883, thought the site, material and architectural appearance of the court house reflected "taste, economy, and practical sense" in the construction of public buildings.²⁴ The editor of the Lumberman visited Bayfield in

February 1885 and called the new court house the most noticeable improvement to the town since his last visit:

I must say it is the finest one I have seen in the Northwest and does infinite credit to the town and county. . . . It was built in the highest portion of the town, of the Bayfield brown sandstone, and from the tower overlooks the whole bay and all of the islands and lake as far as the eye can reach, as well as the opposite shore, with Ashland in plain view.²⁵

On the twenty-ninth anniversary of the settlement of Bayfield, the Bayfield County Press for 28 March 1885 reflected on the community's accomplishments. It thought the use of native brownstone in the Old Bayfield County Court House of particular importance to Bayfield's identity. The Press proclaimed proudly,

Now we boast the most stately structure in Northern Wisconsin, Bayfield County court house . . . rendered still more a source of pride from the fact that its component elements are native to our county. This leads us also to call to mind that within a very few years our brown stone has come into favorable notice and bids fair to rival all of the best known kinds of stone for building purposes.

The prominent location, the large size, and the native brown sandstone building material distinguish the simple, straightforward Old Bayfield County Court House. By means of this stone building its planners restated Bayfield's position as a center of industry, commerce, and government in Chequamegon Bay. The prominent stone court house solidified the permanence of Bayfield as the county seat and promoted the recognition of her developing sandstone industry. The use of the native Bayfield brownstone was the source of pride and identity for the people of the county and community. Wisconsin lieutenant governor Fifield's words spoken in 1883 still hold

true today: "When wooden buildings have crumbled to decay, this Bayfield Courthouse will remain intact to the wisdom of its founders."²⁶

For more than twenty-five years people in Bayfield continued to build with the local sandstone from quarries on the Apostle Islands and the mainland. The Bayfield School Board constructed Lincoln School of solid brownstone in 1894. Stone was almost always used in projects associated with R. D. Pike, owner of Pike's Quarry, who occasionally donated the material. Thus, the parishioners of Holy Family Catholic Church employed brownstone donated by the Pike Quarry in the construction of their church, a ten year project that concluded in 1898. And the Wisconsin State Fish Commission used sandstone and wood shingles in the State Fish Hatcheries (Horace P. Padley) on property donated by Pike at Salmo, two miles west of Bayfield, in 1895. Bayfield builders routinely laid foundations of brownstone and trimmed the town's most important structures with the material. In this way the library board built the Carnegie Library (Henry E. Wildhagen) of yellowish orange brick and sandstone in 1903.

Early in the twentieth century a group of Bayfield investors, motivated in part by an intense rivalry with their neighboring town of Washburn, and in part by a desire to reverse the trend in the decline of the region's lumbering and quarrying industries, established and built in the center of Bayfield a small bank building of solid Bayfield sandstone. Constructed of brownstone from the Pike Quarry in 1905 by Archie Donald of Ashland, the area's most skillful stoneworker, the building is a gem of the stone layer's art.

The First National Bank stands on the northwest corner of Second Street and Rittenhouse Avenue in the midst of Bayfield's approximately four-block commercial district (Figure 35). It is a small, one story, flat-roofed bank and office building, finely crafted in the Neo-classical Revival style of architecture, and constructed of large blocks of clear brownstone ashlar laid evenly. Large single-paned windows with cross-paned transoms, arranged in a pair and a group of three on the Rittenhouse Avenue facade, and arranged singly on the Second Street facade, pierce the walls. A corner entrance reached by three steps leads to the bank. A side entrance over which is carved the name "R. D. Pike" leads to the office. The structure is united horizontally by means of a water table and cornice. The building achieves a simple monumentality and dignity because of its formal design executed in sturdy brownstone.

Early in 1904 investors in Bayfield County decided to establish a bank at Bayfield. That February a group of Washburn men incorporated to form a state bank at Bayfield. M. A. Sprague, F. T. Yates, publisher of the Washburn News and Itemizer, and O. A. Lamereaux filed articles of incorporation for the Bayfield State Bank with the Wisconsin State Commission on Banking, which quickly examined and approved them. The community regarded this event and the additional news that the Omaha Railroad was considering building an extension to Bayfield as a "sign of prosperity."²⁷ But Bayfield men also expressed interest in holding stock in this bank.



Figure 34.--John Nader, Old Bayfield County Court House, Bayfield, 1883-84.



Figure 35.--First National Bank, Bayfield, 1905.

In fact, news of the plans of Washburn subscribers to form a state bank in Bayfield inspired Bayfield capitalists to establish a bank with their own money. In three days' time they had issued subscriptions sufficient to organize a national rather than a state bank. With a capital stock of \$25,000, they applied to the comptroller of currency to establish the First National Bank of Bayfield. The new national bank would replace the Lumbermen's Exchange. The Bayfield County Press for 19 February 1904 reported the plans for a national bank and expressed pride in this venture.

The stockholders are without exception Bayfield people. Bayfield prides itself on the fact that it has secured the first national bank for the county. Believing that Bayfield has insufficient resources to support two banks it is more than probable that the state bank organization headed by people at the county capitol will give way to the more powerful one now all but established. The fact that Bayfield will have and can support a national bank speaks volumes for the town and its enterprising people.

As the stockholders of the First National Bank elected officers and directors at the end of February, the local newspaper noted that these people were "well and favorably known to the citizens of Bayfield" and would "bend every energy, consistent with safe banking, to advance all legitimate moves for the upbuilding of Bayfield and the surrounding country."²⁸

In the meantime the Washburn promoters of the state bank purchased a portion of what was known as "the Pike property" on the corner of Rittenhouse Avenue and Second Street on which to erect a bank building.²⁹ By 11 March, however, promoters of a state bank joined with backers of a national bank to build a single distinctive monument for Bayfield.

Messrs. Wieland and Johnson of the new National Bank of Bayfield were in the city Monday arranging matters with the promoters of the proposed State bank for Bayfield. Everything was adjusted in a manner satisfactory to all concerned and the result is that Bayfield will have but one bank--the First National. Success to it!³⁰

On 3 March 1905, almost one year after the First National Bank of Bayfield was established, the Bayfield County Press announced in a front page article that this bank would build a stone building that spring.

The First National Bank of Bayfield in business one year the 9th of the present month--has outgrown its present quarters and will erect a brown stone bank building on the corner of Second Street and Rittenhouse avenue as soon as the weather conditions will permit. Plans for the building are being prepared and the structure promises to be one of the most complete in all details, for its size, in the country; and, ever and above all, as nearly fire-proof as the art of man can make. The First National Bank of Bayfield is an institution of which all may be proud and is an example of what Bayfielders can do when united.

The bank would symbolize a united Bayfield.

Soon thereafter, R. D. Pike, though apparently not involved in the bank venture, decided to incorporate an office for himself into the scheme for the bank. Nothing is known of the architect, if there was one, who designed either portion of the building. On 12 May 1905, as Pike removed an old residence on the corner of Second Street and Rittenhouse Avenue adjoining the bank property to clear the site for his brownstone office building, the Bayfield County Press explained how it would look. "Architecturally it will correspond to the design of the new bank building and will add much to the appearance of this heretofore blot on the business center of the town."³¹ In fact, the bank and the office took shape in a single unit.

The brownstone for the First National Bank undoubtedly came from Pike's own quarry on the bay at VanTassell's Point, one mile south of Bayfield. The Pike Quarry contained large quantities of excellent quality Lake Superior brownstone. Operations at the quarry began in 1883. But by 1910, five years after the bank and office building opened, there no longer existed a market for colored sandstone and the brownstone industry collapsed.

Plans for the First National Bank were completed by the end of April 1905, and construction began as soon as the building season opened. The bank directors opened bids for the erection of the First National Bank on 2 May 1905 and let the contract to Archie Donald of Ashland, one of the region's most prominent stonecutters, with the understanding that he would complete the structure within ninety days. The notable appearance of the little building is directly attributable to the workmanlike manner in which Donald constructed it.

The need for Donald's skills in cutting, finishing, and laying stone had grown with the emerging popularity of the Lake Superior brownstone in the 1890s. In one particular case, while cutting stone for a handsome new residence for John R. Paul, "the millionaire lumberman of La Crosse," Donald's finishing technique was described as follows: "The stone is sawed and then rubbed together, making a very fine finish--in fact the very finest stone finish that can be procured." The extra care and skill given to the project by Donald was predicted to make it one of the finest brownstone houses ever built. The Ashland Press observed that, "Mr. Donald has established quite a reputation all through the

west as a stonecutter, and he is receiving a large number of outside orders."³²

The bank was completed in four months, Pike's office in seven. The First National Bank moved into its new building by 25 August 1905.³³ The R. D. Pike Lumber Company occupied its new office adjoining the bank by the first of November.³⁴

At this very moment people of Bayfield and the surrounding region sought ways to revitalize their sagging economy. Although commercial fishermen continued to ship tons of herring, trout, and white fish from packing houses at Bayfield to all parts of the country, by 1905 the forests of the region were depleted. People examined the adaptability of the rocky country in the back of the town to farming and turned to agriculture as a way of filling in the logged over areas. In fact, citizens of the Lake Superior district--Ashland, Bayfield, Douglas, and Iron counties--met in Iron River on 1 March 1904 to discuss the agricultural development of the region. Businessmen, real estate investors, and farmers intended to devise ways of promoting the region as a home for the farmer, stock raiser, fruit grower, and dairyman.³⁵

As construction on the First National Bank began, the local newspaper elaborated on the attributes of the bank and what they symbolized to Bayfield.

The building is to be of cut brownstone, steam heated, electric lighted and will have all the necessary modern conveniences of a first class banking house.

The First National Bank is strictly a Bayfield institution and in the erection of this model building the stockholders give renewed evidence of their faith in the

stability and future of the town that should result in putting new life in all in anyways interested in its growth. Invest your money in Bayfield and see the old town flourish like a green bay tree.³⁶

When Pike's office was occupied in November 1905, the Washburn newspaper reported the event this way:

The R. D. Pike Lumber Company moved into its new brownstone office joining the First National Bank, this week. You would have to search cities larger than Bayfield to find as fine an office building.³⁷

Through the almost self-effacing, unobtrusive bank and office building local businessmen proclaimed that Bayfield had passed early days of settlement and growth and was now capable of taking charge of its future. To make this statement they consciously chose Bayfield brownstone. The brownstone was not only practical and economical, but more importantly Bayfield's own, just as the capital for the bank was Bayfield's own. Characteristically, the designer is unknown. More than anything else, the bank was the result of a skilled stone mason, Archie Donald, who knew how to handle Bayfield brownstone.

In 1883, more than twenty years before the erection of the First National Bank at Bayfield, the Chicago, St. Paul, Minnesota, and Omaha Railway Company extended a line north along the western shore of Chequamegon Bay and built a coal dock at the natural deep-water harbor at Washburn eleven miles north of Ashland. Washburn, named for Governor Cadwallader C. Washburn, became a connecting point for the transaction of business between the water transportation companies of the east and the Omaha Road to the west. The town boomed overnight. The railroad company and lumber firms quickly installed a dock over which grain and flour from the wheatlands of

Minnesota and the Dakotas and lumber from nearby forests could be shipped down the lakes to market. The railroad built merchandise docks over which coal and merchandise from Buffalo and the east could be unloaded and shipped by rail west. Men logged the townsite on a slope overlooking Chequamegon Bay, graded roads, and put in sidewalks. A post office, school, boarding houses, general store, sawmills, and saloons appeared simultaneously. After the town was organized in 1884, citizens elected its first officers. In 1888, 55 million feet of lumber cut at Washburn mills, 1,600 cars of Lake Superior brownstone taken from Washburn quarries, and 330 million pounds of flour, merchandise, and coal passed over these docks. The same year people invested nearly \$400,000 in physical improvements in Washburn.

As the 1880s closed, A. C. Probert, formerly head bookkeeper for the White River Lumber Company, established the Washburn State Bank and commissioned an Ashland and Madison architectural firm to design a structure for this financial institution on Washburn's main thoroughfare (Figure 36). Conover and Porter, architects of Madison and Ashland, designed plans for a flamboyant and pretentious masonry bank building that combined stylistic elements of the Chateausque and Romanesque. John Halloran of Washburn constructed it of brownstone quarried locally at Houghton in 1889-90, as the town was rebuilding from a fire, and after the Bayfield County Bank had occupied its new brownstone bank across the street.

The Washburn State Bank is a detached commercial building oriented to a corner site at the northwest intersection of Bayfield Street and Central Avenue. The rectangular structure measures

twenty-five feet in width by eighty feet in length. It is two stories with an attic. Evenly coursed Lake Superior brownstone ashlar clads the walls of the main Center Avenue (south) and Bayfield Street (east) facades; red brick finishes the walls of the rear (west) and side (north) walls. Two steeply pitched, tin-covered hipped roofs, the front rising higher than the rear, cover the structure. Hipped dormers project from the roof on all four sides of the building, and tall chimneys thrust through it. The dormers, chimneys, and roofs create a pointed, jagged, and irregular silhouette that resembles the Chateau style and mixes with the ponderous, solid Richardsonian Romanesque character of the main body.

Large rectangular store windows on the main facades are surmounted on the second story by round-arched windows, clustered in groups of twos and threes and separated by pairs of rectangular-shaped windows. Stone steps lead from the sidewalk up to the main entrance, which stands recessed at a forty-five degree angle at the southeast corner. Over both the Bayfield Street and the Central Avenue approach to the entrance is seated a stone inscribed simply, "Bank." Two side entries give access from Central Avenue to offices at the rear of the bank. Engaged columns with foliated Byzantine-like capitals are distributed along the south and east walls of the first story. A lone, free-standing column bisects the main entrance corner. A string course encircles the building below the dormers. Heavy stone lintels on the engaged columns divide the first and second stories.

"The elegant banking rooms" of the Bank of Washburn, the private offices of its president, A. C. Probert, and the offices of the A. A. Bigelow Logging and Lumbering Corporation occupied the first floor.³⁸ Second and third floors held offices. The building was heated with steam and supplied with hot and cold running water.

Today the building is divided into apartments. The only exterior alterations are the wood panels that fill the window openings.

In 1889, two years after founding the Bank of Washburn, and six years after the founding of Washburn, A. C. Probert, a local entrepreneur, built this sturdy brown sandstone structure in which to carry on his banking business. The Washburn News proudly announced Probert's plans on 10 August 1889.

The News is authorized to state that in the course of a few weeks work will be commenced on a handsome fire-proof building for the bank of Washburn by its proprietor A. C. Probert. We are further authorized to state that when this building is completed the Bank of Washburn will have the finest banking room on Chequamegon Bay.

Within two weeks the newspaper revealed the details.

The site for the new brown stone bank building for the Bank of Washburn has been chosen. The building will be built on the northeast corner of Bayfield Street and Central Avenue, just opposite the Union Block.³⁹

The brownstone building material contributed to the beauty of the bank, symbolized the solid condition of the banking institution, and made the structure fireproof. It stood across from the Union Block, also of brownstone, and the finest commercial building then in Washburn. Probert announced his intent to construct a brownstone

building for the Bank of Washburn at the very moment the Bayfield County Bank opened for business the doors of its new fireproof brownstone building.

The Bayfield County Bank, now completely altered on the first floor interior and exterior, is a small, two-story commercial building on the south side of Bayfield Street. It is built of brownstone in a modest and straightforward interpretation of the Richardsonian Romanesque style of architecture. The building measures twenty-five feet in width by forty-six feet in depth. The banking room, director's room and vault occupied the first floor. D. M. Maxcy and Company, dealers in lumber, occupied the second floor. W. G. and D. M. Maxcy and C. C. Clausen, served as directors of the bank; W. G. Maxcy was president, Clausen cashier. On the opening of the Bayfield County Bank, the local newspaper boasted of the town's banking facilities, but, more importantly, of the use of its own Bayfield brownstone.

There are not many towns the size of Washburn that can boast of having two first-class banks. That is what this city now has, and they are first class in every respect too.

The Bayfield County Bank opened its doors to the public last Monday morning and is fully prepared to transact any and all business in the banking line.

The institution occupies a handsome fire proof building erected for its especial use at an expense of \$5,000. The material used in the construction is the celebrated Bayfield Brown Stone, taken from our own quarries three miles from this city. All who have seen the building pronounce it a handsome structure, some even going so far as to say that there is not a neater or better looking building of its class in the state of Wisconsin.⁴⁰

Fear of fire contributed to the decision to build the Washburn State Bank in stone. On the morning of 15 September 1888,

fire destroyed an entire square block in Washburn, resulting in the loss of nearly thirty buildings. Within days the Washburn column of the Bayfield County Press noted that burned-out property owners would rebuild with stone with the generous help of local quarrymen in supplying the preferred building material.

Jno A. Jacobs, F. J. Meehan, Chas. Flynn. S. A. Yates, D. M. Maxcy & Co., Aune & Overby, Peter Nelson, W. H. Ferguson and others will probably put up stone buildings in the places of the burned ones. Very liberal offers have been received from the quarry men and lumber dealers.⁴¹

In little more than one year's time eighteen buildings rose from the ashes. Three of stone and brick possessed greater value than all of the buildings lost in the fire. Among four or five additional brick and stone buildings scheduled for erection during the next building season was the Bank of Washburn.⁴²

Conover and Porter of Madison and Ashland drafted plans for the Washburn State Bank in the summer of 1889.⁴³ Allan D. Conover (1854-1929) and Lew F. Porter (1862-1918) had opened a branch office in Ashland in 1887, the same year they had established their architectural and engineering firm in Madison. Both Conover and Porter had studied at the University of Wisconsin; Conover taught civil engineering there and, in fact, instructed Frank Lloyd Wright and was his first employer. In 1890 an English immigrant named Horace P. Padley joined the firm, taking charge of the Ashland office. Conover, Porter and Padley became "the most successful architects in Northern Wisconsin," designing such Ashland buildings as the Knight Block (1889), First National Bank (1887), Security Savings Bank (1889), County Jail, County Poor House, Vaughn Block, Breen Block, and many houses.⁴⁴

Construction on the Bank of Washburn began in the fall of 1889, was suspended during the winter, and resumed in May. John Halloran of Washburn was awarded the contract for the carpentry work and began his work in November.⁴⁵ The brownstone came from the quarries of the Washburn Stone Company, opened in 1885 at Houghton Point, between Washburn and Bayfield, by Smith and Babcock of Kasota, Minnesota, and operated continuously by this firm until at least 1896. This high-yielding quarry produced a brown or reddish brown sandstone, some of which has a bluish tone and is mottled with white. Stone cutters finished preparing the stone the first of May and masons completed laying it that spring. The roof was tinned in July. The project when completed cost nearly \$25,000.

Upon completion of the bank, the Washburn News again declared its pride in the new structure.

The Bank of Washburn will move into its handsome new quarters Saturday evening of this week. This institution will do business hereafter in the finest building of its size in this section of the state and so far as the general convenience and all things which go to make up a fine banking institution it is eclipsed by very few in the west. ⁴⁶ The building is alike a credit to its owner and the town.

Two weeks after the Washburn Bank opened, the Washburn News for 17 January 1891 fully described it in these words:

The new building erected during the past year by A. C. Probert and occupied by the Bank of Washburn is one of the finest structures of its size in the state and is a model of architectural beauty and fine workmanship. It is constructed of the celebrated Lake Superior Brown Stone taken from our own quarries. . . . The workmanship throughout is of the very finest and the material used is the best that money could buy. It is indeed a building to which every resident of any town only eight years old could point

to with just pride, and one which the people of Washburn are proud to have erected in their city.

The newspaper expressed pride in the fine workmanship and the choice of local brownstone. For a town of nearly 3,700, the Bank of Washburn was tangible, visible evidence of a well-established community with a bright future.

On 10 June 1893 the Washburn State Bank closed, unable to pay its depositors in the Panic of 1893. Officials arrested Probert and charged him with embezzlement. In July 1895 he was sentenced to a two-and-one-half-year prison term, despite his promises to pay off the claims against him. Some said that the bank had been established in the first place for the purpose of defrauding the people.⁴⁷

In the early 1890s the social and economic progress of Washburn and the Chequamegon Bay region ushered into the area what an eighteen-year-old graduating senior in Washburn termed in her dedicatory oration in 1894, the "Age of Brownstone." At the ceremony marking the opening of Walker High School, this young woman gave name to the era of cultural maturity on which the people of the region then had embarked. She found its visual evidence and its noble possibilities manifest in the native brown sandstone of "the elegant new high school on the hill."⁴⁸

The Walker School once stood on the hilltop above the court house square overlooking the village of Washburn and Chequamegon Bay⁴⁹ (Figure 37). Designed in the Richardsonian Romanesque style of architecture, and named for Lyman T. Walker, president of the high school board, it was constructed of solid, rock-faced Washburn sandstone in the fall of 1893 and spring of 1894, just as Washburn



Figure 36.--Conover & Porter, Washburn State Bank, Washburn, 1889-90.



Figure 37.--T. Dudley Allen, Walker School, Washburn, 1893, destroyed 1947.

emerged as the center of population, commerce, and government in Bayfield County. This public school building was proof of the coming of the "Brownstone Age" in Washburn.

The rectangular school stood two and one-half stories on a raised foundation. From its steeply pitched hip roof thrust towers, parapets, and chimneys. The first and second floors contained four rooms each. Above the second floor, space for two additional rooms was left unfinished.

T. Dudley Allen, a Cleveland architect, designed the Walker School.⁵⁰ During his career he designed at least seven court houses in Ohio, Nebraska, Minnesota, and Iowa. Allen usually employed in his works the Richardsonian Romanesque style of architecture in a bold and vulgar way. The Walker School displayed his tendency to mass turrets, towers, and parapets in a seemingly unplanned fashion. The result was that the finished work--in this case, the Walker School--could serve as a court house as easily as a school.⁵¹

In May 1893, as soon as the Washburn School Board secured from the state of Wisconsin a loan of \$25,000 for the erection of the "handsome new school house," it let a contract for its construction to the Minnesota Stone Company of Minneapolis. Costs were estimated at nearly \$25,000.⁵² The Washburn News for 20 May 1893 reported that "it will be built of Washburn Brown stone from the Washburn Quarries and work will be begun at an early day."

Construction on the school progressed sporadically in September, after village and school officials claimed that the builder was not living up to the terms of the contract, refused to pay the

firm, and demanded to take the work from the firm and complete the building themselves. When the Minnesota Brownstone Company denied village and school authorities permission to take possession of the building and an argument resulted in the injury of a foreman, the company sued the town for damages. The local officials tore down some of the work, and a court injunction was issued. The dispute was resolved by the end of September, however. Construction resumed with considerable work being torn down and replaced, under the supervision of superintendents employed by the school board.⁵³ In December the Washburn School Board borrowed \$10,000 from the state of Wisconsin to complete the school.⁵⁴

Residents of the town and the county admired the progress of their brownstone school building. The people of Washburn thought that it would benefit the community in several ways. It would renew the enthusiasm of teachers and pupils for their work, demonstrate the farsightedness of the community, provoke compliments from passersby on trains and steamers, and increase the value of homes in the community.⁵⁵ They had faith in the uplifting quality of sandstone architecture.

The local newspaper reminded its readers that the school was small for a town its size. Hopefully their brownstone school would invoke pride among the citizens of Washburn and instill in them the values of education, culture, and civilization.

The people of Washburn will soon point with pride to their elegant brownstone school building on the hill; and they will have reason to be proud. But it will be better still when they are able to point with pride to a high school room containing a hundred pupils, fifteen or twenty of whom

shall graduate each spring. . . . Good people of this vigorous young city, you are certainly generous toward your schools in furnishing them with all that money can buy. Be also consistent, and use them for the best possible training of the boys and girls entrusted to your care. Do not be content with the erection of an imposing high school building; build up a high school that shall be worth more to your community--many times more--than your beautiful brownstone school house.⁵⁶

The completion of the Walker School attracted the attention of people throughout the Chequamegon Bay area. Those in Bayfield noted the recent changes in Washburn and thought the new school demonstrated that Washburn had a group of forward-thinking leaders unafraid "to expend large sums of money in good permanent, public improvements that will prove of great benefit to future generations as well as being a source of pride and convenience to the present."⁵⁷ Those in Washburn called the school "the pride of every resident of the place," and added that "it is by long odds the finest school building in Northern Wisconsin, and in fact the finest public building in this section of the State."⁵⁸

The Walker School was dedicated at the end of May 1894 at the first annual Education Week. For one week the entire community enjoyed entertainment, speeches, orations, concerts, and exhibits that combined commencement exercises with dedication ceremonies. In a special program one student spoke on "Joan of Arc," another on "City Government." But Mary Waegerly addressed the issue most central to the people of Washburn and Chequamegon Bay. She presented an oration on "The Age of Brownstone." She reviewed briefly the educational history of Washburn from "the time of the little school near where the depot now stands, up to the first Educational

Week in the new Brownstone building." She expressed to the community her thanks for the program and privileges and urged the students who would continue to study in the new school house to make themselves worthy of the age they were about to enter--the "Brownstone Age."⁵⁹ To the people of Washburn and Chequamegon Bay, the brownstone school symbolized the conclusion of their pioneer and frontier status and the maturing of life and culture in northern Wisconsin.⁶⁰

In May 1894, just as the Walker High School was dedicated, and eighteen months after Washburn became the seat of county government, the Bayfield County Board of Supervisors commissioned the Minneapolis architectural firm of Orff and Joralemon to design a brownstone court house. Constructed by John Halloran of Washburn and virtually completed in December 1895, the Bayfield County Court House summed up the essence of a public building for the people of Washburn (Figure 39).

The Bayfield County Court House at Washburn stands in the center of a full block, just below the site of the Walker High School, on a plateau overlooking the village of Washburn and Chequamegon Bay. The nearly square, symmetrically arranged public building is two stories on a raised foundation. It is built of solid Bayfield sandstone in the Neo-classical Revival style of architecture. Rusticated ashlar in the foundation, first story, portico area, and quoins contrasts with the smooth-cut ashlar of the second story and entablature. A ribbed dome surmounted by a lantern and resting on a colonnaded drum rises above the unadorned roofline and tops



Figure 38.--Palmer & Hall, Duluth High School, Duluth, 1891-92.



Figure 39.--Orff & Joralemon, Bayfield County Court House, Washburn, 1894-95.

the flat roof. A giant tetrastyle pedimented portico in Corinthian order shelters the main (east) facade entry. A broad flight of stairs leads to the main entry, over which is a Palladian window with bracketed balcony. Giant Corinthian order pilasters delimit the portico and enframe the entry. Large single-light windows pierce the walls. A water table, beltcourse, and entablature encircle the building, giving it horizontality.

Inside, a central hall runs from east to west the full length of the building, permitting access to the county offices of the first floor. The hall gives way to a divided staircase with landing that leads to the second floor.

A one-story addition was added later to the rear of the court house. To the northwest is the county jail and sheriff's residence, a two-story brick structure built by the Pully Jail Building and Manufacturing Company in 1893.

On 8 November 1892 voters in Bayfield County elected to remove the seat of county government from Bayfield to Washburn. That summer Washburn businessmen had launched a campaign to capture the county seat. They argued that relocation was inevitable because Washburn stood nearer than Bayfield to the geographic and population centers of the county. Moreover, they offered to donate a one-block site containing a school building suitable for conversion to county offices and \$6,000 with which to renovate it. Accepting this offer and building a new jail at Washburn made better financial sense than enlarging the court house at Bayfield and constructing a jail there, because of an earlier agreement under which the Bayfield

property reverted to its donor when the county ceased using it. The Washburn property would be given free and clear and could be sold if the county again moved its seat of government. The result of the election was clear: 1,755 voters favored removing the county seat to Washburn and 1,147 opposed the removal. As soon as the election result proclaimed Washburn the county seat, records were transferred to temporary quarters in the Washburn Town Hall.⁶¹

In the spring of 1893 the Bayfield County Board of Supervisors dealt with the necessity of constructing a jail and the decision of whether to convert the old school into a court house or to build anew. In March it adopted for the Bayfield County Jail the plans and specifications known as No. 588, furnished by the Pully Jail Building and Manufacturing Company of St. Louis, Missouri, and contracted with this company for its construction in brick on the northeast corner of the county grounds. Construction began in mid-August and was completed in less than three month's time at a cost of \$12,500. The community regarded the jail as handsome, substantial, and ornamental, and one which, together with the Walker High School, set the standard in Washburn for a public building, with one exception, the material. A public building should be built of Bayfield brown sandstone.⁶²

The local newspaper voiced convincingly the inappropriateness of brick for a public building in Bayfield County.

The News believes a halt should be called in the erection of brick public buildings in this section and especially in Bayfield county. Our own brownstone will last a century longer than any brick made, and looks a thousand per cent better and costs but little more. Besides the

money spent for the stone is left in the county and is used to develop our resources while the cost of the brick freight, etc. goes out of this section. If any other material is used in public buildings hereafter let it be Bayfield Brown Sand stone.⁶³

Local opinion argued for the durability and beauty of the native stone and the economic practicality of supporting a local industry. These factors and others proclaimed Bayfield brown sandstone as the only material suitable for public buildings in Bayfield County.

During the spring of 1893 newspapers in the region noted that the people of Bayfield County wanted a new court house. The Ashland Press for 3 June 1893 stated that the people of Bayfield County would build a new court house "in keeping with the handsome new school building and the new jail."

A new court house for Bayfield county will be built at Washburn this season. The committee appointed from the county board to look into the matter of fixing up the old school house for the use of county officials will report adversely your correspondent is informed. Bayfield County has money in the treasury, and the people might as well have a new court house as not. Plans for a very elaborate structure, to be in keeping with the new school house and the new jail, will be drawn.

The Washburn News claimed that jurors, witnesses, and visitors to court favored building a new court house over repairing the present county building, observing that the rapid development of the county would eventually call for a new court house anyway.⁶⁴ By the following spring citizens clamored for a new building and expected the incoming county board to make better quarters for the county offices a first order of business.

If the board does not feel like improving the county as contemplated when the county seat was moved, the News feels safe in saying that Washburn will not be backward about doing its share--and more than its share--towards a new structure.⁶⁵

By May 1 the board appointed a committee "to investigate and devise means of providing suitable offices" for the county's officers and "suitable safe depositories" for the county's records. On 25 May 1894 D. H. Haner, F. Drummond, and K. G. Staples submitted their findings on two candidates--the small wooden structure, then occupied by the county but owned by the city, and the old two-story school house on the court house grounds, then used as the court house. They considered the former inadequate, inconvenient, and unsafe; the office space was insufficient, the vaults were too small for the county records, and not fireproof. Moreover, the city needed to use it for town offices. They thought the latter too small to admit the installation of vaults large enough for county records and retain sufficient space for offices. Its eleven-foot ceilings were too low. Its construction and condition did not warrant any further investment except to tear it down and remove it from the site. The committee recommended that the board at once initiate steps "to build a suitable Court House for the County by authorizing the County Clerk to call for and receive plans and specifications to be submitted to this board for adoption."⁶⁶

There was unanimity concerning what would constitute "a suitable Court House." It must be a fairly elaborate structure, similar in size, substance, and completeness to the Walker School and the county jail, and executed in native Bayfield brownstone.

In fact, suitability was summed up simply in the motion made by Haner, but tabled by the newly elected board at its first meeting. The motion instructed the clerk to receive bids for the construction of "a brownstone courthouse to cost not more than \$30,000."⁶⁷

Twelve architects submitted plans for the Bayfield County Court House. On 28 July the board selected "the three best and most practical" and turned them over to a study committee which would submit the best one for the approval of the board. The three plans given to the committee included one for a completely furnished court house for \$65,000 by T. D. Allen, "the schoolhouse architect"; one for a structure costing from \$30,000 to \$35,000 by Conover, Porter and Padley of Ashland and Madison; and one for a structure costing about \$30,000 from "a Minneapolis firm."⁶⁸

In an article titled "The New Court House," the Washburn News for 13 July 1894 cautioned the board to choose carefully the plans for the structure.

The News has always been in favor of a new court house, ever since it became apparent that the present county building could not be fitted up, but we believe there should be no "penny wise and pound foolish business" about the matter. Don't let the building be spoiled for five or ten thousand dollars. The county needs a court house and our county board as representatives of the people should see to it that the money is wisely spent and that the building erected will not only be ample for all present needs but also for future use. We don't want a court house that will need an addition in a few years, neither should it be cheaply constructed so it will need repairs in a few years. This is a work that needs to be done but once in fifty years and it should be well done. Let the building be ample for all present and future needs of the

county, and substantially built so that when its construction is complete, the expense will be practically at an end.⁶⁹

On 13 July 1894 Currie G. Bell, Drummond, and Haner of the building study committee recommended that the board adopt the plans of Orff and Joralemon. The board acted on the recommendation at that very meeting and instructed the county clerk to advertise for bids for construction of the court house.⁷⁰

Fremont D. Orff (1856-1914) and Edgar E. Joralemon practiced architecture together in Minneapolis from 1893 to 1897. Two works recently have been identified with this firm: the Waseca County Court House at Waseca, Minnesota, 1897; and the Van Dusen House, a romantic stone structure that blends the Richardsonian Romanesque with the Chateausque styles of architecture, at 1900 La Salle Avenue South, Minneapolis, 1892-93. From 1885 to 1886 Joralemon had practiced in Minneapolis, and from 1887 to 1889 had worked in partnership with Charles F. Ferrin. Orff practiced in several partnerships, with his brother George W. Orff (1836-1908) from 1883 to about 1900, with Joralemon until 1897, and with an architect named Guilbert in 1898. From 1899 to 1912 he worked alone, doing houses, schools, libraries, and court houses. Orff's court houses, all in Minnesota, included the Big Stone County Court House, Ortonville, 1901-1902; the Renville County Court House, Olivia, 1902; and the Red Lake County Court House, Red Lake Falls, 1910.⁷¹

Orff visited the site of the proposed court house in Washburn. The Washburn News reported that "Architect Orff, of Minneapolis, was in the city Friday morning with plans for a new court house. He left

for home the same day, but will return to attend the meeting of the board next Tuesday."⁷²

By the end of August, fifteen contracting firms submitted bids in the following amounts for the construction of the Bayfield County Court House: A. Donald and Company, Ashland, \$35,343; John Halloran, Washburn, \$28,670; Hinkley and Powers, West Superior, \$31,737; James McMillan, Duluth, \$32,775; Emil Bruce, James Carlisle Sons, H. Downer and Son, Foster and Smith, Leck and Leck, Libby and Libby Company, Erick Lund, J. H. McClay, R. McMillan and Company, and Minnesota Stone Company, all of Minneapolis, for \$33,887, \$45,300, \$32,949, \$47,687, \$31,800, \$39,290, \$34,800, \$32,358, \$35,758 and \$33,663 respectively; and J. W. Miller, St. Paul, \$33,663. Seven firms submitted bids in the following amounts for steam heating: Churchill Hobbs and Company, Eau Claire, Wisconsin, \$1,785; Samuel L. Pope and Company, Chicago, \$1,987; Theo. Pond and Hasey and Company, Saxton Phillips and Company, W. F. Porter and Company, and Tunstead and Moore, all of Minneapolis, for \$1,630, \$1,749, \$1,630, and \$1,790 respectively; and Fox Brothers, St. Paul, \$1,743.⁷³

The advertisement for bids read as follows:

Bids will be received by the board of supervisors of Bayfield County, Wis., for the construction of a new court house. Bids will be received up to and including August 15th, 1894.

The board reserves the right to reject any and all bids.

Plans and specifications may be seen at the office of the county clerk of Bayfield County, and at the office of Orff & Joralemon, architects, Minneapolis, Minn., on and after July 25th 1894.

All bids to be accompanied by a certified check for \$1,000.

John Froseth,
County Clerk
(Washburn News, 20 July 1894)

At a special meeting on 27 August 1894 the board awarded the contract to the lowest bidder, John Halloran of Washburn, for \$28,670. The contract required him to complete construction within a year.⁷⁴ The local newspaper expressed its pleasure over the proposed county building and over the decision to employ a local builder who, in turn, would employ local labor.

First because the county is to have a suitable building for the transaction of its business. And secondly because a Bayfield county man is to do the building. The latter fact means Bayfield county labor in every department. It means employment for the men who help to raise taxes for the structure. It means work for the long winter for a large crew, and in fact for a whole year.⁷⁵

Of equal importance, stone for the court house came from the quarries of the Washburn Stone Company at nearby Houghton.⁷⁶

W. W. Porter and Company of Minneapolis secured the contract for installing the heating apparatus for \$1,630. P. H. Grimm of Ashland was awarded the contract for moving the old high school building one block from the present site.⁷⁷ Halloran contracted the brick and stonework to Peter Davidson of Duluth.⁷⁸ George W. Orff, brother of the architect, superintended construction.⁷⁹ One year after awarding construction contracts, the board appropriated an additional \$3,167 to complete the court house. The local newspaper explained that a number of important changes in the construction made by the board had increased costs.⁸⁰

The Grand Masonic Lodge of Wisconsin laid the cornerstone of the new court house on 19 October 1894. Myron Reed of Superior, representing the grand master mason, spoke of the importance of this public building to the county.

You have commenced the erection of an edifice that ought and no doubt will be an honor to your county. Every community is as much distinguished by the character of its public buildings as by the eminence of its most noted public men. . . . This building which you are about to erect should and will in some measure represent the industry, thrift, enterprise and intelligence of the people of this county. It is a building of the people and for the people.⁸¹

When work on the court house resumed in the spring, the Washburn Times described the way the building would look.

The structure will be entirely of Washburn brownstone, with finished surface. There will be several ornamental columns, projecting balconies, etc. A large dome will surmount the structure and will afford an excellent view of all surrounding country.⁸²

As work progressed, the local newspaper further described the structure.

That dome of the new court house, as it commences to loom high in the air, stands as the apex of a monument of perseverance and triumph in many ways. Aside from these things it marks the nearing of the completion of a piece of architectural and mechanical work that is a credit to all parties concerned in its designing and construction. As a whole the building may be termed a beauty. The classic style of architecture, the carved stones, and all the various intricacies of the mammoth structure present an achievement of beauty and magnificance that an older and richer county than Bayfield could look upon with haughty vanity and supercilious pride. When it is completed and occupied, which will be in the course of a few weeks. it will be a safe and convenient repository for the records of the county, and a convenient office place for the fellows who are lucky enough to "get there" on election day.⁸³

County officials moved into their new quarters in December 1895 and the last of the work was finished early in 1896. The people of Bayfield County now owned a court house expressive of the social maturity of the county and suited to the "Age of Brownstone."

Four blocks from the court house at Washburn, on the southeast corner of Washington Avenue and West Third Street, stands the Free Public Library (Figure 40). Designed in the Neo-classical Revival style of architecture by Henry E. Wildhagen of Ashland in 1903, the rectangular building measures approximately fifty feet by seventy feet in ground dimensions with a wing at the west (rear). The building is one story on a raised foundation. Evenly coursed, rock-faced Washburn brownstone finishes the walls. The roof is hipped with intersecting gables. The library achieves monumentality by means of a pedimented portico, symmetrical arrangement, and the brownstone building material. The central entrance is reached by a flight of stairs flanked by columns and surmounted with a stone lintel inscribed "Free Public Library." Large, single-light sash windows are grouped in threes on either side of the portico and placed singly elsewhere. A water table and ample cornice give the structure a horizontality.

The main entry leads to a vestibule on the main floor. This is divided into six rooms, the principal of which are separated by large archways. They include the children's reading room, the general or adult room, a reference room, stacks, and the librarian's

office. The basement contains lecture rooms and boiler and storage rooms.

In the spring of 1902 the people of Washburn decided to ask Andrew Carnegie to donate funds to build a library for Washburn. They appointed their most prominent citizens to a committee to act on their resolution. W. H. Irish, L. N. Clausen, Fred T. Yates, M. A. Sprague, and J. E. Jones--all judges, newspapermen, or city officials--asked Carnegie for \$15,000 with which to construct a library building. The committee convinced Carnegie that the people of Washburn possessed sufficient interest in a library. In 1893 they had built a small, four-room structure on Washington Avenue near Bayfield Street for this purpose, and had demonstrated their ability to maintain it. The acquisition of books and the constant increase in the patronage of the institution demanded a larger and better equipped building. On 12 February 1903 James Bertram, secretary for Andrew Carnegie, informed Irish, chairman of the committee, that "if the city agrees by resolution of council to maintain a free public library at a cost of not less than fifteen hundred dollars a year and provide a suitable site for the building Mr. Carnegie will be pleased to furnish fifteen thousand dollars to erect a Free Public Library Building for Washburn."⁸⁴

With this news the Public Library Board sought a site and secured plans for the proposed library. It named Nels M. Oscar, T. C. McWilliams, W. H. Irish, O. A. Lamoreaux, and C. O. Sowden to a site-selection committee that identified three possible building sites: the land between the Hotel Washburn and the Bank of

Washburn building, consisting of seven lots for \$800 or fourteen lots for \$1,300; the site known as the "Beausoliel corner," offered for \$3,500, as well as two lots owned by Dr. Mitchell on the opposite corner, offered for \$1,200; and the William Olson property, consisting of lots nine and ten of block thirty-nine of the original townsite at the southeastern corner of Washington Avenue and Third Street.⁸⁵

Although many preferred the Beausoliel corner because its ample size permitted the placement of the library in "a regular park," others desired a more practical solution. And on 30 June 1903 the board purchased the Olson property for \$1,300. Nevertheless, the intent of the board, "to provide a beauty spot that will be permanent for all time for Washburn," remained firm.⁸⁶ In the meantime, the Public Library Board had appointed Irish, Oscar, and Mrs. O'Neill to still another committee to secure plans for the new building.⁸⁷

The program for "a handsome one story library building" first appeared in an article in the Washburn News for 21 May 1903.

It is proposed that the main floor will be several steps above the street, and contain several rooms including children's reading room, adults reading room, reference room, book room and librarian's reference office. This will be all arranged in such a manner that one person can supervise all the rooms, being accomplished by the location of the librarian's office in the center of the building, viewing all the rooms at a glance. There will be a high basement containing a lecture room.

The newspaper added that Van Ryin and DeGelleke of Milwaukee, a firm that had drawn the plans for nine of twenty-two libraries in the state, probably would furnish the plans for a building that

met their requirements. Although the building committee logically might turn to a firm experienced in designing libraries throughout the state, in its midst was a man fast developing a reputation as a designer of public buildings in local stone. At the same meeting the board purchased a site, it instructed its president "to engage Architect Henry Wildhagen of Ashland to make plans and sketches of the building at once."⁸⁸

Henry E. Wildhagen (1856-1920) was perfectly capable of giving the people of Washburn a library that would function efficiently and appear monumental. Born in Hanover, Germany, he immigrated to America at age thirty, after graduating from the University of Hanover. In 1893 he opened with Herman Rettinghaus, a civil engineer, an office in Ashland, to which he only recently had come to design a sulphite mill. Wildhagen's ability to draft skillfully and carefully formal plans and designs in brick, wood, and stone made him the most prominent architect of public buildings in the Chequamegon Bay area at that time.⁸⁹ In addition to his own experience in designing schools, court houses, and libraries, Wildhagen, no doubt, had observed in Washburn examples of public architecture. Following the models established earlier in the Bayfield County Court House and the Walker School, he and the library board chose to execute the Free Public Library in locally quarried sandstone. When the board purchased the site and engaged Wildhagen, it had in mind the type of building which had been outlined earlier.

According to the plans they now have in mind the building will be one story with a high basement. The basement will contain a club room and lecture room and on the first floor there will be an adult's reading room, librarian's office and book room. These different apartments will all open towards each other so that one person can oversee the entire floor. This will be a saving in the matter of attendants and at the same time give the library a good appearance.⁹⁰

When the Public Library Board opened bids for the construction of the new Carnegie library on 16 January 1904, it discovered that the only local bidder was not the lowest bidder. James Sheridan and A. W. Swain of Washburn had bid \$15,896. Other bidders included the following: John H. Foster and Sons of Ashland, at \$15,466, the lowest bidder; Prendergast and Clark of Chicago, \$19,500; Dan Egan of Ashland, \$16,000. All bids exceeded the \$15,000 granted by Carnegie. On 23 January 1904 the board, in spite of the low bid submitted by John H. Foster and Sons, let the contract to Sheridan and Swain because "it wanted to favor home people." It offered them the job for the amount submitted by the Fosters.⁹¹ The selection of a Washburn rather than Ashland or Chicago contractor expressed the same reliance on local people as the selection of an Ashland rather than Milwaukee architect.

Construction began on 28 April 1904, the cornerstone was laid 9 June 1904, and the library opened and was dedicated in April 1905. The result was another library funded by philanthropist Andrew Carnegie, but in this case, built of local brownstone in classical simplicity by a local contracting firm under the close supervision of its designer, an architect from the neighboring town of Ashland. When the library opened, the people of Washburn viewed

the building as "a monument to the conscientious endeavors of the architect, builders and the library board."

The building is of a beautiful brownstone, taken from the local quarries, and two huge pillars adorn the entrance. . . . It is one of the ornaments to the city which will always be shown with conscientious pride to strangers who visit here.⁹²

Ashland grew in a large sweeping semi-circle on a plain around the southern shore of Lake Superior at the base of Chequamegon Bay. Asaph Whittlesey selected Ashland as a townsite in July 1854, when he rowed over from La Pointe, where John Jacob Astor had established headquarters for the northwest trade of the American Fur Company in 1818, landed, and built a cabin on a site at what is now Eighteenth Avenue and Front Street. Ashland, named by Martin Beaser, the town's second postmaster, for the Kentucky home of Henry Clay, whom he admired, remained a tiny settlement until its sandstone and timber resources attracted the attention of railroad companies. Although nearly fifty houses stood here in 1857, by 1863 all but the two households of the Beaser and the Martin Roehm families had left. In 1871-72 settlers arrived in anticipation of the arrival of a railroad that would haul out sandstone and lumber. Soon some two hundred buildings were constructed hastily for 1,300 workers on the Wisconsin Central Railroad, who made Ashland their headquarters while clearing a track through the forest. The cost of extensive bridge building in the final thirty miles of the road delayed the project, but on 2 June 1877 the Wisconsin Central Railroad finally reached Chequamegon Bay and connected the harbors at this part of Lake Superior with Milwaukee. Ashland boomed as brownstone quarries

were developed on a large scale, sawmills went up on the shore, and deposits of iron ore were sought by prospectors in the Penokee-Gogebic Range, described in the earlier 1849 geologic surveys. Land and mineral speculators bought acres of land and shares of stock. A crash in 1887 reduced prices to reasonable levels.

By 1887 four railroad lines terminated at Ashland: the Chicago, St. Paul, Minneapolis and Omaha; the Northern Pacific; the Milwaukee, Lake Shore and Western; and the Wisconsin Central. The meeting of ship and rail at Ashland made the city an important shipping center. The products from flour mills, a blast furnace, and saw mills at the harbor, and iron ore hauled overland from the Gogebic Iron Range, forty miles to the east, were loaded on ships waiting at the docks. In turn, coal from Ohio and Pennsylvania and merchandise bound for northern Wisconsin, Minnesota, North and South Dakota, and Montana were unloaded from ships and loaded on trains. By 1900 the population reached 10,000. Once men had cut over the forests and failed at attempts to farm the rugged, inhospitable cut-over lands, however, the population declined.

As early as 1885, when four railroads terminated at Ashland on Lake Superior, the people of Ashland thought the city needed a union depot. They hoped the Wisconsin Central, the Lake Shore, the Northern Pacific, and the Omaha railroads would unite and build a centrally located, properly appointed, and sufficiently large depot to accommodate all of them for the convenience of both the traveling public and the businessmen of the city. They believed a union depot,

costing about \$25,000 and if constructed of native sandstone, would be a credit to the rapidly growing city and to the railroads.

The citizens of Ashland are very desirous of having the main building built of the beautiful red sandstone now being extensively quarried here, and through The News they urge upon the officers of the railroads a spirit of liberality in this matter, and the erection of a depot that will be in harmony with the great growth and business importance into which Ashland is increasing.⁹³

The managers of the Wisconsin Central, the Lake Shore, and the Northern Pacific railroads initially favored building a union depot; the manager of the Omaha Railroad was reportedly from the first reluctant to support it.

A Committee on Transportation of the Businessmen's Association discussed the matter with the officials and managers of the four railroad companies. The Ashland Press noted that,

In the past Ashland has dealt favorably with all the roads,--has given them almost every favor asked for,--and it is not too much to ask or expect, that they will respond favorably to the popular solicitation of the public, and make speedy arrangements for the erection of the much needed and much desired building.⁹⁴

Businessmen and railroad men had good reasons for advocating a union depot. Most businessmen thought Ashland needed a depot large enough to accommodate a city that was expected to double its size within ten years. J. I. Levy of Ashland stated that a union depot would help trade and make Ashland a more prominent commercial center. Postmaster Sullivan indicated it would greatly facilitate mail service. J. B. Mathews said it would help Ashland's wholesale business by establishing her importance as a trade center with the railroads. C. A. Mitchell of the Omaha Railroad, J. M. Whitman, general manager of the Chicago and Northwestern, of which the Omaha

was a part, C. H. Hartly, superintendent of the Lake Shore, E. H. Harrison of the Northern Pacific, and J. S. Dyer of the Wisconsin Central observed that all companies had deferred repairs on their present buildings, awaiting a decision on a union depot, and that now they should build a better facility.⁹⁵

In November 1887 the railroads reached an agreement under which the Wisconsin Central would build a union depot for the common use of all the railroads. The community regarded the decision as a demonstration of respect for the Lake Superior terminus of the railroads and the heavy passenger traffic. The local newspaper anticipated happily that there would be "no more boxes and barns scattered about the city for depots, but [there would be] an elegant structure such as any city might well be proud of and an honor to the railroad as well."⁹⁶ Ultimately the Wisconsin Central Railroad built and owned the depot, occupying it jointly with the Northern Pacific with which it had consolidated interests. The Milwaukee, Lake Shore and Western, and the Omaha never became parties to the depot.⁹⁷

The newspaper revealed the plans for the depot, brought to Ashland from Chicago by the chief engineer for the railroad.

In style it will be Gothic, with a clock tower. The depot proper will be two stories high, and the elevation, including tower will be 144 feet, facing Third street. . . . Every modern convenience will be furnished and the estimated cost is placed at about \$45,000.⁹⁸

Tentative plans called for a structure of brick and iron.

Within a year plans for the depot were turned over to a local building firm to determine the cost of constructing it. The

newspaper reported that they "will probably change from brick to stone."

Messrs. Scott & Hubbell have been estimating upon the work and they have recently received word to estimate the cost of the structure, if built of Lake Superior brownstone, instead of brick. While of course it is not expected that the depot will be finished "this season" we are assured by this move, that the project has not been wholly abandoned. It may be one of the mysterious ways of the world that a little waiting will result in increasing the cost and beauty. If so Ashland may well be content to wait a few months longer.⁹⁹

Stone for the station came either from the Ashland Brownstone Company or the Prentice Brownstone Company. Both recently had opened quarries nearby and surely had on hand supplies of roughly cut sandstone, such as that employed in the union depot, easily transportable by water to Ashland. In 1886 John Knight and other Ashland men had established the Ashland Brown Stone Company and opened a quarry on Presque Isle. At that time Knight also served as local attorney for the Wisconsin Central Railroad. And that fall Frederick Prentice of New York City had established a "great brownstone quarry" at Houghton Point, three miles north of Washburn, on the Omaha road. Here he owned 600 acres containing "inexhaustible quantities of the finest quality of brownstone." Eighteen months earlier he had begun clearing and stripping for the quarry. Now a community of one hundred men lived and worked at the site of the quarry. Five channelers cut the solid rock into strips and steel wedges driven by sledges wedged them into immense mill blocks which were, in turn, split into smaller blocks.¹⁰⁰ At this very moment Prentice had stockpiled a large supply of sandstone.

Huge mountains containing over 60,000 tons of mill stone, stand ready for shipment as rapidly as cars can be secured. Over one hundred and fifty tons of "ton stone" has also been taken out and is ready for use. A small quantity [sic] also has been secured.¹⁰¹

More than likely, the roughly finished stone from the Ashland or the Prentice quarry was employed in the Union Passenger Depot of the Wisconsin Central Railroad.

In January 1889, as construction was underway, both the Ashland Weekly News and the Ashland Press fully described the station and illustrated their articles with the elevation drawn by the architect. The Union Passenger Depot stands on Third Avenue West (Figure 41). It measures 158 feet in length and 45 feet in width, with an entry tower on the north that rises 80 feet. From this tower and the main entrance is an unobstructed view of Chequamegon Bay and "the mighty monarchs of the great cold sea of the north," the Apostle Islands. They called the "substantial character and beauty of architecture" of the Richardsonian Romanesque station "an advance in very marked degree on anything yet seen for many years in the great Northwest."

Iron, wood, brick, and stone will enter lavishly into the construction, and give it not only a maximum of safety and strength, but in the pleasing combination of color, give an effect not readily produced by any other process.¹⁰²

The substantial character of the depot derives in large part from the large, heavily rusticated pieces of sandstone that form its walls. They noted that careful attention had been paid to arranging everything for arriving and departing trains and for the comfort of travelers. On the main floor a central lobby, two



Figure 40.--Henry E. Wildhagen, Free Public Library, Washburn,
1904-1905.



Figure 41.--Union Passenger Depot of the Wisconsin Central Railroad,
Ashland, 1889.

ample waiting rooms, baggage rooms and dining rooms served passengers. The basement held smoking and rest rooms for men, storage space and boiler and coal rooms. The second floor contained railroad offices. When completed and opened to the public, the Ashland Weekly News for 28 August 1889 said, "the depot is a beautiful pile of brownstone and brick. . . ."

The Union Central Depot of the Wisconsin Central Railroad stands as a monument to transportation and its role in the economic growth and development of Ashland. The rugged brown sandstone structure in the Richardsonian Romanesque mode symbolized the hopes of the Ashland businessmen for the future of the city as a major shipping center at a time when Superior and Duluth competed with Ashland for that position.

In the fall of 1889, in the midst of a building boom in which new buildings were completed weekly, Colonel John H. Knight, a prominent Ashland capitalist and citizen and former mayor, began to build a mammoth commercial block on the corner of Second Street and Ellis Avenue in the most central part of Ashland. The Knight Block, built of brownstone at a cost of \$100,000, demonstrated the social and economic progress of Ashland and the importance of one of its foremost citizens. It advertised the product of the Ashland Brown Stone Company, owned in part by Knight. The block was demolished in January 1974.

Colonel John H. Knight commissioned the architectural firm of Conover and Porter of Ashland and Madison to draft plans for the three-story block, the upper stories of which would contain the

Knight Hotel (Figure 42). The local newspaper revealed the firm's plans for the building as the foundation was excavated. The large block had 140 feet of frontage on Second Street and 100 feet on Ellis Avenue, more than any block in the city, and enough for six stores on the main street. From each street an entrance and flight of stairs led to the upper floors. The design featured a central tower that rose above the structure on Second Street. Of special importance was the building's enormous size and its brownstone building material. The article observed that "the front of the building on Second Street and on the avenue will be built of brownstone." It continued that "the block will be a model of the perfection of architecture."¹⁰³ The plan called for the division of the first floor into eight spacious, well-lighted stores, each with its own fireproof vault. It arranged the second floor into offices, all with modern conveniences and eight with fireproof vaults. It divided the third floor into two large social halls with anterooms. Conover promised that the building would be "one of the most convenient in the city. It will be heated by steam and well-lighted."¹⁰⁴

The construction of the Knight Block highlighted the season's building boom. A summary of the building activity appeared in the Ashland Press in the fall of 1890.

Ashland on the whole has a number of business blocks which are a gentle reminder of metropolitan affairs, and is gradually coming to the front with the display of big blocks, to which her business, capital and population entitle her.



Figure 42.--Conover & Porter, Knight Block,
Ashland, 1890, destroyed 1974.

The Knight block, four stories and basement, costing, with steam, water, gas fittings, etc., over \$100,000, the new block being erected by Mrs. Vaughn McKinnon, the Leihy-Garnish block, the grain elevator on the bay front . . . are among the most striking.¹⁰⁵

Born in Kent County, Delaware, John Henry Knight (1836-1903) graduated from the Albany, New York Law School in 1859, and fought in the Civil War, before taking a one-year assignment at the Chippewa Indian agency at Bayfield in 1869. Once in Bayfield he worked for several years as register of the land office. In 1880 Knight moved to Ashland, founding the Superior Lumber Company, which eventually controlled one of the largest timber tracts in northern Wisconsin. He served as local attorney for the Wisconsin Central Railroad, as organizer of the Ashland and Superior Railroad, and as mayor of Ashland. The Knight Block was one of his many business interests.¹⁰⁶

Pen and Sunlight Sketches of Duluth, Superior and Ashland, an illustrated pamphlet published in 1892 that promoted these three Lake Superior communities, explained that the Knight Block was erected by Colonel John H. Knight, one of the area's most prominent financiers, who also ran the hotel. The pamphlet described the attributes of the Hotel Knight.

By all odds the most elegant, most complete and most popular hotel in Ashland, Wisconsin, is the magnificent Hotel Knight, which was first opened to the public Jan. 4 th, 1892. This magnificent hotel is located at the corner of Second street and Ellis avenue, in the most central part of the city. . . . The Hotel Knight is practically fire proof, and is strictly first class in every respect. It is furnished with every modern convenience, elevators, baths, electric lights, and has steam heat in every room. There are sample rooms, music hall, wine and billiard rooms in connection, and every appointment is excellent in its details. The

building cost over \$200,000 and the furnishings were put in at a cost of \$20,000. The structure is five stories in height, and is built of brown stone. It measures 140 x 100 feet in dimensions and in design is ornate and massive. The guest rooms number fifty, and are all furnished equally comfortably; while the cuisine is equal to that of the best hotels in the West. The rates are from \$2.00 to \$3.00 per day, and every guest receives the greatest care and attention.¹⁰⁷

The hotel opened 4 January 1892. On the third floor of the block the hotel had fifty sleeping rooms. On the fourth floor it had a dining room that seated 150, kitchen, wine rooms, billiard room, and several sleeping rooms. The tower held four sleeping rooms with a view to Bass Island and beyond. Knight hired a staff who had gained experience at some of the finest hotels in the West. He bought out the competing Chequamegon Hotel and tore it down.¹⁰⁸

The Superior Daily Leader observed the opening of the Hotel Knight and called the Knight Block "the finest building in Ashland." It noted that the brown sandstone block stands as "a tribute to one of Ashland's foremost citizens, in whom every Ashlander, regardless of party, takes pride."¹⁰⁹

Thus, in erecting a large, solid, Richardsonian Romanesque style commercial block and hotel building of locally quarried brown sandstone, John Knight stated his position among the men of northern Wisconsin, and advertised the product of his quarry. This building contributed to the importance of Ashland and from it the townspeople derived a sense of value and pride.

In May 1890 Congress authorized the construction of the United States Post Office at Ashland.¹¹⁰ Congress appropriated funds for the site and the construction in August 1890 and March 1891.

Located on the northwest corner of Second Street and Sixth Avenue West, the Ashland Post Office was designed in the Richardsonian Romanesque style of architecture by Willoughby J. Edbrooke, supervising architect of the United States Department of Treasury. It was constructed by Forster and Smith of Sault Ste. Marie, under the supervision of Horace P. Padley of Conover, Porter and Padley, architects of Ashland, between August 1892 and May 1894. The walls of the building are of Lake Superior brownstone from the Prentice Quarry at nearby Houghton Point. The building went up during the years that Ashland vied with Duluth and Superior for a position as a major port on Lake Superior.

The Ashland Post Office is a rectangular structure, measuring fifty feet in width by eighty feet in depth, and standing two and one-half stories on a raised foundation (Figure 43). A roof of intersecting gables pierced by dormers covers the building. A square tower with a round-arched open belfry with balustrade and pyramidal roof rises from the main mass at the southeast corner. A straight-forward treatment of rock-faced random ashlar finishes the walls. This is highlighted by such decorative carving work as the foliated capitals on the short clustered columns that flank the main (east) entrance at Sixth Avenue West. Large round-arched windows and entrances from Second Street and Sixth Avenue West on the first story give way to smaller paired rectangular windows on the second story and still smaller arched windows in the attic and tower. A one-story, flat-roofed addition for a federal court at the rear (north) of the structure is of similar stone.



Figure 43.--Willoughby J. Edbrooke,
Ashland Post Office,
Ashland, 1892-94.

The post office occupied the entire first floor, with public lobbies approached through entrances on Second Street and Sixth Avenue West. Officials of the United States Land Office, the Indian agency, and the collector of customs occupied the seven offices of the second floor. The third story contained five rooms. At the southeast corner a winding stair led from the post office to the tower.

In the final days of 1889, the Ashland Businessmen's Association promoted with renewed vigor a project discussed for five years previously by residents, businessmen, and politicians of Ashland and northern Wisconsin to secure a public building for Ashland. Competing aggressively with other cities in this matter, the association brought before Congressman Myron H. McCord a report outlining reasons for securing this building for Ashland and describing the commercial importance and advantages of this city over others.¹¹¹ Citizens of Ashland petitioned for McCord's energetic and earnest support. Their efforts succeeded; on 12 January 1890 a bill for a public building in Ashland reached the Senate.

Ashland businessmen advanced many arguments for constructing a government building here. This was not unexpected; the community regarded the members of the Ashland Businessmen's Association as "men who [had] succeeded in their private business, and who recognize the future in store for Ashland, and the necessity for advertising its resources."¹¹² The association argued that the number of federal offices located here and the volume of business transacted through

them proved the need. Furnishing suitable quarters under one roof for the Indian agency, collector of customs, register and receiver of the land office, and the post office would offer citizens greater convenience and save annual rental amounting to \$5,000, eventually enough to pay for the cost of the new structure. The association felt that a port with over 3,000 arrivals and clearances was entitled to police courts and some recognition. Moreover, the businessmen's association hoped the decision to build a government building in Ashland would establish a federal court in Ashland to handle lawsuits related to problems on the reservation, lakes, at the docks, and trespass on government property. It pointed out the strengths of the prosperous and rapidly growing commercial center of Lake Superior, noting the sharp increase in population from 931 in 1880 to 16,000 in 1889, the capital improvements in 1889 of over \$1 million, and the value of commerce in the city for the previous year of \$21,257,000.¹¹³

The bill for a government building called for the acquisition of a site and the construction of a building costing no more than \$100,000 in total. President Benjamin Harrison signed the bill into law on 22 May 1890. It read as follows:

Be it enacted by the senate and House of Representatives of the United States of America, in congress assembled, that the secretary of the treasury be, and he is hereby authorized and directed to acquire, by purchase, condemnation or otherwise, a site, and cause to be erected thereon a suitable building, including fireproof vaults, heating and ventilating apparatus, elevator and approaches, for use and accommodation of the United States postoffice and other government offices, in the city of Ashland, state of Wisconsin. The cost of said site and building complete, not to exceed \$100,000.¹¹⁴

Subsequently Congress appropriated funds. On 30 June 1891 it appropriated \$30,000 for the purchase of the site and the commencement of construction, and on 31 March 1891, \$70,000 for the completion of building.¹¹⁵

The secretary of the treasury sought a "centrally and conveniently located" lot for sale in October 1890. Businessmen and property owners on the east and west ends of Ashland competed with each other to secure the location of the government building in their own end of town, and with good reason. After its completion and occupancy, six or more new blocks opened or were planned at or near the intersection of Second Street and Sixth Avenue West. "The location of the government building probably had something to do with the new buildings going up in this locality," stated the local press.¹¹⁶ A special agent for the treasury department inspected over ten sites and examined offers of sale by private individuals. In January the department purchased part of the court house park from the county board for \$6,000. This parcel included eight lots of the court house square--with 100 feet of frontage on Second Street, 300 feet on Sixth Avenue West, and 100 feet on Front Street.¹¹⁷

For the next six to eight months the supervising architect reviewed the space requirements of occupants of the proposed building.¹¹⁸ Little information on the design and plan of the building was offered to the public with one important exception. An official for the treasury department, Frank Grygla, investigated the qualities of Ashland brownstone as a building material, which led the Ashland

Press to speculate that the Ashland Post Office would be built of brownstone--Ashland brownstone.

It is a significant fact that a federal officer, connected with the department which has charge of public buildings, should make a thorough investigation of the merits of Ashland brownstone.

And it is eminently satisfactory when he reaches the conclusion that the brownstone is all, and more than has been claimed. The brownstone industry has already become one of our most important industries, and the market is expanding every year, so that the output will be increased beyond expectation. Not alone is the stone without a peer for a handsome building, but in trimming brick buildings, and for curbing it is unequalled, Mr. Grygla's visit here at this time, also suggests the probability that the \$100,000 public building is [sic] will be built of this stone.¹¹⁹

Grygla's own comments on the stone, in his letter to Edbrooke, were reported by the Ashland paper.

The stone from the Prentice quarry has been thoroughly tried in many prominent buildings throughout the country. The Milwaukee court house has been built twenty years and can be examined today, with the proof of the durability of the stone. Here in Minneapolis are several magnificent stone buildings put up of the same Lake Superior quarries, and one of them I will name is the Lumber Exchange building, which has been put to a severe test while on fire in the winter of 1891. The building is twelve stories high and the fire burned out all the floors from top to bottom, but the stone structure was left without scaling or checking a particle of the stone work anywhere around the windows, halls and door openings where the flames were pouring out. This should well speak for itself and satisfy the most searching investigation that the stone is capable of resisting any weight put up on it.¹²⁰

On its front page for 19 September 1891, the Ashland Press announced that the sketches and plans for the public building had been completed by Edbrooke, and reviewed by most of the federal agencies required to do so, and approved by the secretary of the interior.¹²¹ Once the postmaster general examined them, working

drawings would be prepared, bids for construction advertised, and work begun. Most importantly the reporter again noted that the structure probably would be built of brownstone.

Another interesting hint which I secured today was that the building will probably be built of brownstone. While my information was not absolutely accurate, I think it entirely safe to reach this conclusion.¹²²

The Ashland Press confirmed the use of brownstone in the public building nearly one year later, on 27 August 1892, in an article titled, "Of Brown Stone: Ashland's Public Building to be Built of Home Material." The article, after summarizing the instructions to Horace P. Padley of Ashland, who had been appointed by the treasury department to superintend construction, stated: "Another important matter which will please every Ashlander, is the fact that the building proper, that is, the facing,--is to be of Prentice brownstone."

Two months later, on 22 October 1892, the Ashland Press fully described the attributes of the local brownstone selected for the Ashland Post Office and optimistically analyzed the role of the rapidly expanding brownstone industry in Ashland's stature as a shipping port. Titled, "Our Own Stone: The Government Building to be Built of Prentice Stone: Will be One of the Finest of its Size in the United States," the article lavished unrestrained praise on stone taken from the Prentice Quarry. Significantly, it stated, not one word about the style of architecture, reflecting, perhaps, the rather mechanical, uninspired character of designs for federal

buildings generated by the supervising architect, who neither knew nor cared about the environment in which they would be placed.

The furnishing of the brownstone for the government building has been awarded to the Prentice Brownstone company and is now being delivered on the ground. It is undoubtedly the finest brownstone that has ever been put into any government building in the United States. It is between a maroon and a cherry color and lights up most beautifully in the sun, works easily, hardens rapidly after it is laid in the wall and does not disintegrate or discolor by age. We think Ashland can pride herself on the finest government building of its size ever built.

The stone is absolutely fireproof, as is shown by the burning of the twelve story building at Minneapolis without even effecting the window, hall or door openings, where the flames were pouring out during the burning of the whole building from top to bottom.

It has since been repaired without removing a single block of stone. Had the building been built of limestone or granite, it would have become simply a pile of broken stone.

Ashland county can boast of more and better brownstone than all the rest of the United States, or, we may say, the world, and it is only a matter of time when this stone is to be shipped to all parts of the United States in immense quantities. It must soon equal the large shipments of lumber now being made from Ashland, and we believe in time will even equal the shipment of iron, and, like the iron shipments, will increase from year to year for all time to come, for the supply is practically inexhaustible, and is bound to assist largely in making Ashland the largest shipping port on the great chain of lakes, as the official United States census of 1890 shows that Ashland has already attained third place and is fast crowding Chicago and Buffalo for first place. If the brownstone and iron shipments increase at the rate they have for the past four years, the next United States census will show Ashland the greatest shipping port on the great chain of lakes. This beautiful stone is being quarried alongside of and from the same area as the huge monolith for the World's Fair, by the above company.¹²³

On 29 June 1892 Edbrooke authorized the postmaster at Ashland to advertise in the Ashland Weekly Times and the Ashland Daily Press for bids for the erection and completion, except plumbing

and heating apparatus, of the Ashland Post Office. He transmitted copies of the drawings and specifications for the use of those in the Ashland vicinity submitting bids.

Edbrooke accepted on 13 August 1892, with the approval of the acting secretary of the treasury department, the proposal of the lowest bidder, Forster and Smith of Sault Ste. Marie, to furnish the labor and materials for erecting the building for \$72,730, and sent instructions to Padley.¹²⁴

Full instructions from the supervising architect arrived in Ashland on 27 August 1892. They required erecting the building according to that office's plans and specifications, required the submission of samples of all materials for that office's approval, and called for the use of "Prentice brown sandstone for facing and approved hard, sound limestone, granite, or Gneiss for foundation." The agreement specified that the building be completed within fifteen months.¹²⁵

Jeremiah O'Rourke, successor to Edbrooke, let the contract on 12 January 1894 for heating and ventilating the building to Charles B. Kruse of Milwaukee for \$6,692.¹²⁶ Work began on 15 August 1893 and the building was occupied in May 1894.¹²⁷ As the building went up the only discussion of the project in the local newspaper concerned the stone carving. Scott and Walker, contractors of Minneapolis, cut the stone for the building. In an article titled, "Carve the Stone," the Ashland Press for 31 December 1892 described the process of preparing the material and noted that

three-fourths of the dozen stonecutters employed on the job were from Ashland, while the remaining were from Minneapolis.

The work done on a number of the pieces shows that the building will be a beauty. Large panels six feet by ten, for the front of the building, have been completed. They are artistically dressed, and are very neat. Much of the work is simply plain chiseling of rough blocks for the sides.

There is a large amount of stone piled up in the court house yard to be fashioned over, and the workmen say that by working full force every day, they cannot finish it before June 1st. Work will be begun in the early spring laying the blocks. According to contract the whole thing must be done before Sept. 1st. The foundation of the building is entirely completed now, and the brownstone wall is finished about six feet in hight [sic] above this.

The Ashland Post Office shows little imagination in its design. This is due in large part to the cumbersome and involved process by which it was created and the limited role of the people of Ashland in that process.¹²⁸

In comparing the government building in Ashland with one of similar cost, design, and date in Marquette, Michigan, it is evident that people in both communities desired a building executed in native stone but felt a sense of overriding pleasure at having secured so important a building at all. In 1881 Congress appropriated \$100,000 for a United States Custom House, Post Office, Court House, and Government Building at Marquette. The project took nearly ten years to complete. The treasury department purchased the site in 1883. M. E. Bell and Will Freret supervised for the treasury department the preparation and revision of drawings for a Richardsonian Romanesque style masonry structure, clearly derived from a source common to the Ashland building. Construction contracts

were awarded in 1888, and the building completed and occupied in 1890. The people of Marquette preferred a building of native stone but got one that had as much stone as the budget could afford. The Marquette Mining Journal for 24 March 1888 discussed the plans and specifications, then having just arrived from Washington.

The material used will be pressed and moulded brick with terra cotta and rock-faced stone trimmings, although the specifications state that "bidders must state what additional amount, if any, they will charge to substitute, instead of pressed and moulded brick and terra cotta, sandstone or limestone, cut in the same shapes as nearly as possible, as the drawings provide for the moulded brick." This makes it possible that the building may be constructed of Marquette or Portage Entry sandstone, though in any event it will be the handsomest public building in northern Michigan.

The same newspaper for 6 July 1889 described the indigenous materials of the Marquette government building as follows:

The building is of pressed red brick with trimmings of Portage Entry sandstone, roof and cornice of Lake Superior copper. The superstructure rests upon a foundation of rock faced sandstone.

The Ashland Post Office is what is termed a second-class fireproof building: the exterior is stone and a portion of the interior is fireproof.

The first floor is of fireproof construction, with brick arches sprung between iron beams, the soffits of which are protected by specially molded skewbacks, and the columns supporting the second floor protected with terra cotta. The other floors and roof are framed in wood.¹²⁹

The building featured first-class materials on the interior as well as exterior.

The finishing lumber of the basement and attic is white pine, and of the first and second stories, including main stairs, both sides of the post-office screen, vestibules, etc., quartered white oak, and window frames,

frames, sash, and trim, of white pine. All the floors of the first, second, and third stories are laid with maple, except the public lobby and stair hall in the first story and the toilet room in the second story, which are tiled with marble having a white field and dark borders.¹³⁰

Even the local newspaper noted the high quality of the building's materials and construction.

When completed, it will be one of the most elegant structures in Ashland. The feature of the building will be its completeness throughout. There will be no poor materials.¹³¹

In its annual edition for 1893, the Ashland Press commented on the city's public buildings and noted:

The city of Ashland has one of the most beautiful public buildings in the State of Wisconsin. Congress recognized the importance of the "Garland City of the Inland Sea" with an appropriation of one hundred thousand dollars for the erection of a public building in Ashland. . . . According to the specifications as laid down by Uncle Sam, all materials are the best that money can buy. . . . The new building is built of native brownstone, procured from quarries adjacent to Ashland.¹³²

In spite of the lengthy and often complex process involved in the erection of governmental buildings, the Ashland Post Office was a simple, though somewhat mechanical statement in local brownstone of the presence of the federal government in the midst of an emerging port on Lake Superior. The people of Ashland saw not necessarily a post office and other federal agencies, but the affirmation of good government created out of local materials, which could improve Ashland's importance in the face of fierce competition from Duluth and Superior. Unfortunately for Ashland, Duluth emerged as the major shipping port on Lake Superior.

Superior, on the southern shore of Lake Superior's western tip, grew as a shipping port for the iron ranges of Minnesota and the agricultural lands of the Northwest. It extends across a flat plain at the confluence of the lake on the northeast and the St. Louis River on the northwest. Across the lake and river on a range of hills lies Duluth. Two long thin points of land, formed by the waves of Lake Superior acting against the silt carried here by the river, extend toward each other forming a natural harbor. Here grain elevators, coal cranes, and ore docks are the hub of the activities associated with the loading and unloading of freighters and trains.

Although French explorers, fur traders, and missionaries arrived in the seventeenth and eighteenth centuries, the first permanent settlers came to Superior after the signing of the Treaty of La Pointe in 1854, which erased Indian title to the region. Then the completion of federal land surveys, news of the building of the locks at Sault Ste. Marie, and the prospect of a railroad from the head of Lake Superior to Puget Sound in the state of Washington, led to a vision that Lake Superior would become a transportation, commercial, and industrial gateway. Some of the nation's most prominent businessmen, financiers, and politicians collaborated in promoting and developing a townsite at Superior at the head of the lake and in seeking federal appropriations for harbor improvements, public surveys, and a railroad to the West. Then R. R. Nelson, Judge D. A. J. Baker, and Colonel D. A. Robertson of St. Paul, later joining forces with Henry M. Rice, also of St. Paul, claimed land

at the western end of Superior. Shortly after southern bankers and politicians--Washington banker William W. Corcoran, Mississippi Senator Robert J. Walker, Kentucky Congressman John C. Breckenridge, and others--speculated in land and developed the eastern portion of Superior.

Superior boomed when rumors of proposals for railroads reaching here stirred. Although a railroad reached Duluth in 1870, the first railroad, the Northern Pacific, did not reach Superior until 1881. The Panic of 1857, the Civil War, and an economic decline in the 1870s slowed the project, but Superior experienced a rush of activity by the 1880s, when the construction of the Northern Pacific was completed from Puget Sound to Superior. In 1884 the first iron ore was shipped from the Vermillion Range in Minnesota, enhancing business activity at Superior.

In the midst of this activity New York and St. Paul financiers, headed by General John Henry Hammond, platted West Superior in 1885 and gave lots to settlers to induce them to come here. Scandinavians, Finns, Canadians, Germans, and Poles arrived to work as lumbermen, miners, and stevedores. Within five years numerous grain elevators, docks, warehouses, commercial blocks, schools, and churches went up. Between 1890 and 1900, the population of Superior made that city the second largest in Wisconsin. Although Superior rivaled neither Chicago as a commercial center nor Pittsburgh as a steel manufacturer, in spite of the hopes of its founders, it shipped and stored millions of tons of ore and millions of bushels of grain yearly. But the development of the Duluth

harbor offered more direct access from the Mesabi Range, and Duluth, not Superior, became the major shipping center of the Lake Superior region.

In the early 1890s the Land and River Improvement Company of Superior invested \$360,000 in the construction of three commercial blocks in Superior. All were named for the places of origins of the community's early investors and promoters. The Minnesota, Washington, and Berkshire blocks stood in the commercial center of Superior.¹³³ The finest of these was the Minnesota Block, designed by the architect Charles Coolidge Haight of New York City, in the Neo-classical Revival style of architecture, and built of pressed brick from Illinois and trimmed with red sandstone from Portage Entry (Figure 44). It was said to present an appearance of "solidity and strength combined with symmetry and elegance."¹³⁴

The Minnesota Block stands at the southwest corner of Tower Avenue and Belknap Street, once a major intersection. It is just north of a square that contained the Massachusetts Block and the Washington Block, a three-story structure, costing \$80,000, and built at the same time of light-colored LaSalle brick with cream-colored terra cotta trimmings made in imitation of cut limestone. The Berkshire Block, a two-story Kasota limestone structure was also under construction at Tower Avenue and Winter Street, at a cost of \$80,000.

The four-story Minnesota Block extended for 150 feet on Tower Avenue and for 130 feet on Belknap Street. The building is of cage construction made fireproof with tile arches laid over iron



Figure 44.--Charles C. Haight, Minnesota Block,
Superior, 1891-92.

girders and posts, floors laid on a cement bed covering the tile arches, and outer walls of brick and stone. H. H. Main of Madison, representative for the German-American Insurance Company, noted "It is the best insurance risk I ever saw--it couldn't burn if it tried."¹³⁵

The Minnesota Block, like the Berkshire and Washington blocks, was finished in quartered oak with plate-glass windows. Unlike the others, its stairways were finished in marble.¹³⁶

John Henry Hammond (1833-1890) organized the Land and River Improvement Company to develop quickly "an obscure frontier village into a modern city," between 1886 and 1892. The Land and River Improvement Company carried out business on a magnificent scale "laying out miles of streets with paving, water mains, sewers and other conveniences, and erecting docks and modern buildings at different points, as well as encouraging the location of numerous industries which helped to build up the embryo city." Experienced at city building through his activities at Chillicothe, Missouri, and Clinton, Iowa, and in railroad building through his promotion of the Manitoba and South Western Railroad, Hammond assessed the prospects of building a city at Duluth and Superior and concluded that West Superior would be the most desirable location for a future city. The city was platted in 1886, and Hammond organized and began managing the Land and River Improvement Company. Despite the reservations of some about building a city in a swamp, Hammond attracted speculators and investors to the Land and River Improvement Company because he carefully planned and executed details. Besides

the townsite, he promoted the Northern Pacific Railroad, the Eastern Railroad of Minnesota, the Duluth, South Shore and Atlantic Railroad, and the Lake Superior Terminal and Transfer Company. Hammond was born in New York City, educated as a civil engineer at the University of Virginia, and studied horticulture in Spain and Switzerland.¹³⁷

Charles Coolidge Haight (1832-1917), the son of the Reverend Benjamin I. Haight, assistant minister of Trinity Parish in New York City, was steeped in the Gothic work of Richard Upjohn. After studying law for one year at the Columbia Law School and fighting in the Civil War, Haight prepared himself to practice architecture by studying in an architect's office and traveling abroad. He practiced by himself in New York City, designing many churches and college buildings in the Gothic tradition.¹³⁸ Hammond's connections and the connections of other investors in the Land and River Improvement Company with New York City probably led to the selection of Haight as architect for the Minnesota Block.

F. A. Fisher and Company began construction of the Minnesota Block in the summer of 1891, and completed it by September 1892 at a cost of \$225,000.¹³⁹ James C. Dawkins, a dry goods store, occupied the basement and ground floors. The Land and River Company, and the West Superior Iron and Steel Company, were among the first occupants of the office space on the upper floors. The Superior Daily Leader remarked that "the Minnesota, Berkshire and Washington blocks, now well on the way toward completion form a trio of magnificent business blocks that would do credit to a city older and more pretentious than Superior."¹⁴⁰

New York speculators and a New York architect collaborated to produce the Minnesota Block, a pretentious building of pressed brick from Illinois, trimmed with only a token amount of red Portage Entry sandstone. This block exemplifies the less frequent use of Lake Superior red sandstone by builders in Superior than by builders elsewhere in the region of the Jacobsville formation and the Bayfield group. Although this may be attributable to the growing popularity of brick and Neo-classicism, more than likely it is a result of being situated in a "swamp" at the fringe of the geological formations, where less desirable red sandstone was available, and where the influence of the rocky environment of Lake Superior was less intense. Builders in Duluth, on the other hand, favored red sandstone.

Typical of red sandstone buildings in Superior is the "elegant and substantial" double house built in 1891 by T. W. Marble at 1311 John Avenue (Figure 45). This building and similar dwelling blocks then going up all over the city were termed "monuments to the prosperity and solid growth of the city."¹⁴¹ This three-story double house with a mansard roof measures forty-five feet by fifty-five feet in plan and is brick with a solid brownstone front. Two distinctively different towers, the one with a pyramidal roof, the other with a hexagonal roof, rise above the full height of the building at the center of each house unit. These individualize each house and render a picturesque appearance to the building. A one-story wooden porch is attached to the front, giving shelter to the entries. The house cost \$14,000, resembles the designs of



Figure 45.--T. W. Marble Double House,
Superior, 1891.

Barber and Barber, architects of Superior, and as easily could have appeared in Marquette, the Copper Country, or Ashland.

In 1890 Henry D. Minot, president of the Eastern Railway Company of Minnesota, an affiliate of the Great Northern Railroad, which had laid a track from St. Paul to Superior, and a leading promoter of the development of Superior, built the Trade and Commerce Building at the northeast corner of Broadway and Hammond Avenue (Figure 46). He commissioned Clarence H. Johnston of St. Paul to design a five-story block, "the highest and most substantial structure in the city," in the Richardsonian Romanesque style of architecture, intending to use it as a grain exchange. It was constructed of "solid stone, the two fronts handsomely trimmed with rough cut stone of different shades."¹⁴² Minot used pinkish yellow Southern Potsdam sandstone in this monumental and important structure, demonstrating a tailing off of the employment of red Lake Superior sandstone (Northern Potsdam) in the westernmost section of the Bayfield group. Many predicted the Trade and Commerce Building would serve as a model for other good buildings. Stately and beautiful, massive, substantial and graceful, this structure would "educate the eye and taste of the people."¹⁴³

The Trade and Commerce Association, a corporation comprised principally of members of the chamber of commerce, who leased the entire building, advertised for memberships and office space in the structure with an illustration of the substantial stone building itself to give evidence of the prestige and security of the



Figure 46.--Clarence H. Johnston, Board of Trade
and Commerce Building, Superior, 1890.

organization and any business that occupied its building¹⁴⁴ (Figure 47).

Clarence H. Johnston, the architect of the Trade and Commerce Building, studied architecture at Massachusetts Institute of Technology, and in 1886 opened a practice in St. Paul. There he designed many major public buildings, churches, and houses. In 1901 the Wisconsin Board of Control retained Johnston and he drew plans for many state buildings.¹⁴⁵

Minot awarded the contract for the masonry work to Ring and Tobin of Superior, the iron work to Herzog Brothers of Minneapolis, and the fireproofing to the Pioneer Company, also of Minneapolis. Construction began in May 1890. The building was completed one year later.¹⁴⁶

Together a St. Paul speculator and a highly trained and well-known St. Paul architect produced the Trade and Commerce Building, which stands "alone in its magnificence" as a symbol of Minot's faith in the future of Superior." They rejected the red Lake Superior sandstone in favor of lighter sandstone from the nearby formation, indicating their obliviousness to the red material to the east.

The Chequamegon Bay and South Shore areas of Lake Superior in Northern Wisconsin grew as people thought the natural harbors at these ports would become a gateway of commerce and industry after the locks at Sault Ste. Marie opened, and after the Northern Pacific Railroad connected Lake Superior with Puget Sound. Slightly less rugged in its rocky and wooded physical appearance than Marquette and the Copper Country, the area possesses an equally harsh climate.

**MEMBERSHIPS.****\$100***(One Half Payable at Time of Election)*

MEMBERSHIP LIMITED AT THAT RATE TO 100

Fine Offices to Rent at Reasonable Terms to Grain Men

Send Applications to

H. A. GEORGE, Secretary.

Room 7,

TRADE AND COMMERCE BUILDING.

Figure 47.--Board of Trade and Commerce Building.
Advertisement in Superior Leader.

After the region's timber and sandstone resources and nearby iron ore deposits were identified and her harbors charted, eastern and urban investors, such as William F. Dalrymple, John Henry Hammond, and Henry M. Rice formed companies, such as the Land and River Improvement Company and the Bayfield Land Company, to develop commerce at the ports of Superior, Bayfield, Ashland, and Washburn. Around these sprang up grain elevators and flour mills, blast furnaces, sawmills, and iron ore, coal, and merchandise docks. The surge in settlement created a need for all kinds of buildings. The architects, builders, and clients frequently used the locally extracted sandstone from the quarries in the Bayfield group giving stability to the architecture, the institutions they housed, and the communities in which they stood. These sandstone buildings belonged to their environment and advertised the product of a local industry. Architects and clients alike recognized the strong local support for the use of Bayfield sandstone.

Since trained architects did not live in the Chequamegon Bay area until the 1890s and those in Superior apparently did not satisfy the requirements of the more worldly clients, eastern and urban clients commissioned architects from the cities of their origins to create sophisticated designs for stone buildings in the Chequamegon Bay and South Shore areas. Seeking to promote the development of Superior, John Henry Hammond, president of the Land and River Improvement Company, selected Charles Coolidge Haight of New York to draft plans for a large, fireproof, Neo-classical Revival commercial block of brick trimmed with Portage Entry

sandstone and built it at Superior in 1891. Motivated by a desire to develop Superior into a center of the grain trade, Henry D. Minot of St. Paul chose Clarence H. Johnston--trained at Massachusetts Institute of Technology and a practicing architect in St. Paul--to plan a tall and substantial office building of yellowish pink sandstone for use as a Trade and Commerce Building. These elaborate and substantial stone and stone-trimmed structures demonstrated the investor's belief in the future growth of the city. The United States Department of the Treasury, using plans prepared by Willoughby J. Edbrooke, its supervising architect, created a predictably uninspired design in the Richardsonian Romanesque style for the Ashland Post Office in 1893. However, at the wishes of local citizens, the post office achieves a local identity through the use of Ashland brownstone.

Local governments sought the services of moderately trained and talented midwestern architects to draft designs for their public buildings. Thus, the Bayfield County Board of Supervisors chose John Nader, an engineer and surveyor of Madison, Wisconsin, to design its brownstone court house at Bayfield in 1886. And, later in 1894, after the seat of county government was moved from Bayfield to Washburn, the board selected Orff and Joralemon of Minneapolis to design the Neo-classical Revival style court house at Washburn. In both cases, the extensive use of the locally quarried sandstone served to establish and maintain the status quo of county government. In the court house at Bayfield the board, influenced by local businessmen, employed sandstone to advertise the area's developing

quarry industry. In the court house at Washburn, the board used local sandstone to meet a primary requirement of the community's definition of a public building.

When the Washburn School Board planned the Walker School in 1892-93, it called on T. Dudley Allen of Cleveland, a man with some training and experienced in court house designs, to create a towered and turreted pile of Washburn sandstone. This structure more than any other established the standard in Washburn for a public building because of its size, location, and material. Ten years later the Washburn Library Board called on Henry E. Wildhagen, a German immigrant with formal training, who had established an architectural practice in Ashland in 1893, and who was earning a reputation as a designer of public buildings through his plans for schools, to design a Neo-classical Revival style Carnegie library. Interestingly the people of Washburn insisted that the library meet its requirements for a public building and built it of native stone.

In 1889 John Knight and C. B. Probert commissioned Conover and Porter of Madison and Ashland to design the Knight Block and Bank of Washburn, respectively. This firm created two flamboyant structures of stone, demonstrating the affinity of the local clients and local architects for the local material.

As much at harmony with its surroundings as any structure was the National Bank Building built at Bayfield in 1908 in the Neo-classical Revival style. Although by then the quarry industry was declining, a building of this style and era most anywhere else would be of white stone. At Bayfield, Archie Donald, a skilled stone

mason of Ashland, crafted the bank building of sandstone from the nearby Pike Quarry.

The businessmen who took pride in local growth and promoted local development realized the importance of building with local sandstone. In nearly every case, the businessmen and chambers of commerce influenced greatly decisions of outsiders and local people alike to build in sandstone. Thus, sandstone architecture in northern Wisconsin symbolized solidity and stability and promoted development.

FOOTNOTES--CHAPTER V

¹Henry Mower Rice (1816-1894), a Vermont-born Minnesota pioneer, U.S. Senator, and Indian commissioner, furthered the interest of the Minnesota Territory by procuring the extension of the preemption right over unsurveyed lands in Minnesota, the establishment of post offices and land offices, and the extension of territorial roads, and by promoting the development of railroads and townsites, including St. Paul. He summered in the Chequamegon Bay area (Dictionary of American Biography, 1929, s.v. "Rice, Henry Mower"; Ashland Press, 20 January 1894).

²History of Northern Wisconsin (Chicago: Western Historical Co., 1881), p. 81.

³The court house at Bayfield hereafter is referred to as the Old Bayfield County Court House to distinguish it from the current Bayfield County Court House at Washburn.

⁴Bayfield County abandoned this court house in 1892, when it moved the seat of county government to Washburn. Subsequently the building served as a town hall, school, community center, and quarters for prisoners of war during World War Two. In 1978 the Bayfield Heritage Association acquired the building and restored the exterior and renovated the interior with funds from the Economic Development Administration and the Upper Great Lakes Regional Commission. It is currently leased to the National Park Service and used as the headquarters for the Apostle Islands National Lakeshore.

⁵The original court house was a two-story frame structure at the corner of Broad Street and Frank Avenue, built in 1873 by B. F. Bicksler (Bayfield County Press, 17 February 1883, 12 July 1884). B. F. Bicksler (1834-1885) came to Bayfield from Virginia in 1856 to work as a carpenter for the Bayfield Land Company. In 1873 he moved to Ashland, where he built the Chequamegon Hotel and other structures before opening a furniture store. Bicksler married the daughter of Elisha Pike, a Bayfield pioneer and father of R. D. Pike, who became one of Bayfield's foremost citizens (History of Northern Wisconsin, p. 70; Bayfield County Press, 7 February 1885).

⁶Bayfield County Press, 24 February 1883.

⁷A pioneer, businessman and village official, Robinson Deerling Pike (1838-1905) led the settlement and development of Bayfield. Born in Meadville, Pennsylvania, the son of Elisha Pike, he arrived with his family at La Pointe on Madeline Island in 1855 to homestead and operate on Pike's Creek a small water mill built by the North American Fur Company ten years before but later abandoned. In 1856 Pike participated with Henry M. Rice and others in the founding of Bayfield. In the 1870s he established a shingle and saw mill; in the 1880s a planing mill, dockage facilities, boating business, and a sandstone quarry company. He promoted logging camps, better roads and docks, electricity and telephones. People regarded Pike as thoroughly progressive, energetic, and forceful, and identified him with all moves to upbuild the community and surrounding country (Robinson Deerling Pike File, Northland College, State Historical Society of Wisconsin Area Research Center, Ashland, Wis.; History of Northern Wisconsin, pp. 83-85; Bayfield County Press, 18 August 1905).

⁸Edward T. Mix (1831-1890), the son and grandson of sea captains, studied architecture in the office of Major Stone, a student of Ithiel Town, who was one of the early professional architects in New Haven. Mix came to Chicago in 1855, where he worked with W. W. Boyington for two years before moving to Milwaukee and establishing his own firm, which specialized in public buildings (Henry F. and Elsie Rathburn Withey, Biographical Dictionary of American Architects (Deceased) (Los Angeles: New Age Publishing Company, 1956), pp. 423-24, 577; A. T. Andreas, History of Milwaukee (Chicago: Western Historical Co., 1881), pp. 1499-1500; The National Cyclopaedia of American Biography, 1921, s.v. "Mix, Edward Townsend").

⁹The Houston County Court House at Caledonia City, Minnesota, was built in 1883, according to plans drafted by C. G. Maybury and Son of Winona, Minnesota. The Old Bayfield County Court House bears a striking resemblance to the Houston County Court House in its simple plainness and use of stone (Minnesota Historic Properties Inventory Form for Houston County Court House, Site File, Minnesota Historical Society, St. Paul, Minn.).

¹⁰Minutes of the Bayfield County Board of Supervisors, 15 February, 1 March, 19 April 1883, Bayfield County Court House, Washburn, Wis.

¹¹Bayfield County Press, 31 March 1883.

¹²Ibid., 7 April 1883.

¹³Ibid., 12 July 1884.

¹⁴Ibid., 21 April 1883.

¹⁵Ibid., 17 February 1883.

¹⁶Ibid., 5 May 1883. In a letter to the editor of the Bayfield County Press, E. M. Coffield of Trenton, New Jersey, also favored the use of sandstone because of its fire resistant quality: "I hope your people will decide to erect a court house of brown stone, with fire proof vaults. I was in Chicago when that city burned, and I can testify that the Lake Superior brown stone was the only stone that was not melted down" (Bayfield County Press, 28 April 1883).

¹⁷Madison Democrat, 29 June 1919; Architects File, Wisconsin State Historic Preservation Office, State Historical Society of Wisconsin, Madison.

¹⁸Madison Democrat, 5 June 1883 (quoted in Bayfield County Press, 9 June 1883).

¹⁹Minutes, Board of Supervisors, Bayfield County, 21 May 1883. The notice read: "Sealed proposals will be received at the office of the County Clerk in Bayfield until noon June 9, 1883 to build a Stone Court House at Bayfield. Plans and specifications can be seen at the office of John Nader (Architect) Madison, Wis. and at the office of the County Clerk in Bayfield" (Bayfield County Press, 26 May 1883).

²⁰Minutes, Board of Supervisors, Bayfield County, 22 June 1883.

²¹Bayfield County Press, 30 June 1883. Pike's Quarry was first opened and developed in the spring of 1883. It is highly probable that only rough-cut stone was available from Pike's Quarry then. On 3 March 1883 the Bayfield County Press noted that Captain R. D. Pike owned "a valuable undeveloped brownstone quarry on the bay near the village" for which he sought a developer. Pike offered a bonus of \$500 to a responsible company which would open and operate it the coming season. The quarry fronted on the bay for at least one mile and the Omaha Railroad traversed the property, both reducing the cost of putting in a system to transport the stone. By 12 January 1884 the Bayfield County Press reported lively activity at Pike's Quarry. In 1883 Cook and Hyde leased and operated the Basswood Island Quarry, located at the south end of Bass Island, one of the Apostle Islands, and first opened in 1868 to furnish stone for the Milwaukee Court House.

²²Bayfield County Press for 12 July 1884 stated that though the county commissioners decided on 19 April 1883 that the cost should not exceed \$30,000, the Lumberman reported that the project cost \$31,000 (Bayfield County Press, 28 February 1885).

²³Dalrymple Farms had been established in 1875 on 2,000 acres near Casselton, North Dakota. By 1936 it would grow to 20,000 acres (The National Cyclopaedia of American Biography, 1979, s.v. "Dalrymple, John Stewart, Jr.").

En route to Bayfield for the summer, William F. Dalrymple stopped at the Knight Hotel where he expressed to a reporter his belief that Ashland, Washburn, and Bayfield would outstrip Duluth.

"I have the greatest faith in this region. . . . I include all the cities on Chequamegon bay I bought out the interest of Jay Gould and ten or twelve others who intended to make Redcliff the terminal of the Northern Pacific.

"I bought all the land along the shore from Bayfield to Redcliff, and will extend the Bayfield Harbor & Great Western along the shore. . . .

"I regard the interests of Ashland, Bayfield and Washburn as identical. . . . I am positive that the combined cities on Chequamegon bay will outstrip Duluth and Superior. . . .

"We can get better lake rates and equal rates with Duluth and Superior to St. Paul and the west. We are much nearer Chicago, and this puts me in mind that here is a parallel case. Although Chicago is further away from the Twin cities and the northwest than Milwaukee, it has continued to grow right away from. Yes, commercially, we will outstrip the cities at the head of the lake, even if we don't in population" (Ashland Press, 3 June 1893).

²⁴Bayfield County Press, 8 December 1883.

²⁵Lumberman, Bayfield, Wisconsin, 16 February 1885 (quoted in Bayfield County Press, 28 February 1885).

²⁶Quoted in Help Restore and Preserve the Heart of Bayfield's Heritage, a brochure printed by the Bayfield Historical Society to solicit funds to restore the Old Court House (Bayfield, Wis., n.d., ca. 1978).

²⁷Bayfield County Press, 5 February 1904. Washburn, a slightly larger town, is located eleven miles south of Bayfield.

²⁸Ibid., 4 August 1905. The names of officers, directors, and stockholders appeared in the Bayfield County Press for 26 February 1904. The following directors and officers were elected: Theodore F. Wieland, president; M. B. Johnson, vice president; A. H. Wilkinson, cashier; George A. Packard; John Kranzfelder. Stockholders included the following as well: William Knight, Isaac H. Wing, Currie G. Bell, H. C. Hale, Robert Inglis, Luella M. Jones, G. A. Pine, H. Hannum, M. Ryder, J. Andreas, C. T. Andreas, John Pasque, Frank Stark, William Ditters, L. C. Willans, Jacob Johnson, John Swane, Ferd Browns, Gordon Ross, S. L. Bontin, H. J. Wachsmuth, and O. L. Shepherd.

²⁹Ibid., 26 February 1904.

³⁰Ibid., 11 March 1904.

³¹5 May 1905.

³²Ashland Press, 22 July 1894.

³³An advertisement in the Bayfield County Press for 18 August 1905 notified customers that the First National Bank would be located in its new building on or after 22 August. The reference to "will be located" was omitted from the ad on 25 August 1905.

³⁴Ibid., 2 November 1905.

³⁵Ibid., 12 February 1904.

³⁶Ibid., 5 May 1905.

³⁷Washburn Times, 2 November 1905.

³⁸Ibid., 17 January 1881.

³⁹Ibid., 24 August 1889. Though reported as the "Northeast" corner, the bank is on the northwest corner.

⁴⁰Ibid., 31 August 1889.

⁴¹Bayfield County Press, 22 September 1888.

⁴²Washburn Times, 12 January 1889. Andrew Aune of Aune and Overby lost in the fire the Diamond Front Saloon, a large structure on Front Street facing the bay that had been one of the first commercial structures erected in Washburn. Aune visited the Bayfield Brownstone Company within a week after the catastrophe to inquire about securing stone for a new building (Bayfield County Press, 22 September 1888). F. J. Meehan and Peter Nelson rebuilt the Union Block (1889) of solid Bayfield sandstone, laid in coursed rubble on the side and rear walls, and coursed ashlar on the front. The two story commercial block still stands at the northeast corner of Bayfield Street and Central Avenue, directly across from the Washburn State Bank.

⁴³Washburn Times, 24 August 1889.

⁴⁴Pen and Sunlight Sketches of Duluth, Superior and Ashland (Chicago: Phoenix Publishing Co., 1892).

⁴⁵Washburn News, 2, 30 November 1889, 3, 24 May, 21 June, 19 July 1890, and 17 January 1891. John Halloran locally enjoyed a reputation as a first class craftsman. The Washburn News for 2 November 1889 noted that, "John can handle anything in his line from a \$15 wood shed to a \$15,000 bank building, and do it in a first-class manner, every time." Perhaps, the News underestimated Halloran's skills; it should have stated a "\$25,000 bank building."

⁴⁶Washburn News, 27 December 1890.

⁴⁷For a detailed account of the circumstances surrounding Probert's arrest, trial, and sentence, see Washburn News, 10, 17 June, 15, 22 July, 16 September, 27 October 1893, 1 January 1897.

⁴⁸Ibid., 6 October 1893. It is apparent that the Washburn News had anticipated the prominence of the school even at the beginning of construction.

⁴⁹The school burned in 1947.

⁵⁰The Washburn News for 7 July 1893 noted that among three plans for the Bayfield County Court House at Washburn submitted to the county board is "one from T. D. Allen, the school house architect." Although no contemporary document identifies Allen as the architect, the previous reference clearly suggests that Allen was, indeed, the architect.

⁵¹Among his designs were the Harden County Court House, Eldora, Iowa, 1891-92; Blue Earth County Court House, Mankato, Minnesota, 1889; Steele County Court House, Owatonna, Minnesota, 1892; Rock County Court House, Luverne, Minnesota, 1888; and the Second-Empire style remodeling of the Medina County Court House, Medina, Ohio, 1873. See David Gebhard and Tom Martinson, A Guide to the Architecture of Minnesota (Minneapolis: University of Minnesota Press, 1977), pp. 241, 302, 344; Richard Pare, ed., Court House A Photographic Document (New York: Horizon Press, 1978), pp. 215-16; and Richard N. Campen, Ohio--An Architectural Portrait (Chagrin Falls, Ohio: West Summit Press, 1973), p. 314.

⁵²Washburn News, 6, 20 May 1893.

⁵³Ashland Press, 16 September 1893; Washburn News, 30 September 1893.

⁵⁴Washburn News, 24 November, 15 December 1893.

⁵⁵Ibid., 10 November 1893.

⁵⁶Ibid., 6 October 1893.

⁵⁷Article from the Bayfield Press printed in the Washburn News, 15 December 1893.

⁵⁸Washburn News, 11 May 1894.

⁵⁹Ibid., 1 June 1893. Ten years later the Washburn News published a Midsummer Edition that proclaimed the attributes of Bayfield County. It featured illustrations of the Washburn and Bayfield high schools under the heading, "From Our Own Brownstone, Two Piles of Rock Costing \$75,000, dedicated to Education" (Washburn News, 23 July 1903).

⁶⁰The striking resemblance of the Walker High School to the Duluth Central High School cannot go unmentioned. Since the Walker School was begun a year after the completion of the Duluth High School, it is highly probable that the Washburn School Board and possibly Allen were aware of this major school building in a city less than one hundred miles away. The Duluth Central High School is one of the most prominent sandstone structures in the region (Figure 38). Designed by Emmet S. Palmer and Lucien P. Hall of Duluth, the massive and elaborate high school resembles H. H. Richardson's Allegheny County Court House and Jail in Pittsburgh (1884-87).

Construction began in June 1891 and was completed 15 December 1892 at a cost of \$500,000. The Duluth Central High School is built of solid Iron River sandstone, a Bayfield group sandstone. The Superior Leader for 26 February 1893 noted that the sandstone came from Iron River; Ernest Robertson Buckley, in his document published soon after the completion of the high school, noted specifically that the stone came from the Arcadian Company and the Flag River Company of Cranberry River, located east of Superior in the westernmost portion of the Bayfield group (On the Building and Ornamental Stones of Wisconsin, Wisconsin Geological and Natural Survey, Bulletin 4, Economic Series 2, 1898, p. 217).

The Duluth High School occupies an entire city block on a hillside between Lake Avenue and First Avenue East and between Second and Third streets. The school is three and one-half stories on a raised foundation. Rectangular wings, each measuring 90 feet by 186 feet in plan, and each with steeply pitched hip roofs and tall protruding dormers, flank a central mass that measures 90 feet by 282 feet in plan, and displays conical bays and turrets surrounding the 230-foot-tall clock and bell tower. Although much smaller, the Walker School is characterized by the tower, turrets, dormers and heavy rustication. Whereas the Duluth High School has elaborate carving of foliated ornamentation, cherubs, and grotesque animals, along with an entrance that features three Syrian arches flanked by polished granite columns, the Walker School was generally devoid of elaborate decoration.

Duluth High School held 1,500 students, but is no longer used as a high school. Noteworthy were its auditorium, manual training shops, and physical laboratory, as well as its modern heating and lighting systems.

⁶¹Ashland Press, 16 July 1892; Washburn News, 23 July, 29 October, 5 November, 3 and 12 December 1892.

⁶²For the construction of the Bayfield County Jail, see Washburn News, 25 March, 12 August, 9 September and 20 October 1893.

⁶³Washburn Times, 30 September 1893.

⁶⁴Washburn News, 6 May 1893.

⁶⁵*Ibid.*, 9 March 1894.

⁶⁶Washburn Times, 4 May 1894; Minutes, Board of Supervisors, Bayfield County, 25 May 1894.

⁶⁷Washburn News, 4 May 1894.

⁶⁸Ashland Press, 7 July 1894.

⁶⁹Washburn News, 13 July 1894.

⁷⁰Minutes, Board of Supervisors, Bayfield County, 13 July 1894.

⁷¹Files of the Northwest Architectural Archives, University Libraries, Minneapolis, Minnesota; Gebhard and Martinson, p. 64, 169, 228-29, 323, 349; Files of the Minnesota Historical Society, St. Paul. The birth and death dates for Joralemon are unknown.

⁷²Washburn News, 15 June 1894.

⁷³Minutes, Board of Supervisors, Bayfield County, 27 August 1894.

⁷⁴*Ibid.*

⁷⁵Washburn News, 31 August 1894.

⁷⁶Buckley, pp. 187-89, 217.

⁷⁷Ashland Press, 1 September 1894.

⁷⁸Washburn Times, 17 April 1895.

⁷⁹*Ibid.*, 11 September 1895.

⁸⁰Ashland Press, 17 August 1895.

⁸¹Washburn News, 26 October 1894.

⁸²17 April 1895.

⁸³Washburn Times, 26 June 1895.

⁸⁴James Bertam to W. H. Irish, 12 February 1903 (quoted in Washburn News, 19 February 1903).

⁸⁵Washburn News, 30 April 1903.

⁸⁶Ibid., 21 May, 25 June, 2 July 1903. The cost of preparing the "Beausoliel corner" by removing structures and putting in an alley probably accounted for its rejection. The Washburn News for 21 May 1903 noted that "while the board has some money on hand they have not enough and will be compelled to borrow quite a sum to fix up the site." Olson, on the other hand, agreed to remove a barn from his site by 15 July as a condition of the sale (Washburn News, 2 July 1903).

⁸⁷Ibid., 21 May 1903.

⁸⁸Ibid., 2 July 1903.

⁸⁹Wildhagen's schools, court houses, and libraries include the following: the Beaser School (ca. 1895), Ellis School (1900), Wilmar School, and the Ashland County Court House (1915) at Ashland; the Port Wing School (1903) at Port Wing; and the Carnegie Library (1903-1904) at Bayfield (Architects File, the State Historical Society of Wisconsin, Madison).

⁹⁰Washburn News, 2 July 1903.

⁹¹Ibid., 28 January 1904.

⁹²Ibid., 13 April 1905.

⁹³Ashland Weekly News, 13 May 1885.

⁹⁴Ashland Press, 9 April 1887.

⁹⁵Ibid., 16 June 1888.

⁹⁶Ibid., 19 November 1887.

⁹⁷Ibid., 20 October 1888; Ashland Weekly News, 28 August 1889.

⁹⁸Ashland Press, 19 November 1887. The architect is not identified in contemporary accounts or in the records of the Soo Line.

⁹⁹Ibid., 15 September 1888. Scott and Hubbell were Ashland contractors.

¹⁰⁰Ibid., 20 October 1888.

¹⁰¹Ibid., 20 October 1888.

¹⁰²Ashland Weekly News, 5 January 1889; see also Ashland Press, 15 June 1889. Six pages of plans and elevations for the depot are on file at the Soo Line Railroad Company, Soo Line Building, Minneapolis, Minnesota.

¹⁰³Ashland Press, 12 October 1889.

¹⁰⁴Ibid.

¹⁰⁵Ashland Press, 4 October 1890.

¹⁰⁶Dictionary of Wisconsin Biography (Madison: State Historical Society of Wisconsin, 1960), p. 210.

¹⁰⁷Pen and Sunlight Sketches of Duluth, Superior, and Ashland, p. 169.

¹⁰⁸Ashland Press, 9 January 1892; Superior Daily Leader, 1 January 1892.

¹⁰⁹Superior Daily Leader, 1 January 1892.

¹¹⁰In the 1930s the General Services Administration declared the Ashland Post Office surplus property and transferred it to the city of Ashland. Using Upper Great Lakes Regional Development funds, the city restored the exterior of the post office and adapted the interior for reuse as municipal offices in 1976-77.

¹¹¹Myron H. McCord (1840-1908), a Wisconsin newspaperman, lumberman, and politician, served as congressman for one term, March 1889 to March 1891. Born in Ceres, Pennsylvania, McCord moved to Wisconsin in 1854, settling in Shawano where he logged, lumbered, and published a newspaper. In 1875 he moved to Merrill, establishing and publishing another newspaper. A Republican, McCord served as state senator in 1873-74 and state assemblyman in 1881, and as registrar of the United States Land Office at Wausau in 1884-85. In 1897 he was appointed governor of Arizona Territory (Dictionary of Wisconsin Biography, pp. 256-56).

¹¹²This description appeared in an article, "Ashland Business Men Propose to Make Times Hum," Ashland Press, 23 January 1892.

¹¹³Ashland Press, 7 December, 21 December 1889, 11, 18 January, and 15 February 1890.

¹¹⁴This law and a brief summary of the process to acquire the building appeared in the Ashland Press, 19 September 1891.

¹¹⁵Appropriations and expenditures for the Ashland Post Office are stated in the U.S. Supervising Architect's Annual Report 1893 (Washington: GPO, 1893).

¹¹⁶Ashland Press, 17 August 1895. It was probably the prestige of having a federal building in the locality and the activity surrounding it, rather than any architectural merit of the structure itself, which attracted new development.

¹¹⁷Ashland Press, 4, 11 October, 29 November, 13 December 1890, and 31 January 1891. The site includes lots 9, 10, 11, 12, 13, 14 15, and 16 in the eastern portion of block 72, Vaughn Division of the city of Ashland. In 1892 the Office of the Supervising Architect of the Department of Treasury had under construction forty-six government buildings, purchased sites for twenty-two more, completed eighteen and spent a total of \$6,741,286.71 (Glen Brown, "Government Buildings Compared with Private Buildings," The American Architect and Building News, No. 954 [7 April 1894] 2).

¹¹⁸James E. Blackwell's articles on "The United States Government Building Practice" in the American Architect and Building News, beginning 5 February 1887, discussed practices and legal conditions governing the construction, specifications, the system used in measuring and estimating the cost of building work, and data for determining costs for materials and labor.

¹¹⁹Ashland Weekly Press, 15 August 1891.

¹²⁰Ashland Press, 26 October 1895. Federal government building practices specified that the stone used in government buildings be "hard and durable, close-grained, of good texture, and free from defects and discolorations" and that a sample be sent to Washington, D.C. for approval. They required that the quarry from which the stone was proposed to be obtained be "fully opened and developed, and capable of supplying all the stone required within the time named by the bidder," and that its name be mentioned (James E. Blackwell, "United States Government Building Practices," American Architect and Building News, 22, No. 601 [2 July 1887] 3-7).

¹²¹Willoughby J. Edbrooke (1843-1896) served as supervising architect of the United States Treasury Department from 1891 to 1892, during President Cleveland's administration. Emigrating from England as a youth, he began the practice of architecture in Chicago in 1867. He associated with Franklin P. Burnham between 1887 and 1891, while preparing plans for the Georgia State Capitol at Atlanta (Withey, p. 189).

¹²²Ashland Press, 19 September 1891.

¹²³The monolith was to be a monument to Ashland brownstone as well as a monument to Frederick Prentice, president of the Prentice Brownstone Company. Measuring 113 feet in height, exceeding that of the quarried Egyptian obelisk, this solid brownstone monolith was extracted from the Prentice Quarry and readied for shipment to the World's Columbian Exposition in Chicago. The project was never brought to completion because of the lack of funds to ship and set up the awesome monument. Four twenty-five-foot monoliths, however, in addition to a brownstone life-size statute of a Chippewa chief, a Wisconsin badger carved of brownstone, and bas reliefs of heads of some blacks of brownstone were shipped by Prentice to the World's Fair. The Ashland Press proudly proclaimed that for Ashland fairgoers "the familiar sight of brownstone will greet them everywhere" (31 December 1892).

¹²⁴Edbrooke to the Postmaster, Ashland, Wisconsin, 29 June 1892, Record of the Legislative and Natural Resources Branch, National Archives and Records Service, General Services Administration, Washington, D.C. A listing for Forster and Smith, contractors (James Forster and Edward Smith), 8 W. Portage Avenue, Sault Ste. Marie, appears in the Michigan State Gazetteer and Business Directory for 1893-1894 (p. 1436).

¹²⁵Edbrooke to Padley, 13 August 1892, National Archives. See also Ashland Press, 27 August 1892. Approximately seventy-five construction drawings for the Ashland Post Office are at the Center for Cartographic and Architectural Archives, National Archives and Records Service, General Services Administration, Washington, D.C.

¹²⁶Competing bidders included the following: Funstead and Moore, Minneapolis, \$5,780; Pond, Hasey and Company, Minneapolis, \$5,947; William Rodger and Company, St. Paul, \$6,315; Allan Black and Company, Duluth, \$6,191; A. D. Nepil, St. Paul, \$6,000 (Ashland Press, 13 January 1894).

¹²⁷Ibid., 12 May 1894.

¹²⁸To alleviate these problems the American Institute of Architects advocated a bill, signed into law in 1893, that permitted competition in design of government buildings with a jury of experts deciding the outcome on the merits of the plan. The American Institute of Architects compared the cost of building, time of completion, cost of architect's services, business methods, and character of design in private buildings with that of government buildings. It demonstrated that first-class fireproof government buildings cost 62 percent more, took 300 to 500 percent longer to complete, and cost 3 percent more to design than private work. It pointed out that government buildings frequently were designed by subordinates or duplicated from drawings prepared for another project, and built under the supervision of a man out of touch with the design. Supervising architects Edbrooke and O'Rourke took issue with the report and opposed the bill, claiming that "Government buildings are fully equal to municipal and private work of like magnitude in artistic effect, time of erection and cost of construction" (Glen Brown, "Government Buildings Compared with Private Buildings," American Architect and Building News, 44, No. 954 [7 April 1894] 2-9).

¹²⁹U.S. Treasury Department, A History of Public Buildings (Washington: GPO, 1901), p. 629. According to the Ashland city ordinance the fire limits of the city extended between Vaughn and Ellis avenues to Third and Fourth streets, and from Ellis east to Third Avenue and from Vaughn to Seventh Avenue West for half a block in width on each side of Second Street. Within this region the ordinance prohibited the building of any frame structure and prescribed the issuance of a permit for the repair, enlargement or removal of any structure. The city clamped down on violations to the ordinance in December 1893 (Ashland Press, 16 December 1893).

¹³⁰U.S. Treasury Department, A History of Public Buildings, p. 629.

¹³¹Ashland Press, 1 April 1893.

¹³²Ashland Daily Press Annual Edition, May 1893. It was noted that work was begun on 15 August 1892 and was scheduled for completion by 15 November 1893, although the building was not completed until six months later.

¹³³The Superior Daily Leader for 25 September explained that "the building is named in conformity with the plans adopted by the land company for naming its large blocks. Others are called after Wisconsin, New York, New Jersey, Massachusetts, Washington and Maryland." One group of early investors--Nelson, Baker, Robertson and Rice, were from St. Paul.

¹³⁴Superior Leader, 25 September 1892.

¹³⁵Ibid.

¹³⁶Superior Daily Leader, 17 November 1891.

¹³⁷Commemorative Biographical Record of the Upper Lake Region (Chicago: J. H. Beers and Co., 1905). p. 5.

¹³⁸Alfred Morton Githens, "Charles Coolidge Haight," Architectural Record, 41 (April 1917), pp. 367-69; Dictionary of American Biography, s.v. "Haight, Charles Coolidge;" Withey, p. 255.

¹³⁹Superior Evening Telegram, 20 June 1891.

¹⁴⁰Superior Daily Leader, 17 November 1891.

¹⁴¹Superior Leader, 13 September 1891.

¹⁴²Superior Evening Telegram, 8 November 1890. Minot's untimely death in 1891 in a train accident terminated plans to use the building as a grain exchange. Subsequently the building was subleased and leased to the court, library, and various offices, but never fully occupied. In 1904 the city acquired it for only half the cost of construction and used it for offices until 1970.

¹⁴³Ibid., 27 May 1890.

¹⁴⁴Ibid., 8 November 1890, 25 February 1892.

¹⁴⁵"Forum of Events: Death," The Architectural Forum (February 1937), 70.

¹⁴⁶Superior Evening Telegram, 16 May 1890.

CHAPTER VI

CONCLUSION

Sandstone architecture flourished in the Lake Superior region of northern Michigan and Wisconsin from the 1870s until just after 1900. People building iron blast furnaces, lighthouses, breweries, and mining structures, and people building foundations for all types of structures had taken the abundant and easily available native red sandstone from outcrops or had blasted it out as rubble in the 1850s and 1860s. But people building court houses, city halls, commercial blocks, schools, churches, and houses first employed quarried and finished sandstone blocks beginning in the 1870s in Marquette, Michigan, and a decade later in the Copper Country of northern Michigan and in Bayfield and Douglas counties of northern Wisconsin. Native red sandstone architecture gave the region a unity, harmony, and robustness that matched its rugged and wild landscape. A study of these solid and substantial sandstone buildings shows that the reason they succeeded lay in the interaction of the social, cultural, economic, and environmental factors present in life at that time in the Lake Superior region.

Sandstone architecture attained favor in the Lake Superior region because the growth and prosperity of the region created a demand for all kinds of substantial buildings and the native red

stone was easily procured and transported. Then, too, after a series of devastating fires had destroyed buildings and entire districts in many of the young towns and cities of the region, their residents turned to sandstone as a fireproof material with which to rebuild. With the rush of building activity in the 1880s appeared the popular Richardsonian Romanesque style of architecture. It was uniquely suited for interpretation in the native building stone. Together the style and the stone satisfied the emotional needs of architects and clients alike. Builders found that red Lake Superior sandstone architecture, especially in the Richardsonian Romanesque mode, possessed the ability to convey symbolic meaning. Whether the diverse clients and architects who came to the region expressed that meaning in high style or vernacular renditions, sandstone architecture succeeded.

The imposition of a technological society in this wilderness rich in natural resources created a need for all kinds of buildings. Marquette grew as a commercial, transportation, and financial center in the 1860s and 1870s, after the opening of the locks at Sault Ste. Marie, a railroad, and a modern ore dock at her excellent natural harbor permitted the efficient shipping of iron ore from the mines of the Marquette Iron Range to the large coal fields of the Lower Lakes. Houghton, Hancock, Calumet, Laurium, and other towns in the Portage Lake Mining District of the Keweenaw Peninsula grew and prospered from 1885 to 1904, when the copper mines produced huge profits, after a long period of exploration and development. Ashland, Washburn, and Superior grew and prospered in the 1880s

and 1890s, when railroads and docks facilitated shipping of iron and lumber from nearby mines and forests, and flour and wheat from the wheatfields of the West. Although none developed into shipping centers of the size realized by Duluth, their settlement and development, nevertheless, was substantial. With growth and prosperity the builders of the region imitated the styles and the materials of the larger cities of the Midwest and built their architecture with red Lake Superior sandstone. Thus, the acceptance by the Milwaukee County Board of Supervisors of Bass Island brownstone in 1868 for the Milwaukee County Court House (L. A. Schmidtner, 1869-73) established the reputation and fashion for Lake Superior brownstone from Milwaukee to Marquette.

Great fires that razed buildings, blocks, and districts in Marquette in 1868, in Hancock in 1869, in Red Jacket in 1870, in Washburn in 1888, and in Bayfield in 1883, after these towns had built up and become more populous, caused village and city councils to adopt fire codes and regulations and to acquire adequate fire fighting apparatus and skills. After these disasters most places enacted ordinances that required all structures within certain prescribed boundaries in the central portions of the communities to be constructed of brick or sandstone. The need to build with a fire-proof masonry building material greatly increased the demand for sandstone.

Profit-motivated quarry investors and businessmen in Marquette, Houghton, Ashland, and Bayfield promoted the use of sandstone locally. Quarrymen in Marquette opposed the early

tendency of local builders to "import brick at quite a heavy expense" or to "use lumber in too great quantities." The campaign they mounted against the use of brick and lumber typified tactics employed in the Copper Country and Chequamegon Bay areas. The following article, which appeared in the Marquette Mining Journal for 17 August 1872, just three weeks before the incorporation of the Marquette Brownstone Company, summed up the arguments and conclusions expressed in their promotion:

. . . Nature has placed at our doors a material for building which far surpasses the brick or lumber, seemingly as if not to neglect a single duty which she owes so intelligent and enterprising a people. This material is the sandstone of which the new Methodist Church and the "Superior Buildings" are being erected. Strangers who notice the variegated color in the formation of this stone, and examine its texture, are heard to pronounce it as fine building material as they have ever seen, and ask, at once, why it has not long ere this been generally used; and as the quarries furnish a light and a brown sandstone, in addition to this variegated strata, all of which is of as good quality for building as any sandstone known, it is but a question of time when the major portion of the best buildings of Marquette will be reared by means of these blocks.

Local pride augmented an obvious interest in making profit in this time of expansion. A recent writer, William H. Jordy, has noted similarly that quarrymen and brickmakers launched an attack against cast iron construction in the late 1860s and early 1870s in Chicago, after fires had demonstrated the vulnerability of cast iron, as brick manufacturing facilities enlarged, and as sandstone and limestone quarries opened in Ohio, Illinois, and Michigan.¹ Just as William Le Baron Jenney's Portland Block (1872) in Chicago, the first large office building of pressed brick substituted for stone,

demonstrated proof of the hold which quarrymen and brick builders had on building in the city in the 1870s, Henry Lord Gay's amazingly similar Superior Block (1871-73), the first office building of cut Lake Superior sandstone in Marquette, launched the fashion for stone locally and demonstrated the influence exerted by the quarry interests of the Wolf and Son Company, the Marquette Brownstone Company, and the Burt Freestone Company. Thus, buildings constructed of quarried and finished sandstone throughout the Lake Superior region stood as proof of the advocacy of sandstone quarrymen. In Marquette Peter White, an investor in the Marquette Brownstone Company, no doubt exerted his influence on his fellow vestrymen as they selected skillfully dressed, clear brown Marquette sandstone for St. Paul's Church (Gordon W. Lloyd, 1874-76). In Houghton James H. Seager, an investor in the Hancock Sandstone Land Company, probably influenced other directors of the National Bank of Houghton to select rock-faced and ornately carved, red Portage Entry sandstone for their new bank (Scott and Company, 1888-89). In Bayfield Robinson D. Pike, owner of a newly opened quarry at Van Tassell's Point, likely persuaded other members of the Bayfield County Board of Commissioners to select Bayfield brownstone for the Old Bayfield County Court House (John Nader, 1883).

Throughout the region enterprising quarrymen erected sandstone buildings as advertisements for their developing industry. For example, John H. Knight, investor in the Ashland Brown Stone Company, built in Ashland the Knight Block (Conover and Padley, 1889-91) of stone from his own quarry. Throughout the region

quarrymen, prominent citizens, and members of Businessmen's Clubs promoted the use of the local material in all types of major public buildings. In this way, John H. Jacobs, owner and manager of the Wolf and Jacobs Company quarry, petitioned the Board of Commissioners of the Upper Peninsula Branch Prison to employ an architect guaranteed to create plans for the prison (William Scott and Company, 1885-89) at Marquette that would be executed in sandstone. Similarly, the Board of Control of the Michigan Mining School, comprised of men who represented and supported the developers of Michigan's geological resources, chose red sandstone from the Portage Entry Redstone and Furst and Jacobs Company quarries for its first building, Science Hall, later named Hubbell Hall (John Scott and Company, 1887-89). And the Ashland Businessmen's Association persuaded Willoughby J. Edbrooke, supervising architect for the United States Department of the Treasury, to select brownstone from the Prentice Quarry at Houghton Point for the Ashland Post Office (1890-94).

Between 1885 and 1900 the Richardsonian Romanesque style of architecture made its influence felt on the Midwest. Its massive, ponderous, stone forms brought to the Lake Superior region a form and style particularly appropriate to expression, in fact, almost begging for expression, in the red Lake Superior sandstone, and uniquely capable of declaring symbolically the wishes, dreams, and fears of the generation that then had reached maturity there. The style was named for Henry Hobson Richardson (1838-1886), whose designs for buildings borrowed motifs from the medieval French Romanesque and employed a picturesque massing of towers, porches,

arches, and buttresses in varied colors and textures of stone. The midwestern practitioner, however, used a simplified version of the Richardsonian Romanesque that featured rusticated foundations, low, broadly arched windows and openings, brown and red stone, and foliated ornamentation.

Alan Gowans has stated that the heavy stonework and ponderous forms of the Richardsonian Romanesque created an impression of solidity, an attitude of stability, and a mood of security that met the needs of Americans living in an era of paradox. On the one hand, Americans felt confident and exuberant in the midst of rapid change, on the other hand, they felt disturbed and afraid of the effects of change, upheaval, destruction, and demoralization. Solid, stable, and secure stone buildings symbolized and expressed a sense of permanence and belonging in an environment of uncertainty and impermanence.² In the Lake Superior region, the sense of security symbolized by the solid, massive, red sandstone buildings in the Richardsonian Romanesque style was intensified by the placement of these buildings in the wild and rocky terrain that had yielded the building material itself, and by the close juxtaposition with the wilderness of the cities in which the buildings stood. But additional motives associated with the desire for permanence and stability found expression in the red sandstone architecture and helped shape the cities and towns of the Lake Superior region.

Establishment of territory and protection of status quo, aggrandizement of self and place, profit making, resistance to oppression, resistance to the melting pot, respectability, local

pride and optimism, insurance against strike, altruism, philanthropy, utility, thrift, good sense, and others purposes motivated institutions and individuals to build with Lake Superior sandstone. County and municipal governments established and protected their territories with red sandstone court houses, federal buildings, town halls, and prisons. Men proclaimed their social stature with red sandstone houses, commercial blocks, and libraries. Townspeople saw the reputation of their communities derived from the collection of sandstone architecture built by their residents and their institutions. With solid and substantial sandstone buildings bankers solicited and held depositors, landlords secured tenants for commercial space, mining companies demonstrated their paternalism toward employees threatening to strike, religious groups declared the values of their institutions and the social position of their members, educators stated the values of scholarship and the arrival of cultural maturity, governments denied economic decline, ethnic groups upheld the validity of their native traditions and institutions in the face of the melting pot, and townspeople created a sense of place. Sandstone architecture symbolized permanence, solidity, and belonging and lifted up the spirits of those who beheld it.

Major architectural projects employed the designs of highly trained architects executed in the clearest, finest stone, properly squared, specially dressed, and laid in courses. Lesser projects employed the designs of practitioners with little or no training executed in reddish brown and white variegated rubble stone. In the major commercial centers eastern and urban investors who had

speculated in the region's minerals, timber, and land, and who had developed its cities into centers of shipping, finance, and commerce, demanded the best stone for their architecture and employed the skillful designs of widely traveled eastern or European-educated architects from large midwestern cities. Wealthy and powerful men, such as John M. Longyear and Peter White of Marquette, George C. Sheldon and Jay Hubbell of Houghton, and John Henry Hammond and Henry D. Minot of Superior, commissioned such well-trained architects as Henry Lord Gay and Henry L. Ottenheimer of Chicago, Gordon W. Lloyd and William and John Scott of Detroit, and Clarence Johnston of St. Paul to create churches, houses, commercial blocks, and schools in cultivated styles. These high style sandstone buildings, restrained and scaled to the economic and social conditions of the region, guided the fashion for stone and styles in architecture.

Sometimes men and institutions of means sought the designs of construction supervisors for urban architectural firms that had opened branch offices in the Lake Superior region. Architects and engineers like Demetrius Frederick Charlton and Carl F. Struck in Marquette, and Horace P. Padley in Ashland, often themselves with eastern or European training and experience, skillfully interpreted the designs of the principal architect, developed great sensitivity to the stone building material, and remained in the region to pursue careers independently.

Immigrant groups who provided the region with its labor force and people of ordinary means in towns further removed from the centers of trade and commerce tended to use second grade,

reddish brown and white variegated or mottled stone, roughly cut or in rubble, for their buildings and employed the designs of craftsmen who had learned by experience and observation rather than by formal training. Thus, Amos Harlow of Marquette, the Suomi Synod of the Finnish Lutheran Church, the Red Jacket Village Council, and Robinson D. Pike of Bayfield secured the skills of builders and stone masons who displayed a romantic interest in stone and an innate ability to handle it. These designers, men like Hampson Gregory, a skilled stone mason steeped in the stone building tradition of his native Devonshire, C. Archibald Pearce and Charles K. Shand, obscure architect builders in Hancock and Calumet respectively, and Archie Donald, a stone mason of Ashland, responded directly and intuitively to construction in stone. Although the cultivated, high style renditions in the finest stone--the John Munro Longyear House (Demetrius Frederick Charlton, 1890-92) and St. Paul's Church (Gordon W. Lloyd, 1874-75) in Marquette, and even the Washburn State Bank (Conover and Porter, 1889-90) in Washburn set the standard for others to follow, often the native vernacular structures--Suomi College (C. Archibald Pearce, 1898-1900) in Hancock, the Red Jacket Fire Station (Charles K. Shand, 1898-1900) in Calumet, and the Paul P. Roehm House (Paul P. Roehm, 1895-96) in Laurium conveyed every bit as well, if not better, the sense of relatedness to the environment because they were built by men who responded directly, simply, and intuitively to construction in stone.

In terms of its ability to symbolize meaning, endure the harsh climate, and harmonize with the surroundings, the most

successful sandstone architecture was that of the Richardsonian Romanesque style, which used rock-faced ashlar and foliated carving. The revival of the Neo-classical, spurred by the World's Columbian Exposition in 1893, resulted in a preference for cut ashlar of lighter color. Thus, the picturesque Victorian Romanesque Marquette prison is more successful than the Neo-classical Marquette County Court House (Charlton and Gilbert, 1902-1904), the exuberant Marquette County Savings Bank Building (Barber and Barber, 1891-92) is more fitting than the Neo-classical Revival Sheldon-Dee Block (Henry L. Ottenheimer, 1899-1900) at Houghton, and the massive but graceful Marquette City Hall (Lovejoy and Demar, 1893) harmonizes with its environment better than the Neo-classical Revival Bayfield County Court House (Orff and Joralemon, 1894). Lake Superior sandstone was consistent with the northern environment of the Lake Superior region. And, here, removed from the acids, salts, and pollution found in more urban environments, it is durable. When properly removed from the quarry, particularly when given a rock-faced finish, and when properly laid in the walls, it endures remarkably well. The sandstone architecture harmonizes with its natural environment and appears warm and comfortable in the clear cold skies of the North. Even the pervasive rust-colored dust that covers everything in an iron mining area goes unnoticed on these red stone buildings. The massive, ponderous, red sandstone forms of the Richardsonian Romanesque seem at one with their rugged surroundings.

Sandstone relinquished its preeminence to brick in the Lake Superior region in the 1890s and 1900s. William H. Jordy has noted

that brick manufacturers flocked to Chicago in great numbers after the Fire and introduced the technology of hard Philadelphia pressed brick and brick construction rose in popularity there in the 1880s.³ The effects of this campaign are recorded clearly in The Brickbuilder, "An Illustrated Monthly Devoted to the Advancement of Architecture in Materials of Clay," published in Boston beginning in 1892. The effort contributed to the falling from favor of sandstone architecture throughout the country and to the demise of the Lake Superior quarry industry. Then, too, the appearance in the mid-1880s in Chicago of steel skeletal construction in larger buildings was a factor in the shift from stone to brick. This type of construction required a lighter material to clothe the skeleton. Brick manufacturers touted the desirability, beauty, and freshness of enamelled brick and its ability to produce "beautiful designs in architecture and harmonious blending of colors."⁴

Although the era of sandstone architecture had come to an end, this architecture stands as testimony to the solidity and confidence of an age.

FOOTNOTES--CHAPTER VI

¹American Buildings and Their Architects, vol. 3: Progressive and Academic Ideals at the Turn of the Twentieth Century (Garden City, New York: Doubleday and Co., 1972), pp. 11-24. "The two most expensive Chicago fires of the sixties had occurred in cast-iron buildings in 1868 and 1869" (Frederick and Francis Cook, Bygone Days in Chicago [Chicago: McClurg, 1910], pp. 193ff, cited in Jordy, p. 11).

²Images of American Living (New York: J. B. Lippincott Co., 1964), pp. 350-62.

³American Buildings and Their Architects, pp. 1-82, 378.

⁴The Brickbuilder, 4, no. 1 (January 1895): 23.

APPENDICES

APPENDIX A

SIGNIFICANT QUARRY COMPANIES AND INVESTORS

APPENDIX TABLE A-1.--Significant Quarry Companies in the Jacobsville Formation and the Bayfield Group.

Company/Individual	Capital Stock	Stockholders	Main Office	Incorporation Date	Quarry Locations	Comments
Arcadian Brownstone Co.		A. J. Cheney W. S. Maxwell		1886	S327 T48M R12W Douglas Co. WI	1888 first shipment 1897 still operating
Ashland Brown Stone Co.	\$50,000	John H. Knight William Knight D. S. Kennedy	Ashland WI	1886	S4 T51N R2W Bayfield Co. WI	1890 sold to J. G. Bodenschatz
Ashland Brown Stone Co.	\$100,000	G. A. Bodenschatz J. G. Bodenschatz E. H. Brown	Chicago IL	1890	S4 T51N R2W Bayfield Co. WI	1897 suspended operations
Bass Island Brown Stone Co.		Alanson Sweet Daniel Wells	Milwaukee WI	1868	SE1 SW1 S4 T50N R3M Bayfield Co. WI	
Bass Island Brown Stone Co.	\$45,000	Walter C. Brooks Camberton Leach James S. Ritchie	Superior WI	1898	SE1 SW1 S4 T50N R3M Bayfield Co. WI	
Bayfield Brownstone Development Co.	\$50,000	Francis M. Denison Robinson D. Pike George H. Quayle	Bayfield WI	1892		
Borgeault Stone Co.				1897	S27 T49M R9W Bayfield Co. WI	Leased site from Iron River Red Sandstone Co.
Breckenridge Quarry		Col. Breckenridge		1892	S4 T50N R3M Bayfield Co. WI	Blasted out stone but abandoned work after two or three shipments
Burt Free Stone Co.	\$500,000	A. Judson Burt Hiram A. Burt John Burt William Burt William A. Burt	Marquette MI	1872	S26 T48M R25W Marquette Co. MI	By 1879 idle In 1883 Teased site to J. H. Jacobs
Butler Brownstone Co.	\$300,000	George Barnes Thomas Butler Charles Johnston F. M. Moore C. H. Schaffer	Marquette MI	1891	S14, 15, 22, 23 T48M R21W Alger Co. MI	By 1892 quarry well-equipped By 1895 probably closed
Cook & Hyde		Cook Hyde	Milwaukee WI Minneapolis MN	1883	SE1 SW1 S4 T50N R3M S27 T50M R4W Bayfield Co. WI	1883-88 Teased Basswood Island site from R. W. Lee of Chicago 1886 operated site north of Bayfield Brownstone Co. 1889 sold machinery and equipment from both sites to Prentice
Craig, George		George Craig	Marquette MI	1860s	S26 T48M R25W Marquette Co. MI	Extracted stone by blasting
Cranberry River Quarry		Owels F. H. Quinby		1891-92	S5,8 T50M R7W Bayfield Co. WI	Operated for six months then property acquired by Lake Superior Brownstone Co.
Peter Crebassa		Peter Crebassa	L'Anse MI	by 1881	S25 T51N R33M Baraga Co. MI	

APPENDIX TABLE A-1.--Continued.

Company/individual	Capital Stock	Stockholders	Main Office	Incorporation Date	Quarry Locations	Comments
Detroit & Marquette Brownstone Co.	\$500,000	John H. Bissell Myron E. David H. Hubert Humphrey Alfred Kidder Leonard Laurence Charles H. Little Willard S. Pope	Detroit MI	1889	S35 T48N R25W Marquette Co. MI	1892 renamed Detroit Brownstone Co. 1893 sold personal property and leased site
Duluth Brownstone Co.	\$30,000	John H. Crowley Frank B. Lazier Alexander McDougall	Duluth MN	1887	Lots 1,2, S6 T48N R15W Douglas Co. WI	Extensive local market in Superior and Duluth
Excelsior Brownstone Co.	\$1,800,000	Frederick Prentice Edwin Ellis S. S. Firfield F. E. Goddard L. C. Tobias	Ashland WI	1891	SE1 S13 R51N R2W Bayfield Co. WI	By 1887 had opened quarry on land held since 1857 Predecessor to Excelsior Brownstone Co.
Excelsior Red Stone Co.	\$50,000	Otis W. Johnson Frank E. Robson James B. Seager James H. Seager Samuel L. Smith	Ashland WI	1893	SE1 S13 R51N R2W Bayfield Co. WI	1893-96 produced 220,000 cu. ft. annually 1897 experienced financial difficulties and ceased operations
Flag River Brown Stone Co.	\$30,000	Miller	Hancock MI	1891	S8 T53N R32W 2 miles from Red Rock on shores of Portage Lake Houghton Co. MI	
Furst, Jacobs & Co.	\$180,000	George C. Furst Henry Furst Ernest Heidman John H. Jacobs Peter M. Neu Peter A. Pickel	Duluth MN	1889	S19 T50N R8W Bayfield Co. MI	Leased site from Isaac Ming and operated it until 1894
Furst, Neu & Co.			Chicago IL	1887	S26 T48N R25W Marquette Co. MI Lot 1, S19 T53N R32W Houghton Co. MI	1891 J. H. Jacobs sold out interest and company restructured as Furst, Neu & Co.
Furst, Neu Co.	\$35,000	Howard M. Carter Henry Furst William Garnett Jr. Ernest Heidner Anna M. Neu Peter A. Pickel Ira C. Wood	Chicago IL	1891	S 26 T48N R25W Marquette Co. MI Lot 1, S19 T53N R32W Houghton Co. MI	1893 consolidated with Portage Entry Red Sandstone Co. as Portage Entry Quarries Co.
Grand Island Quarry			Chicago	1866	SE1 S15 T47N R15W Alger Co. MI	Floated stone across bay for construction of Schoolcraft Furnace

APPENDIX TABLE A-1.--Continued.

Company/Individual	Capital Stock	Stockholders	Main Office	Incorporation Date	Quarry Locations	Comments
Hancock Sandstone Land Co.		James Seager	Hancock MI	by 1888	Near Portage Entry on north side of Lake Houghton Co. MI	
Hartley Bros.				1885	S27 T49N R4W Bayfield Co. WI	1885 opened unsatisfactorily 1887 opened at nearby site 1889-92 produced over 300,000 cu. ft. 1897 idle
Hennessey Quarry				1860	S25 T41N R33W Baraga Co. MI	
Ingalls Quarry			Duluth MN	1869	Lots 1, 2, S6 T48N R15W Douglas Co. WI	1873 ceased operations
Iron River Brownstone Co.	\$150,000	J. H. Horton R. I. Tipton Albert C. Titus	Superior WI	1893	S47 T49N R9W Bayfield Co. WI	In 1892 opened and soon transferred to Iron River Red Sandstone Co.
Iron River Red Sandstone Co.	\$100,000	T. V. Badgley S. B. Roberts A. C. Titus	Superior WI	1894	S47 T49N R9W Bayfield Co. WI	
Kerber-Jacobs Redstone Co.		Carl Findeisen S. M. Goodale J. H. Jacobs John Mitchell B. S. Packard D. M. Powell E. H. Tower	Marquette MI	1892	S8 T53N R32W Houghton Co. MI	1893-95 produced over 200,000 cu ft. 1896 market dull 1897 Jacobs sold out
Keweenaw Redstone Co.		D. L. Case Theo. W. Lulling		1891	S22 T52N R33W Baraga Co. MI	
Lake Linden Brownstone Co.		Chicago men		by 1885-89	Thomas A. Trevathan farm on DSS&A railroad 6 miles east of Houghton, Houghton Co. MI	Until 1889 worked irregularly on small scale then leased to Jacob and Israel Schureman.
Lake Superior Brownstone Co.	\$500,000	Varnum B. Cochran William S. Dalliba Alfred Kidder Egbert J. Mapes Jay C. Morse Henry Stafford	Marquette MI	1873	Lot 1, S19 T53N R32W Houghton Co. MI	1883 leased site to Wolf & Jacobs Co. who developed it
Lake Superior Redstone Co.	\$2,000,000	George Barnes C. H. Call D. M. Powell Ernest Rankin Gad Smith	Marquette MI	1891	Lot 3, S19 T53N R32W Houghton Co. MI	
L'Anse Brown Stone Co.	\$500,000	Edward Breitung Timothy Hurley Francis M. Moore Paul Pine	Marquette MI	1875	S25 T51N R33W Baraga Co. MI	1876-78 produced nearly 30,000 cu. ft. 1879 went bankrupt and sold out to St. Clair Bros. of Ishpeming

APPENDIX TABLE A-2.--Continued.

Company/Individual	Capital Stock	Stockholders	Main Office	Incorporation Date	Quarry Locations	Comments
L'Anse Brownstone Co.		W. A. Amberg William O'Brien and other Chicago parties		1893	S25 T51N R33M Baraga Co. MI	
Laughing Whitefish Stone Quarry		George Craig Thomas Craig Mm. F. Deelman Charles Moesinger Henry D. Smith George Wagner Charles Meunter		1871	S25 or 26, T48N R22M Alger Co. MI	1871 operations suspended at a loss because rock did not hold out in uniformly good quality
Marquette & Lake Superior Co.				1889	S35 T48N R25M Marquette Co. MI	1889 quarry opened and under development
Marquette Brownstone Co	\$500,000	Sidney Adams Thomas B. Brooks William Burt S. P. Ely Alfred Green J. H. Jacobs Henry R. Mather Raphael Pumpelly F. P. McNamee Peter White	Marquette MI	1872	S26 T48N R25M Marquette Co. MI	1878 quarry leased to Watson & Palmer
Michigan Red Stone Co.		Charles C. Bloomfield Lawrence H. Field Addison B. Robinson Eugene J. Weeks Thomas A. Wilson		1891	S2 T52N R33M Baraga Co. MI	Leased site from Martin Messner
R. B. Moss/A. Ping Quarry		New York capitalists		by 1889	S26 T48N R25M Marquette Co. MI	1889 channeled and test pitted to determine prospects for quarry
Newport & Lake Superior Brownstone Co.	\$100,000	Richard Blake Frederick M. Gillett John H. Gillett	Marquette MI	1888	Lots 2, 3, 4, 5 S30 T52N R27M Marquette Co. MI	
Peninsula Brownstone Co				1888	S35 T48N R25M Marquette Co. MI	
Pike's Quarry		Robinson D. Pike	Bayfield MI	1883	S33 T50N R4M Bayfield Co. MI	1883 to at least 1897 operated continuously
Portage Entry Quarries Co	\$1,000,000	Henry Furst Ernest Heldmaier Edwin T. Malone Peter M. Neu Peter A. Pickel John Thumlinson	Chicago IL	1893	S19 T53N R32M S18 T53N R32M NE 1/4, Lot 7, S13 Houghton Co. MI S19, 20 T50N R8M Bayfield Co. MI S2 T52N R33M Baraga Co. MI S26 T48N R25M Marquette Co. MI	Consolidation of Furst, Neu & Co. and Portage Entry Red Stone Co.

APPENDIX TABLE A-1.--Continued.

Company/Individual	Capital Stock	Stockholders	Main Office	Incorporation Date	Quarry Locations	Comments
Portage Entry Red Stone Co.		Malone Brothers	Cleveland OH	by 1887	SE1 S18 T53N R32W Houghton Co. MI	
Portage Entry Sandstone Co.	\$1,000,000	Joseph Croze Nathan F. Leopold Philip B. Parker Prosper Roberts Norbert Sarazin		1891	S31 T54N R32W Houghton Co. MI	Shipped stone by scow to Marquette and then by rail to other points 1893 consolidated with Furst, Neu & Co. as Portage Entry Quarries Co.
Port Wing Quarry Co.		Miller Brothers Johnson	Duluth MN	1895	S19, 207 T50N R8W Bayfield Co. WI	
Powell's Point Quarry				1868-70	S27 T27N R19W Alger Co. MI	1895-97 shipped over 100,000 cu. ft. 1898 still operating
Powell's Point Quarry				1920s-30s	S26, 27 T47N R19W Alger Co. MI	Stone used in the construction of two neighboring blast furnaces
Prentice Brownstone Co.	\$1,250,000	George H. Barr Gwin Ellis Cassius M. Hamilton Frederick Prentice Eugene A. Shores	Ashland WI	1888	S27 T49W R4W Bayfield Co. WI	
Rock River Brownstone Co.	\$500,000	George Barnes Willard L. Brotherton Charles Johnston Francis M. Moore Charles H. Shaffer Edward H. Watson	Alger/Marquette Counties MI	1889	S14, 15, 22, 23 T48N R21W Alger Co. MI	1893 bankrupt George W. Miswell operated quarry for creditors 1902 M. G. Maginness of New York City purchased
Herman Ruonawaara Quarry		Herman Ruonawaara			across river from Craig Houghton Co. MI	By 1895 ceased operations
Schureman		Israel Schureman Jacob Schureman	Chicago IL	1889	Thomas A. Trevelthan Farm on DSS&M Railroad 6 miles east of Houghton	By 1889 sold 80 acres to Lake Superior Redstone Co. 1894 operated extensive rubble stone business
Strong, French & Co.			Chicago IL	by 1872	SE1 SW1 S4 T50W R3W Bayfield Co. WI	Reduction in freight rates by railroads permitted development of this, and locked quarry Schuremans were marble dealers in Chicago
Superior Brownstone Co.	\$35,000	Freeborn C. Bailey George H. Barr James H. Rogers	Ashland WI	1891	SE1 SW1 S4 T50W R3W Bayfield Co. WI	1875 ceased operations
Superior Natural Redstone Co.		Lawrence J. DesRochers Raymond P. DesRochers Robert DesRochers		1959	S2 T52N R3W Barrage Co. WI	
Superior Red Sandstone Co.	\$50,000	Ernest Bollman J. B. Cooper J. H. Rice		1899	S10 T52W R3W Barrage Co. WI	1965 ceased operations

APPENDIX TABLE A-1.--Continued.

Company/Individual	Capital Stock	Stockholders	Main Office	Incorporation Date	Quarry Locations	Comments
John Thoney				1883	S35 T50N R26W Marquette Co. MI	1883 stone extracted in stripping shipped to Grand Marais, MI for use in riprapping cribs at harbor of refuge Stone inappropriate for fancy ornamental work
Torch Lake Sandstone Quarry		Callumet & Hecla Mining Co.		by 1880	S1 T55N R33W Houghton Co. MI	1882 submitted specimens of stone to Boston for pressure tests Stone shipped by rail to Calumet and Lake Linden for Callumet & Hecla Mining Company's industrial buildings
Traverse Bay Red Stone Co.		Charles Hebard		1892	S6 T56N R31W Keweenaw Co. MI	1896 ceased operations Produced only a small quantity of building stone which was used locally
Washburn Stone Co.		C. W. Babcock W. H. Smith	Kasota MN	1885	S27 T49N R4W Bayfield Co. WI	1897 still operating
Watson & Palmer			Marquette MI	1878	S26 T48N R25W Marquette Co. MI	Leased site from Marquette Brownstone Co. and operated it at least until 1884
Wieland Bros.			Duluth MN	1905	S T48N R4W Bayfield Co. WI	
Wolff & Jacobs Co.		Peter Wolff John H. Jacobs	Chicago IL	1883	S26 T48N R25W Marquette Co. MI Lot 1, S19 T53N R32W Houghton Co. MI	1887 succeeded by Furst, Jacobs & Co.
Wolff & Son Co.		Peter Wolff M. W. Wolff	Chicago IL	1869	S26 T48N R25W Marquette Co. MI	1872 acquired by Marquette Brownstone Co.

APPENDIX TABLE A-2.--Stockholders (Investors) in Significant Quarry Companies in the Jacobsville Formation and the Bayfield Group.

Name	Residence	Company
Sidney Adams	Marquette MI	Marquette Brownstone Co.
A. A. Albrecht	Detroit MI	Detroit & Marquette Brownstone Co.
W. A. Amberg	Chicago IL	L'Anse Brownstone Co.
C. W. Babcock	Kasota MN	Washburn Stone Co.
T. V. Badgley	Superior WI	Iron River Red Sandstone Co.
F. C. Bailey	Superior WI	Superior Brownstone Co.
George Barnes	Marquette MI	Butler Brownstone Co. Lake Superior Redstone Co. Rock River Brownstone Co.
George H. Barr	Superior WI	Prentice Brownstone Co. Superior Brownstone Co.
John H. Bissell	Detroit MI	Detroit & Marquette Brownstone Co.
Richard Blake	Marquette MI	Newport & Lake Superior Brownstone Co.
Charles C. Bloomfield	Jackson MI	Michigan Red Stone Co.
G. A. Bodenschatz	Chicago IL	Ashland Brown Stone Co (1890)
J. G. Bodenschatz	Chicago IL	Ashland Brown Stone Co. (1890)
Ernest Bollman		Superior Red Sandstone Co.
Col. Breckenridge	Kentucky	Breckenridge Quarry
Edward Breitung	Negaunee MI	L'Anse Brownstone Co.
Thomas B. Brooks	Marquette MI	Marquette Brownstone Co.
Walter C. Brooks	Superior WI?	Bass Island Brown Stone Co. (1898)
Willard I. Brotherton	Bay City MI	Rock River Brownstone Co.
E. H. Brown	Chicago IL	Ashland Brown Stone Co. (1890)
A. Judson Burt	Marquette MI	Burt Freestone Co.
Hiram A. Burt	Marquette MI	Burt Freestone Co.
John Burt	Marquette MI Detroit MI	Burt Freestone Co.
William Burt	Marquette MI	Burt Freestone Co.
William A. Burt	Hurley WI	Burt Freestone Co.
Thomas Butler	Au Train MI	Butler Brownstone Co.
C. H. Call	Marquette MI	Lake Superior Redstone Co.
Howard M. Carter	Chicago IL	Furst, Neu Co.
D. L. Case	Marquette MI	Keweenaw Redstone Co.
A. J. Cheney	Kenosha WI?	Arcadian Brownstone Co.
Varnum B. Cochran	Marquette MI	Lake Superior Brown Stone Co.
Cook	Milwaukee WI	Cook & Hyde
J. B. Cooper		Superior Red Sandstone Co.
George Craig	Marquette MI	Laughing Whitefish Stone Quarry
Thomas Craig	Marquette MI	Laughing Whitefish Stone Quarry

APPENDIX TABLE A-2.--Continued.

Name	Residence	Company
John H. Crowley	Duluth MN	Duluth Brownstone Co.
Joseph Croze	Houghton MI	Portage Entry Sandstone Co.
William S. Dalliba	Marquette MI	Lake Superior Brown Stone Co.
Myron E. David	Marquette MI	Detroit & Marquette Brownstone Co.
Wm. F. Deakman	Chicago IL	Laughing Whitefish Stone Quarry
Francis W. Denison		Bayfield Brownstone Development Co.
Lawrence J. DesRochers		Superior Natural Redstone Co.
Raymond P. DesRochers		Superior Natural Redstone Co.
Robert DesRochers		Superior Natural Redstone Co.
Edwin Ellis	Ashland WI	Excelsior Brownstone Co. Prentice Brownstone Co.
S. S. Fifield	Ashland WI	Excelsior Brownstone Co.
S. P. Ely	Marquette MI	Marquette Brownstone Co.
Leonard H. Field	Jackson MI	Michigan Red Stone Co.
Carl Findeisen	Chicago IL	Kerber-Jacobs Redstone Co.
George C. Furst	Chicago IL	Furst, Jacobs & Co.
Henry Furst	Chicago IL	Furst, Jacobs & Co. Furst, Neu & Co. Furst, Neu Co. Portage Entry Quarries Co.
William Garnett Jr.	Chicago IL	Furst, Neu Co.
Frederick W. Gillett	Marquette MI	Newport & Lake Superior Brownstone Co.
John N. Gillett	Marquette MI	Newport & Lake Superior Brownstone Co.
F. V. Gindele	Chicago IL	Kerber-Jacobs Redstone Co.
F. E. Goddard		Excelsior Brownstone Co.
Fred E. Goddard		Prentice Brownstone Co.
S. W. Goodale	Detroit MI	Kerber-Jacobs Redstone Co.
Alfred Green	Marquette MI	Marquette Brownstone Co.
Hartley	Minneapolis MN	Hartley Bros.
Cassius M. Hamilton		Prentice Brownstone Co.
Charles Hebard	Pequaming	Traverse Bay Red Stone Co.
Ernest Heldmaier	Chicago IL	Furst, Jacobs & Co. Furst, Neu Co. Portage Entry Quarries Co.
J. H. Horton	Superior WI	Iron River Brownstone Co.
H. Hubert Humphrey	Detroit MI	Detroit & Marquette Brownstone Co.
Timothy T. Hurley	Marquette MI	L'Anse Brownstone Co. (1875)
Hyde	Milwaukee WI	Cook & Hyde
Ingalls	Duluth MN	Ingalls Quarry
John H. Jacobs	Marquette MI	Furst, Jacobs & Co. Kerber-Jacobs Redstone Co. Marquette Brownstone Co. Wolf, Jacobs & Co.

APPENDIX TABLE A-2.--Continued.

Name	Residence	Company
Johnson		Port Wing Quarry Co.
Otis W. Johnson	Racine WI	Excelsior Red Stone Co.
Charles Johnston	Rock River MI	Butler Brownstone Co. Rock River Brownstone Co.
D. S. Kennedy	Ashland WI	Ashland Brown Stone Co. (1886)
Alfred Kidder	Marquette MI	Detroit & Marquette Brownstone Co. Lake Superior Brown Stone Co.
John H. Knight	Ashland WI	Ashland Brown Stone Co. (1886)
William Knight	Bayfield WI	Ashland Brown Stone Co. (1886)
Leonard Laurence	Detroit MI	Detroit & Marquette Brownstone Co.
Frank B. Lazier	Duluth MN	Duluth Brownstone Co.
Cambreton Leach	Superior WI?	Bass Island Brown Stone Co. (1898)
R. W. Lee	Chicago IL	Basswood Island Brownstone Co.
Nathan F. Leopold	Chicago IL	Portage Entry Sandstone Co.
Charles H. Little	Detroit MI	Detroit & Marquette Brownstone Co.
Theodore W. Luling	Marquette MI	Keweenaw Redstone Co.
Edward T. Malone	Chicago IL	Portage Entry Quarries Co.
Malone Bros.	Cleveland OH	Portage Entry Red Sandstone Co.
Egbert J. Mapes	Marquette MI	Lake Superior Brown Stone Co.
Henry R. Mather	Marquette MI	Marquette Brownstone Co.
W. S. Maxwell	Kenosha WI	Arcadian Brownstone Co.
Alexander McDougall	Duluth MN	Duluth Brownstone Co.
Miller	Duluth MN	Flag River Brown Stone Co.
Miller Bros.	Duluth MN	Port Wing Quarry Co.
Charles Moesinger	Chicago IL	Laughing Whitefish Stone Quarry
F. M. Moore	Marquette MI	Butler Brownstone Co.
Francis M. Moore	Marquette MI	L'Anse Brownstone Co. (1875) Rock River Brownstone Co.
Jay C. Morse	Marquette MI	Lake Superior Brown Stone Co.
Anna M. Neu	Chicago IL	Furst, Neu Co.
Peter W. Neu	Chicago IL	Furst, Jacobs & Co. Furst, Neu & Co. Portage Entry Quarries Co.
N. E. Nicol	New York NY	Prentice Brownstone Co.
J. B. Niles	Ashland MI	Prentice Brownstone Co.
William H. O'Brien	Chicago IL	L'Anse Brownstone Co. (1893)
Omeis		Cranberry River Quarry
B. S. Packard	Marquette MI	Kerber-Jacobs Redstone Co.
E. B. Palmer	Marquette MI	Watson & Palmer

APPENDIX TABLE A-2.--Continued.

Name	Residence	Company
Philip B. Parker	Houghton MI	Portage Entry Sandstone Co.
Peter A. Pickel	Chicago IL	Furst, Jacobs & Co. Furst, Neu Co. Portage Entry Quarries Co.
Robinson D. Pike	Bayfield WI	Bayfield Brownstone Development Co. Pike's Quarry
Paul Pine	Marquette MI	L'Anse Brownstone Co. (1875)
Willard S. Pope	Detroit MI	Detroit & Marquette Brownstone Co.
D. H. Powell	Marquette MI	Lake Superior Redstone Co.
Frederick Prentice	Ashland WI New York NY	Excelsior Brownstone Co. Prentice Brownstone Co.
L. A. Prentice	New York NY	Prentice Brownstone Co.
Raphael Pumpelly	Cambridge MA	Marquette Brownstone Co.
Ernest Rankin	Marquette MI	Lake Superior Redstone Co.
J. H. Rice	Houghton MI	Superior Red Sandstone Co.
James S. Ritchie		Bass Island Brown Stone Co. (1898)
Prosper Roberts	Lake Linden MI	Portage Entry Sandstone Co.
S. B. Roberts	Superior WI	Iron River Red Sandstone Co.
Addison R. Robinson	Jackson MI	Michigan Red Stone Co.
Frank E. Robson	Detroit MI	Excelsior Red Stone Co.
James H. Rogers	Superior WI	Superior Brownstone Co.
Herman Ruonawaara	Jacobsville MI	Herman Ruonawaara Quarry
George H. Quayle		Bayfield Brownstone Development Co.
F. H. Quinby	Bayfield WI	Cranberry River Quarry
St. Claire Bros.	Ishpeming MI	L'Anse Brownstone Co. (1879)
Norbert Sarazin	Lake Linden MI	Portage Entry Sandstone Co.
C. H. Schaffer	Marquette MI	Butler Brownstone Co.
Schureman, Israel	Chicago IL	Schureman Quarry
Jacob Schureman	Chicago IL	Schureman Quarry
James H. Seager	Hancock MI	Excelsior Red Stone Co.
Charles H. Shaffer	Marquette MI	Rock River Brownstone Co.
Eugene A. Shores	Ashland WI	Prentice Brownstone Co.
Gad Smith	Marquette MI	Lake Superior Redstone Co.
Henry D. Smith	Marquette MI	Laughing Whitefish Stone Quarry
Samuel L. Smith	Detroit MI	Excelsior Red Stone Co.
W. H. Smith	Kasota MN	Washburn Stone Co.
Henry H. Stafford	Marquette MI	Lake Superior Brown Stone Co.
Alanson Sweet (Almson)	Milwaukee WI	Basswood Island Brownstone Co. (1868)
John Thomlinson	Chicago IL	Portage Entry Quarries Co.
John Thoney	Marquette MI	John Thoney Quarry

APPENDIX TABLE A-2.--Continued.

Name	Residence	Company
R. I. Tipton	Superior WI	Iron River Brownstone Co.
A. C. Titus	Superior WI	Iron River Red Sandstone Co.
Albert C. Titus	Superior WI	Iron River Brownstone Co.
L. C. Tobias	Ashland WI	Excelsior Brownstone Co.
E. H. Tower	Marquette MI	Kerber-Jacobs Redstone Co.
Luther C. Voorhes	New York NY	Prentice Brownstone Co.
George Wagner	Marquette MI	Laughing Whitefish Stone Quarry
Edward M. Watson	Marquette MI	Rock River Brownstone Co. Watson & Palmer
Eugene J. Weeks	Jackson MI	Michigan Red Stone Co.
D. L. Wells	Milwaukee WI	Bass Island Brownstone Co (1868)
Charles Weunther	Chicago IL	Laughing Whitefish Stone Quarry
Frederick Wetmore	Marquette MI	Marquette Brownstone Co.
Peter White	Marquette MI	Marquette Brownstone Co.
Wieland Bros.	Duluth MN	Wieland Bros.
Thomas A. Wilson	Jackson MI	Michigan Red Stone Co.
M. W. Wolff	Chicago IL	Wolf & Son Co.
Peter Wolf	Chicago IL	Wolf, Jacobs & Co. Wolf & Son Co.
Ira C. Wood	Chicago IL	Furst, Neu Co.

APPENDIX B

CHECK LIST OF SANDSTONE BUILDINGS IN
THE LAKE SUPERIOR REGION

APPENDIX B

CHECK LIST OF SANDSTONE BUILDINGS IN THE LAKE SUPERIOR REGION

This list is compiled from a variety of sources: on-site personal inspection, field surveys, the examination of historical prints and photographs, and research of the literature of the region and the period. Unless otherwise indicated the architects and contractors had offices and businesses in the same locale as the structure. An asterick (*) indicates buildings discussed in the text.

The format for the entries is as follows:

Date	Name
	Address
	Architect
	Other architects, contractors, masons, designers
	Brief description
	Sources

Frequently Cited Sources

Throughout this appendix the following newspapers are cited in abbreviated form, using the code designated on the left.

ADP	<u>Ashland Daily Press</u>
AP	<u>Ashland Press</u>
BCP	<u>Bayfield County Press</u>
CCEN	<u>Copper Country Evening News</u>
DMG	<u>Houghton Daily Mining Gazette</u>
MMJ	<u>Marquette Mining Journal</u>
PLMG	<u>Portage Lake Mining Gazette</u>
SDL	<u>Superior Daily Leader</u>
SET	<u>Superior Evening Telegram</u>
SL	<u>Superior Leader</u>
WN	<u>Washburn News</u>
WT	<u>Washburn Times</u>

Michigan

Alger County

Au Train

- 1890 Alger County Jail and Sheriff's Residence (destroyed)
 Demetrius Frederick Charlton, Marquette, architect
- This four-cell jail and seven-room sheriff's residence was built of native sandstone in rock-faced rubble work eleven years before the county seat was moved from Au Train to Munising.
- MMJ, 19 April 1890.

Munising

- 1868 Schoolcraft Furnace
 Munising Creek
- 1895-96 First National Bank of Alger County
 100 West Munising Avenue
- Ferguson Brothers, Sault Ste. Marie, contractors
- Randomly coursed, rock-faced, variegated red sandstone furnished the building material for one of Munising's most important commercial structures. The two-story, Richardsonian Romanesque bank is oriented to a corner site by means of round-arched windows along the facades fronting two streets and by means of a corner entry. It has served as a bank, post office, city hall, and professional offices.
- Munising News, 9 April, 26 November 1896.
- 1901-1902 Alger County Court House (destroyed 1978)
 Elm Street
- Charlton and [R. William] Gilbert, Marquette, architects; Northern Construction Company, Milwaukee, contractor
- In April 1901, after the county commissioners decided to move the seat of county government from Au Train to Munising, they commissioned Marquette's foremost architectural firm to design a domed, Neo-classical Revival court house for a site on a hillside over Munising. They constructed it of pressed red Menominee brick trimmed with red sandstone, some salvaged from the Au Train Jail which had burned in 1900. The court house cost \$29,448.

[Demetrius Frederick] Charlton and [Edward] Kuenzli,
Some of Our Recent Work in the Upper Peninsula
 (Marquette, Michigan?: n.p., 1914); MMJ, 18 November
 1902.

ca 1910 Sacred Heart School
 Elm Street

This school was built solidly of randomly coursed,
 roughly finished, red sandstone.

1922 Lincoln School
 Superior Street

Demetrius Frederick Charlton, Marquette, architect

This Neo-classical Revival school is built of randomly
 coursed, variegated brown sandstone rubble from nearby
 Powell's Point. It cost \$85,000.

MMJ, 11 February 1922.

Onota

1869-70 Bay Furnace
 Lot 2, Section 29 of T47N R19W

The Bay Furnace Company built of large, reddish gray
 sandstone blocks from Powell's Point this forty-five-
 foot high, closed top stack with nine-foot boshes. The
 hot blast and boilers were located at the top.

MMJ, 17 January 1874.

Baraga County

Assinins

1873, 1875, Church (destroyed), Rectory (destroyed), and Convent
 1881 and Orphanage of the Catholic Mission

Sandstone for the church and rectory, and probably for
 the convent and orphanage, reportedly was taken from a
 stone heap piled higher each year by Father Gerhard
 Terhorst while increasing annually the size of his
 garden. The orphanage resembles in style the "French



Colonial" house type built by French Canadians in Quebec.

Rezek, vol. 2, pp. 243-45; MMJ, 6 February 1875.

L'Anse

1874

First Methodist Church
N. Main Street

Methodists built this church of local materials in the Gothic Revival style two years after organizing in 1872. By then L'Anse had prospered as a lumber, commercial, and transportation center. The end-gable, board and batten structure with corner tower and buttresses rests on an exposed foundation of sandstone quarried near L'Anse and is roofed with slate from the Huron Bay Quarry. The interior was remodeled in 1907.

Edna Mence, L'Anse United Methodist Church--100 Years (L'Anse, Mich.: Baraga County Historical Society, 1973); Alvah L. Sawyer, A History of the Northern Peninsula of Michigan and Its People (Chicago: Lewis Publishing Co., 1911), p. 445.

1894

Sacred Heart Church
16 South Sixth Street

This church was built of variegated brown sandstone, probably from the quarries at L'Anse, for a parish of French, Irish, Indian, German, and Polish families. The Gothic Revival and Richardsonian Romanesque style building cost \$10,500. It replaced a small frame church, built in 1872, one year after L'Anse became the terminus of the Marquette, Houghton and Ontonagon Railroad and anticipated great growth as a shipping center.

Photograph File, Michigan Technological University Library Archives and Copper County Historical Collections, Houghton, Mich.: Rev. Antoine Ivan Rezek, History of the Diocese of Sault Ste. Marie and Marquette, vol. 2 (Chicago: M. A. Donahue and Co., 1907), pp. 245-47.

Gogebic County

Bessemer

1888 Gogebic County Court House

John Scott and Company, Detroit, architect; Wahlman and Grip, Ishpeming, contractors

This two-story, hip-roofed, rectangular court house with a central projecting entry tower is built of randomly coursed, top-quality, rock-faced, red Jacobsville sandstone, sometimes mottled with white, in the Richardsonian Romanesque style. The stone walls are embellished with carving of foliation and lions' heads and modillions at the entrance, checkerwork in the tower, and a decorative beltcourse inlaid with vesica piscis-shaped stones. The (Gogebic) Iron Tribune for 27 December 1890 called the handsome and substantial red sandstone court house "not only the pride of the city, but one of the finest structures of its kind to be found in northern Michigan or Wisconsin." It strongly resembles Hubbell Hall at Michigan Mining School.

Ironwood1896 Church of the Transfiguration
East Aurora and South Marquette

Demetrius Frederick Charlton, Marquette, architect

The Mission of St. Paul was organized in the fall of 1888, seven years after A. L. Norrie had sunk the first mine shaft in Gogebic County, and one year before Ironwood was incorporated as a city. After Norrie promised the Episcopal Ladies Society \$1,000 toward a stone church, it began a building program. Stone for the Gothic Revival parish church reportedly was quarried north of Ironwood and was laid randomly in the walls. When the cornerstone was seated on 4 July 1896, the Ironwood News said, "When completed, the new Episcopal church will be one of the finest houses of worship in the upper peninsula. It will be constructed of stone, hence it will be the first stone church building on the Gogebic range. . . . Ironwood has many handsome church edifices, but this new stone structure will set the pace for the others which will follow."

The Church of the Transfiguration 1889-1979 (Ironwood, Mich.: Ninetieth Anniversary Booklet Committee, n.d. [ca. 1979]).

1909 Passenger Depot of the Chicago and Northwestern Railroad
Between Ayer and Frederick streets

Charles S. Frost, Chicago, architect

This brick structure rests on a five-foot-high foundation of red sandstone laid vertically. A hipped roof with overhanging eaves supported by wooden brackets covers the structure. The roof is pierced by a central tower with round-arched windows. The materials, tower, and windows give the building a Richardsonian Romanesque appearance.

Charles S. Frost, Chicago and Northwestern Railroad Passenger Depot at Ironwood, Michigan. Drawings. Held by Chicago and Northwestern Railroad Company Archives.

Houghton County

Calumet

1880-83 Calumet and Hecla Water Works

The Calumet and Hecla Mining Company took from its Torch Lake Quarry blocks of red sandstone, seventeen feet in length and seven feet in diameter, for the construction of this water works.

A. T. Andreas, History of the Upper Peninsula of Michigan (Chicago: Western Historical Co., 1883), p. 255.

1880s,
1899-1900 Vertin Brothers Department Store
220 Sixth Street

Charles W. Maass, architect, 1899 remodeling; Ulseth and Ulseth, carpentry contractor for remodeling; Paul P. Roehm, masonry contractor for remodeling

Two stories were added to this commercial block of randomly coursed, variegated red Portage Entry sandstone, when it was remodeled in 1899-1900.

CCEN, 21 January, 22 March, 28 June, 19 September 1899, 19 May 1900; Photograph File, MTU Library Archives.

1886, First National Bank (destroyed)
1899 Fifth Street

J. B. Sweatt, Marquette, architect and builder; Bice, Powell and Company, Marquette, counter manufacturer; I. E. Swift, Ishpeming, steam heating; M. R. Manhard, Marquette, tile supplier

Charles K. Shand, architect, 1899 alterations and addition; Bajari and Ulseth, woodwork contractor; Paul P. Roehm, stone and masonry contractor

Originally thirty-four feet by fifty-seven feet in plan, this bank building held banking rooms on the first floor, and offices on the second floor. The structure stood two stories on a raised foundation and was constructed of variegated sandstone with brick side walls. The Marquette newspaper said the "solid brown-stone from the Portage Entry quarries, laid in broken ashlar with a rock face," gave the bank "an imposing and substantial appearance." The sandstone building material and interior fittings from the noted Marquette woodworking shops made this a building ideally suited for banking purposes.

CCEN, 18 February, 27 April, 16 December 1899; MMJ, 1 September 1886; Photograph File, MTU Library Archives.

1895 Sterk Block
Fifth Street

Sterk's new brownstone block was thought to enhance the appearance of Calumet's principal business street.

MMJ, 12 October 1895.

1895 Commercial Building
425 Fifth Street

This two-story commercial building was built of evenly coursed, rock-faced, variegated red Portage Entry sandstone. A galvanized metal cornice and a cast iron threshold, columns, and spandrels, probably ordered from a builders' supply catalog, were assembled in this storefront. The first floor contains a store and the second, rooms. It resembles the Agnitz Block to its immediate north, also built in 1895, but is two-thirds the width.

- 1895 Agnitz Block
427 Fifth Street
- Henry Key, contractor
- This straightforward, two-story commercial structure was constructed of evenly coursed, red Portage Entry sandstone with a cast iron store front and a galvanized metal cornice. The first story served as a saloon and crockery, the second as a hotel.
- MMJ, 22 September 1894.
- 1896 Swedish M. E. Church
East side of Sixth Street between Temple and Oak Street
- Bajari and Ulseth, contractor
- The use of variegated red sandstone rubble laid in courses gave the Swedes of Calumet an imposing church. The simple, rectangular-shaped, gable-roofed building with a central entry and bell tower measured fifty-eight feet in length by thirty feet in width, held 300 people, and cost \$3,800.
- CCEN, 5 August, 8 December 1896.
- 1896 St. Mary's Italian Church (The Assumption of the Blessed Virgin)
Portland Street between Ninth and Tenth streets
- Martin Brothers, contractor
- Standing on a site donated by the Calumet and Hecla Mining Company to the Italian parish, this church is built of coursed, rock-faced Portage Entry ashlar in the Gothic Revival style of architecture. A central entry and bell tower gives access to the nave which seats 400. The church closed in 1966.
- Rezek, vol. 2, pp. 286-87; CCEN, 15 December 1896; Photograph File, MTU Library Archives.
- 1897 Michael Nampaa Building
- As ground was broken for this three-story structure of sandstone on the first level and wood on the upper levels, the local newspaper termed it large, imposing, and ornamental.
- CCEN, 22 July 1897.

1897

YMCA Building (Elks' Temple)
Southeast corner of Sixth Street and Wedge

Paul P. Roehm, stone contractor; Gribble, contractor;
McCutcheon and Parson, masons; N. S. Bray, doors and
window frames

This sandstone structure on a raised foundation stands on a one-hundred-foot-square lot donated by the Calumet and Hecla Mining Company to the YMCA. It once displayed a Classical Revival veranda that extended the full width of the structure. The plans were executed in part. Full plans had called for a bowling alley, lockers, and swimming pool in the basement; a gymnasium, offices, games and reading rooms, and reception hall on the first floor; and a track and auditorium on the second floor. The YMCA proposed in 1906, and eventually built, a new building on Fifth Street.

CCEN, 19 October 1896, 3, 5, 9 January, 1, 3 February, 1 May, 20 September 1897; MMJ, 18 May 1895.

1898

Bernard Bracco Building
Elm Street

Charles K. Shand, architect

Plans for this three-story block, completed in May 1898, called for a front of brownstone and side and rear walls of "native stone," and arranged flats on the floors above the first floor stores.

CCEN, 11 May 1898.

1898

Joseph Suino Block (destroyed)
Corner of Sixth and Portland streets

Scott, architect

A short supply of sandstone delayed construction of this two-story commercial block. When the sandstone for the job did arrive from Portage Entry, the Copper Country Evening News for 23 July 1898 said, "Nearly all the stone used in the new buildings going up here comes from the Portage Entry, and so far the demand has been larger than the supply. The quarry companies are having difficulty in securing men to do the work although they offer good wages."

CCEN, 24 March, 4 November 1898.

1898

Edward Ryan Block
305-307 Sixth Street

Charles K. Shand, architect; L. E. Chausse, contractor;
J. F. D. Smith, plaster work

Commissioned by Edward J. Ryan (1842-1900), "the merchant prince of the Copper Country," this three-story, Richardsonian Romanesque commercial building is seventy-five feet in depth by fifty-two feet in width and arranged with two large store rooms on the first floor and flats on the upper floors. It is solidly and substantially built of top-grade, red Portage Entry sandstone with a galvanized-metal cornice, a two-story projecting bay, and pedimented false front.

CCEN, 5 May, 9 June, 23 July, 17 March 1898,
14 December 1900.

1898

Joseph Hermann Building
106 Sixth Street

Charles W. Maass, Menominee and Calumet, architect

Measuring forty-six feet by sixty-eight feet in plan, the Hermann Building is a two-story, flat-roofed, simple commercial structure constructed of red Portage Entry sandstone with randomly laid courses on the front wall and rubble work on the side and rear walls. Originally the first floor contained stores and the second floor held two nine-room flats, each with fireplaces, front and rear entrances, and gas lights.

CCEN, 27 May, 23 July, 21 October 1898.

1898

Kinsman Block
101 Sixth Street

Charles W. Maass, Menominee and Calumet, architect;
Paul P. Roehm, masonry contractor; Bajari and Ulseth,
carpentry contractor

This three-story business block is built of cut sandstone on the front wall and variegated rubble on the side walls. A shingled corner tower with conical roof orients the structure to both Sixth and Scott streets, and the masonry, entry, and cornice details define its front. Two spacious stores, each with a center entrance and plate-glass fronts, occupy the first floor space.

The second and third floors are divided into four nine-room flats. The block cost about \$12,000.

CCEN, 18 March, 10 May, 12, 23 July, 30 August, 27 September, 1, 21 October, 12 November 1898, 12 May 1899.

- 1898 Blau Block (destroyed 1981)
813 Elm Street
- Constructed with alternating courses of wide and narrow red sandstone blocks laid evenly on the front and with rubble stone on the side walls, this small, three-story block featured a central oriel window of galvanized metal on the second and third stories of the pedimented false front. The Albion Hotel occupied the structure, which stood near the railroad passenger depot.
- 1898-99 Red Jacket Fire Station*
West side of Sixth Street south of Elm Street
- Charles K. Shand, architect; Procissi and Company, stone masonry; Bajari and Ulseth, carpentry
- 1898-1900 Red Jacket Town Hall and Opera House*
Southeast corner of Sixth and Elm streets
- Charles K. Shand, architect; Paul P. Roehm, masonry; Bajari and Ulseth, carpentry
- 1899-1901 Ste. Anne's Church*
Southwest corner of Scott and Fifth streets
- Charlton, Gilbert and [Edward] Demar, Marquette and Milwaukee; architects; Prendergast and Clarkson, Chicago, contractor
- 1900 N. P. Swanson Block (destroyed)
Elm Street
- Carl E. Nystrom, Duluth and Calumet, architect
- The first story of this block was of red Portage Entry sandstone, the second and third stories of pressed brick and terra cotta. The structure measured forty-nine feet by fifty-eight feet in plan and was designed in the "Corinthian" style of architecture. The first floor held two stores; the second and third floors held offices.
- CCEN, 15 June 1900.

- 1900 Gately-Wiggins Block (destroyed)
Sixth Street
- C. L. Cowles and George Eastman, Saginaw and Laurium, architects
- This three-story commercial building, 50 feet in width by 125 feet in length, featured a sandstone front. Gately-Wiggins, dealers in carpets, clothing, and furniture, occupied the first and second floors; the Knights of Pythias, Elks, and Modern Woodsmen occupied the lodge rooms of the third floor.
- W. E. Steckbauer and Albert Quade, A Souvenir in Photogravure of the Upper Peninsula of Michigan (Brooklyn, N.Y.: Albertype Co., 1900); CCEN, 22 May 1900; DMG, 27 February 1900.
- 1900 Ernest Bollman Block (destroyed)
Southwest corner of Oak and Eighth streets
- Charles K. Shand, architect; Paul P. Roehm, masonry contractor
- The red sandstone building material made the four-story Bollman Block one of the most handsome, substantial and durable in the city. The local newspaper thought its architectural beauty, expressed in the Richardsonian Romanesque mode, would appeal to visitors disembarking from the train at the depot one-half block away. The first floor contained four stores that faced Elm Street, each with a shop and cellar beneath. The upper three floors held flats.
- CCEN, 2, 18 May, 4 October 1899, 22 May, 7 June 1900; DMG, 4 October 1899, 8 May 1900.
- 1900 Quello Block
306-308 Fifth Street
- Eastman and Cowles, Saginaw and Laurium, architects for remodeling
- Remodeling at a cost of \$15,000 put another story and a new front of Portage Entry sandstone and pressed brick on the building.
- CCEN, 3 August, 22 December 1900.

1900 Calumet Brewing Company
Lake View

The upper half of the stone brewery was constructed of wood. The bottling plant was built entirely of stone. Twenty-five employees of the brewery lived in a large building next to the plant.

CCEN, 23 May 1900.

1900 Michael Johnson Block
Pine Street

A stone-fronted addition to this commercial block in 1900 increased the width from fifty to eighty feet, the depth from fifty to seventy feet, and the height from three to four stories, and made the building one of the largest of stores and flats in Calumet.

CCEN, 29 August 1900.

1900-1901 William Craze Block (planned)
Eighth Street near Oak Street

Anticipating the growth of Oak and Eighth streets as a business center because of its proximity to the Duluth, South Shore and Atlantic Railroad's passenger depot and the recent erection of the Bollman Block here, William Craze planned a large, three-story sandstone building for his site adjoining the Bollman Block. Fifty-three feet by fifty-seven feet in ground dimensions, the structure would contain stores and flats.

CCEN, 11 October 1900.

1902 V. Coppo Block
213 Sixth Street

When Vital Coppo, a Calumet merchant, began plans for this three-story commercial block in 1899, the local newspaper noted, "It will be built of either stone or brick. . . . In every particular it will be strictly up to date and modern and is certain to add a great deal to the appearance of the street." The structure is of evenly coursed, rough-faced Portage Entry sandstone on the main facade and coursed rubble on the side and rear walls. It holds stores on the first floor and apartments on the upper floors.

CCEN, 27 February 1899.

1902-1904

St. Joseph's Austrian (Slovenian) Church
Northwest corner of Eighth and Oak streets

Erhard Brielmaier and Sons, Milwaukee, architects;
Paul P. Roehm, contractor

On 8 December 1902, after fire destroyed St. Joseph's Church, the thirteen-year-old Slovenian and Croatian parish decided to rebuild in stone. They chose a well-known Milwaukee architect to design a solid red sandstone church large enough to seat 500. It cost some \$62,000. The stone was quarried locally by the Portage Entry Quarries Company. In 1966 five Catholic parishes--St. John the Baptist Croatian, St. Mary's Italian, St. Anne's French-Canadian, St. Joseph's Austrian (Slovenian), and St. Anthony of Padua Polish--closed their churches and merged into one body with another parish that had closed its church in the 1930s. Together they rededicated this church as St. Paul the Apostle Church.

Rezek, vol. 2, pp. 283-85.

1906

First National Bank
Southeast corner of Sixth and Oak streets

Constructed of red Portage Entry sandstone and buff-colored brick, this three-story bank is unified effectively with the V. Coppo Block to the south by means of a prominent cornice and an arched window motif.

Hancock

1890s

Double House
534-536 Quincy Street

This two-story, flat-roofed double house is built of rubble stone with a smooth-cut, evenly coursed, red sandstone front that displays some decorative work. A wooden porch extends the width of the house.

1894-95

Seth D. North and Son Store
Quincy Mine Location

Edward Demar of Demar and [Andrew F.] Lovejoy,
Marquette, architects; E. E. Grip and Company,
Ishpeming, contractors

Constructed entirely of Portage Entry sandstone for a cost of \$10,000, this two-story general store was

viewed as "substantial and highly ornamental." The Marquette Mining Journal for 27 October 1894 declared the structure an ornament to Quincy Hill and predicted the envy of the residents of Hancock. North, who had operated a store at the Quincy Mine location since 1866, leased this stone building from the Quincy Mining Company in return for a percentage of the sales.

MMJ, 27 October 1894, 16 March 1895.

1895 Andrew Johnson Block (execution unknown)
Reservation Street

Andrew Johnson, a prosperous and respected Finnish-born Hancock businessman, who served as director of the Finnish Mutual Fire Insurance Company of Calumet, announced plans to build a three-story, stone commercial block on a site just north of the fire engine house. Plans for the structure, fifty feet by sixty-five feet in plan, called for brownstone walls on a rubble foundation. The proposal arranged the interior with two large stores on the first floor, offices on the second, and a lodge room and hall on the third.

MMJ, 13 April 1895.

1895-97 Quincy Mining Company Office
Quincy Mine Location

Robert C. Walsh, Morristown, New Jersey, architect

Situated on Quincy Hill, the Quincy Mining Company Office was designed by an architect from Morristown, the location of the company's home office. The Neo-classical Revival style building of Portage Entry sandstone cost nearly \$30,000. As the structure approached completion, the Marquette Mining Journal equated this office building with the ability of the clerical officers of "the world's richest mine."

MMJ, 22 August 1896.

1898 Edward Lieblein Building
Hancock Street near railroad track

The stone structure that housed Edward Lieblein's wholesale grocery business presented "a most pleasing appearance" and was "undoubtedly the finest structure in the copper country," according to the local

newspaper. Two and one-half stories in height, and sixty feet by ninety feet in floor plan, the warehouse and office building was of solid Lake Superior sandstone with a steel shingle roof. An elevator, steam heat, electricity, and telephone system made its packing, shipping, and sales rooms, and its offices among the best equipped in northern Michigan.

CCEN, 16 April, 6 May 1898.

- 1898-99 Hancock Town Hall and Fire Hall*
 Charlton, Gilbert and Demar, Marquette and Milwaukee, architects; E. E. Grip and Company, Ishpeming, contractors
- 1898-1900 Suomi College*
 Quincy Street

 C. Archibald Pearce, architect; Bajari and Ulseth, Calumet, carpentry contractor; William Scott, stonework
- 1899 S. F. Prince Building (planned)
 Quincy Street

 The local newspaper noted that Prince intended to tear down his old confectionary store on Quincy Street and erect "a modern stone structure" that would "greatly enhance the beauty of the street."
- CCEN, 4 May 1899.
- 1898-1900 Hancock Hotel (planned, not executed)
 Corner of Reservation Street, opposite the Jacob Baer House, and on the site of the old fire station

 Charlton, Gilbert and Demar, Marquette, architects

 A group of Hancock's most influential and public-spirited businessmen--C. A. Wright, C. D. Hanchette, Henry L. and Jacob Baer, M. C. Getchell, George Ruppe, Thomas Dunston, James T. Fisher, and Thomas Coughlin, planned to organize a stock company and raise funds for a first-class, modern hotel. The Hancock Hotel Association intended to raise \$50,000 to erect and equip a hotel on a site overlooking Portage Lake so as to hold business in Hancock. The proposal called for a five-story building of rock-faced and rough-dressed sandstone "having such a naturally rustic

appearance as to convey the idea that [it] had sprung up from the site on which the building stood."

CCEN, 29 November 1898, 31 March, 6 April, 16 May, 1, 13, 14, 27 June 1899; DMG, 13 October 1899, 7 February 1900.

1899-1900

C. D. Hanchette Building
Southwest corner of Quincy and Reservation streets

Charlton, Gilbert and Demar, Marquette, architects

Red sandstone trims this large, pressed-brick commercial structure, one of the most prominent in Hancock. It was erected in the Neo-classical Revival style of architecture at a cost of \$30,000.

DMG, 24 November 1899.

1900

Charles A. Wright Block
Reservation and Quincy streets

Charlton, Gilbert and Demar, Marquette, architects; Edward Demar, supervising architect; Prendergast and Clarkson, Chicago, contractors; Hamilton and Eide, decorators; I. J. Mueller and Company, Milwaukee, steam heating contractor; Julius and Company, Milwaukee, electrical contractor; Fred J. Stoye, Houghton, plumbing

Occupying a primary intersection at the gateway to Hancock, the Wright Block fronts Quincy Street for seventy feet and Reservation Street for eighty-five feet. It is built of buff-colored Columbus pressed brick and carved, red Portage Entry sandstone. This three-story commercial block, one of Hancock's major structures, cost \$60,000. The primary original tenant was the Superior Savings Bank. Other first tenants included Western Union and Telegraph Company; Charlton, Gilbert and Demar; Prendergast and Clarkson; Hamilton and Eide; and Frank King, building contractor. The local newspaper congratulated Hancock on the progressiveness of one of her best-known citizens and noted the importance of the Wright Block in improving the appearance of the city and giving visitors a good first impression.

CCEN, 10 June 1899; DMG, 27 January 1900; MMJ, 22 February 1900.

- 1900 Kauth Block
Quincy Street
- H. T. Liebert, architect; John H. Foster and Son,
Ashland, Wisconsin, contractor
- Portage Entry sandstone trims this three-story commercial block of buff-colored pressed brick. Measuring fifty feet by eighty feet in ground dimensions, it was designed in what was termed the "Modern Renaissance" style of architecture and arranged with store, office, and lodge hall space.
- DMG, 24 January, 16 March 1900.
- ca 1900 Commercial Block
325 Quincy Street
- 1900 House
Quincy Street
- This two-story, end-gable house of evenly coursed, rock-faced, red Portage Entry sandstone resembles in type and form the workers' houses built in wood by mining companies.
- ca 1900 Commercial Building
632 Quincy Street
- 1905 Israel and Rachel Epstein Building
116 Quincy Street
- Alternating bands of smooth and rough-cut sandstone cover the first floor street facade of this three-story, red brick commercial building.
- 1906 Scott Hotel
Northeast corner of East Quincy and Reservation streets
- Archibald J. Scott, former mayor of Hancock, built this five-story hotel on a site adjacent to Hancock's business district, and convenient to boat and rail connections. The simple, plain, and massive structure of brick and stone once displayed four stories of porches on the front that afforded a fine view of Portage Lake.
- MMJ, 6 July, 10 August 1906.

ca 1910 House
923 Summit

This two-story, Classical Revival bungalow is built of smooth-cut, red sandstone blocks, probably salvaged from another structure.

1914 Ripley School
Ripley M-26

Demetrius Frederick Charlton, Marquette, architect

Situated on the hillside overlooking the Portage Canal at Ripley, this school was designed in the Neo-classical Revival style of architecture and built of top-grade, rock-faced, red Portage Entry sandstone laid in even courses.

Houghton

1875 W. Miller Block
413 Sheldon Avenue

This two-and-one-half story, end-gable building is built of roughly finished sandstone.

1875 Adam Haas Brewery (destroyed 1968)
405 Sheldon Avenue

This cut-stone building replaced a log structure. The brewery employed fourteen men and produced 6,000 barrels of beer a year.

Andreas, History of the Upper Peninsula, p. 276;
B. E. Tyler, Souvenir of the Copper Country Upper Peninsula of Michigan (Houghton, Mich.: B. E. Tyler, 1903).

by 1883 Union School (destroyed)

This stone school stood high on the slope overlooking the village of Houghton and Portage Lake. The basement held rooms for the janitor's family, and full eating and waiting rooms for those who arrived before school hours. The first floor contained recitation and dressing rooms; the upper floor contained an office, laboratory, and library. The building was heated

with steam and ventilated. It cost \$35,000 and held 760 pupils.

Andreas, History of the Upper Peninsula, p. 273.

1887-89

Hubbell Hall (Science Hall), Michigan Mining School (destroyed 1968)*

John Scott and Company, Detroit, architects; Wahlman and Grip, Ishpeming, contractors

1888-89

National Bank of Houghton*
600 Sheldon Avenue

Scott and Company, Detroit, architects; Wahlman and Grip, Ishpeming, contractors; G. W. Church, Detroit, superintendent of construction; I. E. Swift, steam heating contractor

This three-story, pressed brick bank displays its Richardsonian Romanesque inspiration with a rusticated red sandstone foundation, round-arched windows, and foliated carving. It was the first use of brick for a commercial block in the Copper Country. The contractors speeded up construction by working into the night under lights. As the bank was completed on 15 August 1889, the Portage Lake Mining Gazette reported that the National Bank of Houghton occupied a building "appropriate in size and construction to its characteristics as a financial institution." In fact, it thought its banking rooms surpassed those of many substantial banks in Chicago and other large cities. "Nothing equal to their massive antique oak counter, doors and wood finish, their great floor space and height of ceiling--can be found in any other banking establishment north of Milwaukee."

MMJ, 11 August 1888; PLMG, 12 July, 29 November 1888, 15 August 1889.

1892-93,
1918-25

Grace Methodist Church
201 Isle Royale Street

William T. Pryor, architect and superintendent of construction

The Grace Methodist Church is a Richardsonian-Romanesque-styled church with a corner entry tower. The donation of top-grade, red sandstone from the Portage Entry quarries for use in constructing the

front walls and the donation of rubble for use in building the side walls kept the cost of the structure at \$18,000, despite the expense of cutting the stone. The Portage Lake Mining Gazette for 10 December 1896 thought it a "fine specimen of the durability of that stone." A. C. Lane, state geologist and resident of Houghton, reportedly advised Pryor on architectural design, and presumably, on the choice of material. They adapted a plan used for the Methodist Church in Owosso, Michigan.

Benjamin D. Noetzel, comp., A History of Grace Methodist Church (Houghton, Mich.?: n.p., 1954); DMG, 27 February 1900; PLMG, 1 December 1896.

1898-1902

St. Ignatius Loyola Church
Houghton Avenue

Erhard Brielmaier and Sons, Milwaukee, architects;
McCurdy Brothers, contractors for basement and wood-
work; Fred E. King and Company, masonry contractor;
Peter Lauer, Milwaukee, contractor for interior work;
Gavin Art Glass Works, Milwaukee, windows

Situated on the hill above Houghton, St. Ignatius Loyola Church was designed by a firm of architects noted for designing churches for German, French, and Irish parishes. The church was built in 1901 of solid red Portage Entry sandstone on a foundation laid two years earlier. It cost \$65,000. As the Reverend Father Anton Rezek advertised construction bids in March 1899, the Daily Mining Journal said: "Built of solid stone and on such a commanding site the new church will be an edifice of which every citizen of Houghton can feel proud, and its tower, rising for 165 feet from the ground will be a landmark for many miles in all direction." The newspaper called the church a credit to the rector, the congregation, Houghton, and the Copper Country.

Rezek, vol. 2, pp. 249-59; CCEN, 14 February, 7 May 1898; DMG, 22 July 1897, 4, 9, 16 October 1899; MMJ, 1 March 1899, 17 May 1900.

1899

Shelden-Dee Block*
Northwest corner of Shelden Avenue and Isle Royale
Street

Henry L. Ottenheimer, Chicago, architect; Paul F. P. Mueller, Chicago, contractor

- 1899 James R. Dee Building (Houghton Post Office)
65 N. Isle Royale Street
- Henry L. Ottenheimer, Chicago and Houghton, architect;
Paul F. P. Mueller, Chicago and Houghton, contractor
- Measuring sixty feet by sixty-five feet in plan, and standing three stories in height, this commercial block is built of evenly laid, rock-faced, Portage Entry sandstone, trimmed with tooth chiseling and some ornamental relief carvings. James R. Dee, manager of the Peninsula Electric Light and Power Company, wanted a structure that would house the post office, stores, other offices, and a public hall. Several wooden buildings occupying the lot were moved to make way for the Dee Block. This structure represented the smaller of two investments Dee made in commercial blocks in 1899, both of sandstone, both designed by Ottenheimer, both built by Mueller. The Dee Building cost \$30,000.
- CCEN, 7 April, 12 June 1899; DMG, 30 October 1899.
- 1899 Lake Superior Produce and Cold Storage Company Plant
- Fred W. Wolf and Company, Chicago, designer; Paul F. P. Mueller, Chicago, builder
- Facing the Copper Range Railroad, over which many of the mining company's goods arrived and were shipped, this five-story plant was built of Portage Entry sandstone. The local newspaper considered it the "finest and best equipped plant of its kind north of Milwaukee."
- DMG, 2 December 1899; MMJ, 26 October 1899.
- 1899-1900 F. W. Kroll Block
606 Sheldon Avenue
- Charlton, Gilbert and Demar, Marquette and Milwaukee, architects; Wilson and Sampson, Duluth, contractors
- Evenly coursed, smooth-cut Portage Entry sandstone, three Romanesque arches supported on columns, and a band of pink Tennessee marble enhanced the front of this commercial building.
- CCEN, 10, 13, 20 June 1899; DMG, 24 November 1899.

1903 Hoar Mausoleum
Forest Hill Cemetery

ca 1900 Hall Building
320-322 Sheldon Avenue

The first floor and the exposed foundation of this three-story commercial block are of rock-faced, red Portage Entry sandstone. Smooth-cut sandstone quoins and voussoirs finish the corners and windows of the brick upper stories, and sawed sandstone pilasters with foliate-carved capitals enrich the lower story of this skillfully designed building.

ca 1900 Commercial Block
122-126 Sheldon Avenue

Evenly coursed, rock-faced, red Portage Entry sandstone on the first floor and exposed foundation, and smooth-cut, red sandstone pilaster strips between the second floor windows contrast with the yellow brick of this two-story structure, oriented to a corner site.

1901 Citizens' National Bank
Shelden Avenue

C. Archibald Pearce, Hancock, architect

A group of Ishpeming men, including Charles H. Moss and Charles W. Hall, organized the Citizens' National Bank in the spring of 1901. It had plans drawn for a three-story brick and stone building that would cost \$40,000 and stand on the corner lot formerly occupied by the Edward's Homestead, just west of the Hass Brewery. In addition to the bank, the building was planned to hold a store on the first floor and offices on the upper floors.

CCEN, 10 May, 5 June 1901.

1903 Passenger Depot of the Duluth, South Shore and Atlantic
Railway (Soo Line Railroad Company)

Built of rock-faced Portage Entry sandstone with a slate roof, the depot is 102 feet in length and 22 feet in width. It cost \$10,347.

ca 1905 Masonic Building
Northeast corner of Sheldon Avenue and Portage Street

Charles W. Maass and Fred A. H. Maass, architects

This four-story block of evenly laid, rough-cut red sandstone employs smooth-cut red sandstone in its vertical members, thereby creating a sensitive combination of textures.

ca 1910 Foley Block
404-408 Sheldon Avenue

A central, round-arched entry gives the primary focus to the front of this two-story masonry structure. The first story is red sandstone.

Hubbell

1903 St. Cecilia's School
1401 Euclid Street

Located in Hubbell, where the Calumet and Hecla Mining Company operated its smelters, the school was built of brick on an exposed sandstone foundation. It cost \$20,000. The Sisters of St. Francis of Milwaukee operated the school.

Rezek, vol. 2, pp. 269-70.

Lake Linden

1886-87 Calumet and Hecla Smelting Works
South Lake Linden

The structures of this smelting works were built of sandstone from the Calumet and Hecla Mining Company's own quarry. The smelter was owned jointly by the Detroit and Lake Superior Copper Company and the Calumet and Hecla Mining Company.

James B. Cooper, "Historical Sketch of Smelting and Refining Lake Copper," Proceedings of the Lake Superior Mining Institute, Seventh Annual Meeting, Houghton, Michigan, 5-9 March 1901, pp. 43-49.

1891 Hotel Linden (destroyed)

As work began on this hotel, the local newspaper explained that its owner had decided to build entirely of Portage Entry stone because brick was not good enough. The structure, fifty feet in width by one hundred feet in depth, and four stories in height, including a mansard roof and a cupola, features variegated stone that was randomly coursed in large blocks on the front and randomly coursed in smaller pieces on the side walls. Stone quoins and window heads enhanced the front. The stone building material and the Second Empire style distinguished the hotel, thought to be "one of the handsomest buildings in Lake Linden."

(Lake Linden) Torch Lake Times, 23 August 1887; MMJ, 17 January 1891; Photograph File, MTU Library Archives.

ca 1898-
1900 First National Bank
346 Third

Evenly laid blocks of red sandstone give the front of this small, two-story bank a substantial appearance.

Steckbauer and Quade.

1900,
1912 Eglise Saint Joseph
701 Calumet Street

C. Archibald Pearce, Hancock, architect; Demetrius Frederick Charlton, Marquette, architect for 1912 alterations

French-Canadian Catholics built this stone church in the "Roman Byzantine" style in 1900. Twelve years later they altered it, moving the main entry to Calumet Street. The entry was enframed with a columned porch and flanked by corner towers or steeples. Constructed of Portage Entry red sandstone laid in alternating courses of rough and smooth-cut blocks, this large church holds 1,000 and is the most prominent building in Lake Linden, once the location of the Calumet and Hecla Stamping Mills.

DMG, 31 January 1900; MMJ, 31 August 1918.

1901-1902 Lake Linden Village Hall and Fire Station
401 Calumet Street

Charles K. Shand, Calumet, architect; L. F. Ursin, contractor

Designed in the Richardsonian Romanesque and Neo-classical Revival styles, this two-and-one-half-story public building with a central entry tower was constructed solid and permanent of tan brick on a red sandstone foundation and trimmed with sandstone, as the copper and lumber milling industries essential to the village's economy culminated.

Laurium

ca 1895 Commercial Building
317 Hecla Street

This two-story block of coursed, variegated Portage Entry sandstone features a central, second-story, galvanized metal bay flanked by large, segmentally arched windows.

ca 1895-96 Paul P. Roehm House*
Northeast corner of Willow Avenue and First Street

Paul P. Roehm, builder

1896-98 Sacred Heart Church
1383 Rockland Street

Louis Picket, Cincinnati, architect; Paul P. Roehm, contractor; Charles W. Maass, Menominee, architect; Bajari and Ulseth, contractor for wood work

The Sacred Heart parish organized in 1867, three years after the discovery of the Calumet Mine. When it had grown to over 300 families (mostly Irish and German), it built this sandstone church to replace a frame structure. To prepare plans, it chose Louis Picket, who worked in Cincinnati, the residence of the Franciscan Fathers of St. John the Baptist who supervised the pastorate. The design and the material, "famous Portage Entry sandstone of extra fine grade," led the Marquette Mining Journal to call the Sacred Heart Church "the finest on the peninsula" and comparable with "those of the largest cities." The

church, 188 feet by 60 feet in plan, cost about \$45,000.

Rezek, vol. 2, pp. 276-81; CCEN, 17 June, 3 December 1896, 26 February, 24 May, 14 July, 11 October 1897, 5 April, 13, 17, 22 October 1898.

1897

Dominick Quello Block
Hecla Street near the Laurium Village Hall

John Prochissi, contractor

Constructed entirely of stone, this two-story commercial block, forty-six feet by sixty feet in plan, held business and living space.

CCEN, 30 July 1897.

1898-1900

Commercial Block
East corner of Hecla and Second street

This two-story, coursed rubble stone building with a conical-roofed corner tower of shingles and pressed metal held stores and apartments.

1898

Johnson Vivian, Jr. House
Northeast corner of Pewabic and Third streets

Demetrius Frederick Charlton, Marquette, architect

Johnson Vivian, a banker, merchant, and industrialist, built his house of red Portage Entry sandstone on the first story and shingles on the second story. The Marquette Mining Journal called the large, Colonial Revival style house "the finest and most modern in the county."

Charlton, Gilbert and Demar, Souvenir of a Few of Our Upper Peninsula Buildings, n.d. (ca. 1907); Steckbauer and Quade; CCEN, 27 September 1898; MMJ, 14 May 1898; Photograph File, MTU Library Archives.

ca 1898

Commercial Building
106 Kearsarge Street

This two-story storefront was built of coursed, red Portage Entry sandstone with mine rock side walls. It features a cornice and central, galvanized-metal, second-story bay with false pediment.

- 1899 W. H. Faucett and Brothers Block
Hecla Street
- Paul P. Roehm, stone work contractor; Frank E. Meyers, carpentry contractor
- CCEN, 25 April 1899.
- 1899,
1914 Laurium Village Hall
310 Hecla Street
- Charles W. Maass, Houghton, architect for 1899 structure and 1912 remodeling; Spaulding, contractor
- The remodeling of the Laurium Village Hall refaced the front of the structure with sandstone veneer made from old curbstone, laid in alternating courses of smooth-cut and rough-faced blocks.
- CCEN, 28 September 1898, 6 March, 12 July 1899; Charles W. Maass, Specifications of Work to be Done and Materials to Be Used in Remodeling the Laurium Village Hall, Laurium Village Hall, Laurium, Mich.
- 1900 Michael A. Richetta Block
- F. F. Ursin, carpentry; Peninsula Electric Light and Power Company, wiring; Laurium Hardware Company, steam heating and plumbing
- The local newspaper said that the red sandstone building material contributed to the architectural beauty of this handsome, three-story business block. It measured forty-two feet by eight feet in plan, held stores and offices, and cost \$18,000, more than any structure built in Laurium in 1900.
- CCEN, 19 September, 30 October 1900.
- 1900 D. Marta Block
323 Hecla Street
- Evenly coursed, red Portage Entry sandstone is employed in the front and side walls of this three-story building. Decorative stone work, stone pilasters, window hoods and surrounds, and cast iron elements grace the front. Small windows adapt the building to the climate. The structure cost approximately \$10,000.
- CCEN, 30 October 1900.

- ca 1900 Commercial Building
316-322 Hecla Street
- This two-story double store building is of red Portage Entry sandstone blocks and rubble.
- 1900 Peter Contralto Block
Corner of Second and Hecla streets
- Cowles and Eastman, Saginaw and Laurium, architects
- The local newspaper announced that plans and specifications had been prepared for "still another sandstone building" in Laurium. Peter Contralto estimated that the two-story commercial block, fifty feet in width by sixty-five feet in depth, would cost \$10,000. The central location and interior spatial arrangement was thought suitable for use as a store, saloon, or offices.
- CCEN, 22 May 1900.
- 1900 Ernest Bollman House
Tamarack and Third streets
- Donald M. Scott, civil engineer and architect
- CCEN, 5 June 1899, 25 August 1900.
- ca 1900-1905 Commercial Building
Northeast corner of Pewabic and First streets
- This nearly square, two-story block with a corner entry was built of regularly coursed, red Portage Entry sandstone on a mine rock foundation. It contains a store and apartments.
- 1901 State Savings Bank
Southeast corner of Hecla and Third streets
- Charles W. Maass, Houghton, architect (plans unexecuted); Carl E. Nystrom, Duluth and Calumet, architect and superintendent of construction
- In 1899, eighteen months after establishing the State Savings Bank, the board of directors intended to remodel completely and increase the size of its bank. It wanted a comparatively new building, ideally suited for the purposes of banking, so called on Charles W. Maass to draw plans for the enlargement of the building, the addition of a second story, and the placement of a

large corner entrance to the large public lobby and to the banking, counting, and director's rooms of the first floor. To further the image of the State Savings Bank as a sound banking establishment, the directors planned to use red sandstone for the first floor and brick for the second. These plans were not executed. Instead, two years later, the board had Carl E. Nystrom design a three-story building strong enough to carry three more stories, if later desired. Intended originally to be built entirely of Portage Entry sandstone ornamented with carved work and columns of St. Cloud granite, the structure was executed in brick and sandstone.

CCEN, 15 November 1898, 24 May 1899, 15 June 1901.

1904-1907 Carlton House
401 Kearsarge Street

This large, two-story, side-gabled house with dormers was built solidly of red Portage Entry sandstone in the Neo-classical Revival style of architecture for a pioneer family of merchants.

Painesdale

1902-1903 Sarah Sargent Paine Memorial Library (destroyed 1964)*

Alexander C. Eschweiler, Milwaukee, architect;
Prendergast and Clarkson, Chicago, contractor

1909-1910,
1935 Jeffers High School

Attributed to Alexander C. Eschweiler, Milwaukee,
architect

This large high school was built of randomly coursed, rock-faced red Portage Entry sandstone. Foliated ornamentation was carved into the stone arch of the main entry. The school, the Sarah Sargent Paine Library which it complemented, and a church overlooked a public square in the company town that served as residence for the employees of the Champion Mine of the Copper Range Consolidated Company. A swimming pool and gymnasium were added to the school in 1935.

South Range

1907-1910 Kaleva Temple Block
Trimountain Avenue

This two-story commercial block of rough-cut, red Portage Entry sandstone held stores, offices, and a social hall for the Knights of Kaleva, a Finnish-American fraternal order.

DMG, 17 April 1909, 11 March 1910.

1935 South Range Community Building
Trimountain Avenue

Philip Verville, Hancock, contractor

Constructed of red Portage Entry sandstone and brick on a mine-rock foundation, this community building contains the village offices and fire department and a large auditorium. The Civil Works Administration initiated the project to erect the community building using local labor and local materials. The building cost \$33,383.

Marquette County

Ishpeming

1880-81 Engine House, Iron Cliffs Mining Company
Near the intersection of M-28 and the Marquette,
Houghton and Ontonagon Railroad switch

This gable-roofed, T-shaped structure was built of coursed, unfinished Marquette sandstone to house boilers, engines, air compressors, and hoisting drums. The local newspaper thought it unfortunate that such an immense and substantial building was hidden between two hills, despite its utilitarian rather than ornamental function. Now owned by the Cleveland Cliffs Mining Company, the engine house, a sandstone machine shop, and other later structures stand in a complex called locally "the Brownstone," after the building material of the original building.

MMJ, 27 March, 14 August 1880, 23 July 1881.

1885 Edward Hall House
112 Bluff

Inspired by Sunnyside, Washington Irving's house at Tarrytown, New York, this Gothic Revival style house is built of native stone trimmed with smooth-cut brownstone. C. H. Hall employed Italian immigrant stone masons to build it for his son Edward. The house stands on a bluff, where it overlooked Ishpeming, before the construction of a highrise apartment building obstructed the view.

1890 Toutloff Building

E. E. Grip and Company, contractors

Portage Entry red sandstone, iron, and glass distinguished the front of this two-story commercial block.

MMJ, 6 September 1890.

1890-91 Ishpeming City Hall
Corner of First and Main streets

Demetrius Frederick Charlton, Marquette, architect;
Sinclair and Outerson, contractors

Red Portage Entry sandstone trimming distinguishes this two-and-one-half-story, brick, Richardsonian Romanesque public building. It was built at the primary intersection of Ishpeming, when the population reached 11,000, as the Cleveland Cliffs Iron Mining Company became the town's chief producer of ore. The structure cost \$31,340 and was termed "sturdy, commodious, and well-crafted."

MMJ, 14 February, 25 April, 10 October 1891.

1891,
1902 William G. Mather Chalet
112 Bluff Street

Charlton and Gilbert, Marquette, architects

Mine or local rock, sandstone, and logs are combined in this Swiss-inspired cottage built for the president of the Cleveland Cliffs Mining Company on a hill above Ishpeming. It received an addition in 1902. Today the company and its employees entertain guests here.

MMJ, 13, 20 October 1891.

- 1895-96 Ishpeming High School (destroyed ca. 1981)
Corner of North and First
- Charlton, Gilbert and Demar, Marquette, architects
- Standing two stories on a raised rubble stone foundation and featuring a tall corner clock and stair tower, this brick school was trimmed with sandstone and designed in a "modified Italian Renaissance style."
- MMJ, 18 May 1895.
- ca 1900 Anderson Block
Northeast corner of Main and Pearl
- Red Portage Entry sandstone trims this two-story, brick commercial structure.

Negaunee

- ca 1885 Commercial Block
434 Iron
- A facing of smooth-cut variegated Marquette sandstone and cast iron elements distinguish the front of this two-story, brick double store.
- 1895 Water Works
- 1890s Shea Block
300 block of Iron
- Smooth-cut variegated Marquette sandstone graces the front of this two-story commercial block.

Marquette

- 1855 First Marquette County Jail (destroyed)
- Charles Johnson, builder
- 1860s John Burt House*
220 Craig Street
- 1868-70 Machine Shops and Roundhouse of the Marquette and Ontonagon Railroad Company*

1870-73,
1891 First United Methodist Church
113 East Ridge Street

William Wyckoff, architect; Gregory and Webb, contractors; Carl F. Struck, architect for towers; Demetrius Frederick Charlton, architect for 1891 alterations

The church cost between \$20,000 and \$25,000. In 1873 Carl F. Struck, Marquette's first skilled architect-in-residence gave an otherwise plain church of variegated brown Marquette sandstone rubble a distinguished European character by means of his designs for the two steeples. Demetrius Frederick Charlton planned the 1891 alterations.

MMJ, 25 June 1870.

1871 Grace Furnace of the Lake Superior Iron Company
(destroyed)

1871-73,
1885 Superior Building (First National Bank) (destroyed)*
Southwest corner of Front and Spring streets

Henry Lord Gay and Company, Chicago, architect; Carl F. Struck, Chicago, supervising architect; Alfred Green, Cleveland, contractor; Hampson Gregory, architect/builder, 1885

1872 Dock Office of the Marquette and Ontonagon Railroad
120 East Main Street

Constructed when the Marquette and Ontonagon Railroad merged with the Houghton and Ontonagon Railroad into the Marquette, Houghton and Ontonagon Railroad, this utilitarian structure of variegated brown Marquette sandstone, roughly finished and laid in courses, is the sole survivor of a group of railroad buildings.

1872-76 Hiram A. Burt House
202 East Ridge Street

The uniqueness of this brown Marquette sandstone structure derives from the use of smooth-cut, finely fitted, hexagonal blocks for the exterior finish. Hiram A. Burt, a pioneer businessman and industrialist and president of the Burt Freestone Company, reportedly found inspiration for the Second Empire house while

traveling in Europe. The stone probably came from the Burt Freestone Company quarries in South Marquette.

MMJ, 5 October 1872, 15 May 1875, 1 April 1886.

1874-75 High School (destroyed 1900)*
Ridge, Arch, and Pine streets

Carl F. Struck, architect; Hampson Gregory, contractor

1874-77 First Opera House (destroyed)
Front Street between Washington and Main streets

Carl F. Struck, architect

This structure was built of pure brown Marquette sandstone with a rubbed finish, after a group of Marquette citizens formed a stock company and commissioned Struck to draft plans for a large opera house of "first-class" quality. The Panic of 1873 halted the finishing of the interior of the theater.

MMJ, 17 October 1874.

1874-76 St. Paul's Episcopal Church*
Northeast corner of Ridge and High streets

Gordon W. Lloyd, Detroit, architect; Carl F. Struck, supervising architect; Gowling, stone mason

1875 Andrew A. Ripka House
430 East Arch Street

Carl F. Struck, architect

The Philadelphia-born-and-educated manager of the railroad company dock and speculator in mines constructed this one-and-one-half-story, cross-gabled, Gothic Revival house of randomly coursed, rock-faced, variegated brown sandstone from the quarries of the Marquette Brownstone Company. The house, lawn, and surroundings were considered equal or superior to any in the Upper Peninsula.

MMJ, 6 March, 24 April 1875, 23 July 1882.

1875-76 Richard P. Traverse House
135 Bluff Street

Carl F. Struck, architect

This one-and-one-half-story, nearly square, "cottage residence" was constructed of evenly coursed, smooth-cut, uniform and variegated brown Marquette sandstone for the operator of a quartz quarry. The local newspaper admired the way in which Traverse had improved the appearance of the neighborhood by removing the old buildings from the site and building in their place a new sandstone building.

MMJ, 10 July 1875, 3 March 1877.

1880 Daniel H. Merritt House*
410 E. Ridge Street

Hampson Gregory, architect and builder

ca 1880 Commercial Building
412 S. Front Street

Smooth-cut, variegated brown Marquette sandstone, still visible on the second story, but covered with plastic on the first, dressed the facade of this otherwise rubble stone building.

1880, St. Peter's Roman Catholic Cathedral
1935 311 W. Baraga (southwest corner of Superior and Front streets)

Henry G. Koch and Son, Milwaukee, architects; Hampson Gregory, contractor; James Lawrence, masonry superintendent; George A. Misch, Chicago, cathedral glass windows; R. R. Williams, L'Anse, slate work; Demetrius Frederick Charlton, interior woodwork design; Hager and Johnson, woodwork

After fire destroyed St. Peter's Cathedral in 1879 (originally built in 1864), the Diocese of Marquette rebuilt it in variegated brown Marquette sandstone. Reconstruction took nearly ten years and cost \$100,000. The cost and beauty of its material, the magnitude of its proportions, and the elegance of its design and finish symbolized the prominence of

both the diocese and the city. Extensive rebuilding occurred in 1935.

Rezek, vol. 2, pp. 193-205; MMJ, 15 January 1881, 29 March 1890.

1881

James M. Pickands Warehouse
121 Baraga Street

The rubble work of variegated brown Marquette sandstone conveys the utilitarian function of this two-story warehouse. Constructed near the docks for James M. Pickands, dealer in coal and pig iron, it was later acquired by the Duluth, South Shore and Atlantic Railroad Company.

Henry E. Riggs, Report on the Valuation of the Duluth, South Shore and Atlantic Railway as of June 30, 1911 (Ann Arbor, Mich.: n.p., 1911).

1883

Martin Vierling Block
Northeast corner of Front and Main streets

Martin Vierling crowned his choice commercial site with a structure worthy of its commanding location. The smooth-cut, variegated brown Marquette sandstone foundation and front, and the brick side walls give the two-story business block a solid and enduring character.

MMJ, 10 February 1883.

1883

Edward Fraser Block
East side of Front Street between Main and Spring streets

Located in what was then the most desirable part of the city's business center, the Fraser Block features a front of smooth-cut and rubbed, red Portage Entry sandstone. This was reportedly the first use of this stone in Marquette.

MMJ, 25 October 1884.

1884-86

First Baptist Church (destroyed)
Southeast corner of Ridge and Front streets

Henry W. Coddington, Kalamazoo, contractor

Executed in randomly coursed, rough-faced, variegated brown Marquette sandstone for about \$20,000, this

Gothic Revival church stood on a ridge overlooking the bay and the valley.

MMJ, 26 April 1884.

1885-89 Upper Peninsula Branch Prison and House of Correction*

William Scott and Company, Detroit, architects;
Demetrius Frederick Charlton, Detroit, supervising
architect and construction supervisor; Wahlman and
Grip, Ishpeming, contractor; James Sinclair, super-
visor of stone masons

1887 William Hicks Block
329 W. Washington Street

1887 First Timothy Nester Block (destroyed 1891)
Washington Street

Smith and Wilson, contractors

Rock-faced, variegated brown Marquette sandstone
covered the front of this substantial commercial build-
ing of stores and offices which was designed in the
vernacular manner.

MMJ, 23 April, 18 June, 10 September 1887.

1887 Harlow Block*
Northwest corner of Washington and Front streets

Hampson Gregory, architect

1887 Edward Breitung House (planned)
Ridge Street

William Scott and Company, Detroit, architects;
J. B. Sweatt, contractor (cancelled)

The death of Edward Breitung cancelled the plans for
building this large house of rock-faced, red Portage
Entry sandstone, the cost of which was estimated at
\$60,000. Breitung, a pioneer speculator in mineral
lands and banks, a politician, and Negaunee's most
influential and highly esteemed citizen, selected the
Ridge Street site over one in Negaunee because it
better suited his stature and the stature of his
house. His widow decided not to build the large

brownstone mansion, but erected a smaller, shingle house, after plans prepared by John Scott.

MMJ, 5 February, 11 June 1887, 25 August 1888.

1887

Breitung Mausoleum
Park Cemetery

John Scott and Company, Detroit, architect; Furst and Neu, Chicago, construction contractor and supplier of building material

This burial vault of red Portage Entry sandstone is a monument to Edward Breitung, one of the area's wealthiest and most prominent citizens. To design the mausoleum, the family chose the firm that recently had completed plans for the Breitung House and several other important public and private buildings in Marquette. The mausoleum cost \$6,000.

MMJ, 5 March 1887.

1887

Morgan Memorial Chapel
318 West High Street

[Henry Ives] Cobb and [Charles S.] Frost, Chicago, architects; Hampson Gregory, contractor

Peter White, one of Marquette's major philanthropists, commissioned Cobb and Frost of Chicago to design this small chapel in memory of his son, Morgan Lewis White. The rock-faced, variegated Marquette sandstone structure was constructed by a local builder.

MMJ, 28 May 1887.

1888-89

United States Custom House, Post Office, Court House, and Government Building (destroyed)
Northwest corner of Washington and Third streets

M. E. Bell and Will A. Freret, supervising architects of the U.S. Treasury Department; Smith and Wilson, contractors; John Lawrence, supervisor of stone cutters

Seven years after Edward Breitung had assisted in securing a congressional appropriation of \$100,000 for the construction of a government building in Marquette, the United States Treasury Department prepared final plans and let bids for this government

building. The design called for a Classical and Romanesque style masonry structure, the exterior material of which could be determined by the bids of contractors. Smith and Wilson employed as much stone as their budget would allow. They built it of pressed red brick with trimmings and foundation of Portage Entry sandstone. Lake Superior copper covered the roof.

American Architect and Building News, 18 September 1866, il. 560; MMJ, 13 January 1883, 17, 24 March, 14 April, 12 May 1888, 6 July 1889.

1888-89

Campbell and Wilkinson Bank Block (destroyed)
Northeast corner of Front and Washington streets

John Scott and Company, Detroit, architects; Demetrius Frederick Charlton, construction superintendent; Wahlman and Grip, Ishpeming, contractor

Rock-faced and carved, red Portage Entry sandstone and Chicago Anderson pressed brick expressed the substantial quality of this two-story business block. The Marquette Mining Journal called this \$35,000 building modern in design and the finest in the city.

MMJ, 12 May 1888.

1889

Herman B. Ely School (destroyed 1969)
Bluff Street

Demetrius Frederick Charlton of Scott and Charlton, architect; Wilson and Moore, contractors

Rock-faced, red Portage Entry sandstone laid in courses contributed to the massiveness and solidity of this Richardsonian Romanesque style school, and thereby symbolized the importance of the educational institution. It cost \$22,387.

MMJ, 29 June, 13 July, 3 August 1889.

1889-91

Abraham Mathews House (destroyed)
Northeast corner of Bluff and Blaker streets

Demetrius Frederick Charlton, architect; L. F. Crosby, Milwaukee (formerly with Burnham and Root), interior finish; Andrew W. Lovejoy, carpentry; James Sinclair, masonry

The house cost between \$20,000 and \$25,000.

MMJ, 13 April 1889, 14 March 1891.

1889-91

Water Works
Lake Street at Ridge Street

Demetrius Frederick Charlton, architect; Furst, Jacobs and Company, contractor for superstructure

After fire destroyed the city's first pumping station in 1889, the board of water and the fire commissioners erected this fireproof structure to house a duplex compound pump capable of pumping daily into the city water mains three million gallons of water drawn from the lake. Randomly coursed, rock-faced red sandstone, employed in a solid and substantial Richardsonian Romanesque treatment that lacked expensive ornamentation, gives a pleasing appearance to a water pumping plant which cost \$55,000.

MMJ, 25 October, 29 November 1890, 10 January 1891.

1890

Bice Pendill and Company
321 Division

Variegated brown Marquette sandstone rubble states the utilitarian function of this two-story factory.

MMJ, 6 December 1890.

1890-91

Marquette Opera House (destroyed)
Washington Street between Front and Third streets

Demetrius Frederick Charlton of Charlton and Gilbert, architect and construction superintendent; Wilson and Moore, contractors

The Marquette Opera House displayed a bold and simple Richardsonian Romanesque style treatment in Portage Entry sandstone. The rock-faced redstone front, with finely carved details, produced a building thought to be the "most conspicuous and handsomest" in the city. It cost \$100,000.

MMJ, 4 July 1891, 13 February 1892.

- 1890-92 John Munro Longyear House (moved to Brookline 1903-04)*
536 Arch Street
- Demetrius Frederick Charlton, architect; Charles Van Iderstine, stonework and construction superintendent
- 1891 Fraternity Hall
213 N. Front Street
- A. W. Lovejoy and Hampson Gregory, architects; Hampson Gregory, construction superintendent
- The Knights of Pythias and Odd Fellows introduced to the Upper Peninsula dazzling white sandstone from the Rock River Brownstone Company's quarries. The stone's remarkable color and its solidity and strength attracted attention. The lodge cost \$30,000.
- MMJ, 11, 25 April, 7 November 1891, 2 January 1892.
- 1891 Frank Carney Block
136 West Baraga Street (formerly Superior Street)
- Andrew W. Lovejoy, architect
- The coursed, rock-faced, brown sandstone front combined with such features as the round-arched entry, central pediment with checkerwork, corbels, and corner piers, express the vernacular inspiration of this rubble stone commercial block.
- MMJ, 16 May 1891.
- 1891-92 Marquette County Savings Bank*
107 S. Front Street
- [Charles A.] Barber and [Earl W.] Barber, Milwaukee, architects; Noble and Benson, St. Paul, Minnesota, contractors
- 1891-92 Lake Superior Hotel-Sanitarium (destroyed 1929)
In Mountain Park between Jackson Street and Blemhuber Avenue
- Elijah E. Myers, Detroit, consulting architect; Andrew W. Lovejoy, architect and construction superintendent; J. B. Sweatt, contractor
- The Marquette Lake Superior Hotel-Sanitarium Association, a group of Detroit-area physicians and prominent

Marquette citizens, financed this huge, sprawling resort hotel, hoping to attract invalids and resorters to its Turkish baths, dancing hall, gymnasium, hiking trails, scenery, and pure air. Its picturesque assortment of towers, wings, and piazzas was constructed of variegated Marquette brownstone on the lower stories and wooden shingles on the upper stories. The 325-room hotel cost nearly \$125,000. The association went bankrupt two years after opening.

MMJ, 10, 17 October 1891, 29 February, 30 July 1892, 29 September 1894.

1891-92

Second Timothy Nester Block
Washington Street

Charlton and Gilbert, architects; Sinclair and Outerson, stonework contractors

Rusticated stonework and angle quoins are prominent on this modern, four-story, brick office building styled in what its architects termed Italian Renaissance. The Marquette Mining Journal thought that the Second Nester Block, the Marquette County Savings Bank, and the Second Opera House--all built in one season--gave Marquette a "metropolitan" look.

Inland Architect and News Record, July 1892 (ill.);
MMJ, 25 July 1891.

1892

Anton Zaaman Block
229 W. Washington Street

Hampson Gregory, architect

Smooth-cut variegated Marquette brownstone dresses the front of this two-and-one-half story, brick commercial building. The street level is now altered.

MMJ, 16 April 1892.

1893

Mrs. Peter White Phelps House
433 East Ridge Street

Charlton and Gilbert, architects; Charles Van Iderstine, contractor

W. F. Fitch, president of the Duluth, South Shore and Atlantic Railroad Company, had this red Portage Entry sandstone house built for his daughter and son-in-law.

Charlton and Gilbert, Drawings of the Mrs. Peter White Phelps House (1893), Mr. and Mrs. David Drury, Marquette.

- 1893-94 Upper Peninsula Brewing Company (destroyed except for Charles Meeske House)
Meeske Street and U.S. 41 West
Andrew W. Lovejoy, architect
The castle-like appearance of this brewery and biergarten stated its intended industrial and social functions. Executed in variegated brown sandstone in a vernacular interpretation of the Romanesque Revival style that featured towers and crenelations, the buildings stood in a pastoral setting.
- 1893-94 Marquette City Hall*
220 Washington
Lovejoy and Demar, architects; Emil Bruce, Minneapolis, contractor
- 1899-1900,
1907 Northern State Normal School, Longyear Hall of Pedagogy (South Wing)
Charlton, Gilbert and Demar, architects
E. W. Arnold, a Battle Creek architect, drafted plans for the rebuilding of Longyear Hall after fire destroyed it in 1907.
MMJ, 2 November 1899, 7 July 1900, 13 April 1907.
- ca 1900 House
409 E. Ridge Street
Stone is used somewhat incongruously on this Shingle style building.
- 1901-1902 Northern State Normal School, Peter White Hall of Science (North Wing) (destroyed 1975)
Charlton and Gilbert, architects
The exterior appearance of the North Wing duplicated that of the South Wing. It is in what its designers termed "the Elizabethan style." The Marquette brown-stone building cost \$35,000.
MMJ, 11 May 1901, 1 November 1902.

- 1902 Duluth, South Shore and Atlantic Railroad Depot
Main Street between Front and Third streets
- Demetrius Frederick Charlton, architect; Lipsett and Gregg, contractors
- This two-story building was constructed of evenly coursed, rock-faced brown sandstone, probably from the quarries at Port Wing. It replaced an earlier depot.
- Riggs; DMG, 8 May 1900; MMJ, 28 December 1901.
- 1902-1904 Marquette County Court House
400 South Third Street
- Charlton and Gilbert, architects; Northern Construction Company, Milwaukee, general contractor; Manning Brothers, Boston, landscape architects; Lipsett and Sinclair, cut stonework
- Neo-classical Revival in style, this court house is composed of a domed, three-story central mass flanked by two-story symmetrical wings and extended by a large columned portico. It possesses the solid dignity and beauty required for a building of its kind. It was built of "the stone of the North Country"--red Portage Entry sandstone--and cost \$204,000.
- MMJ, 20 September 1902, 19 September 1904; Marquette County Court House Building Committee, Minutes, 6 August 1902.
- 1903-1906 Baraga School (destroyed 1975)
Fourth and Rock streets
- John D. Chubb, Chicago, architect
- This Richardsonian Romanesque style school, two stories with a hipped roof and castellated central entry tower, was built of Marquette brownstone salvaged from the Grace Furnace.
- Rezek, vol. 2, pp. 203-204.

1913-15 Northern State Normal School, J. H. Kaye Hall (Central Building) (destroyed 1975)

Charlton and Kuenzli, architects; Herman Gundlach, Houghton, contractor

This structure of Marquette brownstone in a vernacular interpretation of the Tudor style contained executive offices, a library, gymnasium, assembly hall, and several educational departments.

MMJ, 2 August 1913, 10 January 1914, 27 February 1915.

Wisconsin

Bayfield County

Ashland1886-88,
1901St. Agnes Roman Catholic Church
201 Front Street EastJ. S. Chevigny, architect; Periner and Chevigny,
contractors and builders

Situated near the site of the first church on Chequamegon Bay, established by Father Allouez in 1665, St. Agnes Church was begun in 1886, and completed in 1888. In 1901 the steeple and side entrances were added. Built of native Bayfield brownstone in the Gothic Revival style of architecture, the church is what the local newspaper termed "a magnificent and imposing edifice, a monument to the Catholic religion." It explained, "the building is built entirely of Bayfield brown stone, which has become so favorably noticed during the last few months. The stone is all dimension and has been carefully cut and set with plumb bond and rock face, except at arrows, etc. where mouldings have been worked." The church has been the centerpiece of a complex that included first a Franciscan Monastery, and later St. Agnes Rectory (1896), St. Agnes School (1895), and Sacred Heart Convent (1892). The church cost \$45,000.

Fr. Medard Buvala, History of St. Agnes Community 1873-1973 Celebrating One Hundred Years of Faith (Ashland, Wis., 1973); AP, 11 February 1888, 3 September 1892.

1887

Northern National Bank

E. A. Shores organized the Northern National Bank in 1886, four years after coming to Ashland from Manistee, Michigan, to invest in pine lands. The Shores Building Association built the bank of brick trimmed with brownstone, as solid and substantial as the institution itself. The directors included Isaac H. Wing, Fred Fisher, George F. Merrill, and R. D. Pike.

AP, 11 August 1888.

1887 First National Bank

[Allan Darst] Conover and [Lew Forster] Porter,
Madison and Ashland, architects

With the development of the mineral resources surrounding Ashland and the need for additional financial institutions here, Edwin Ellis, J. H. Knight, S. S. Fifield, and others filed articles of incorporation for the First National Bank. In the spring of 1887 they began the erection of a three-story bank of white-pressed brick trimmed with brownstone. Located on a major business corner, the building was considered a credit to the city as well as to the institution.

AP, 11 August 1888.

1888 George W. Peck Block
311 East Second Street

Conover and Porter, Madison and Ashland, architects

This small, two-story, Richardsonian Romanesque commercial block was built of solid brown sandstone. The front features a large arched window and checkerwork over the store. The corners and sides are finished in rock-faced stone.

AP, 28 July 1888.

1889 Ellis and Gregory Block (Security Savings Bank)
212-214 West Second Street

Conover and Porter, Madison and Ashland, architects;
B. B. Scott, construction supervisor; P. J. Dullanty,
plumbing contractor; Donald Brothers, stone cutters

Designed in the Richardsonian Romanesque style of architecture, this three-story commercial block was executed in brick with a front of smooth-cut and carved brownstone. Twenty-five feet in width by sixty feet in depth, it stands on Ashland's principal business street and went up after the town's population had risen from 350 in 1880 to nearly 10,000 in 1890. The Ashland Press for 17 August 1889 said: "The bank building of Ellis and Gregory on Second Street is one of those solid structures that give a city an assurance of growth, although not the largest. The front is of massive and artistic appearance, being brownstone up to the frieze. . . ."

- 1889 Union Passenger Depot, Wisconsin Central Railroad*
Third Avenue West
- 1889 Knight Block (destroyed 1974)*
Second Street and Ellis Avenue

Conover and [Horace P.] Padley, Madison and Ashland,
architects
- ca 1890 Bristol Block (Meyers Walgreen Drugs)
315 West Second Street

This three-story, Richardsonian Romanesque commercial
block displays a front facade of rock-faced brown
sandstone from the Superior Brown Company's quarries
on Bass Island.

ADP, Annual Edition, May 1893, p. 65.
- 1890s Commercial Block
507 West Second Street

Stone pilasters and corbelling decorate the front
of this two-story double store of coursed, rock-faced
brownstone.
- 1891 C. E. Booth Sanitarium
Prentice Park

Barber and Barber, Superior, architects and construc-
tion supervisors; A. L. Morse and Company, heating and
plumbing contractor; Henry Asseltine, West Superior,
contractor

Brownstone laid in "random range style" furnished the
building material for the first story of this three-
and-one-half story medical and surgical sanitarium.
The structure measured 105 feet by 40 feet in plan,
and featured three wings and a wide veranda. It stood
on the top of a knob overlooking the bay in the midst
of natural ravines and was supplied with spring water.

AP, 15 August, 31 October 1891.
- 1892 Ashland Opera Block (planned)
Second Street and Sixth Avenue West

Cobb, Chicago, architect

Proposed since 1889, the Ashland Opera House was
promoted fully three years after the Ashland Opera

Block Company had organized to build an opera house of solid brownstone. The scheme called for Frederick Prentice to donate the brownstone, for other prominent citizens to donate the site and building materials, and for still others to donate cash. The design of the five-story block followed the Richardsonian Romanesque mode. The proposal called for finishing the building in heavy brownstone with piers of rough ashlar work in bold relief and panels infilled with irregular pointed "range work," which, according to the Ashland Press for 10 December 1892, would give the facade "a rich, bold and liberal treatment of outline, carrying with it the character of strength, durability and pleasing conception of outline."

ADP, Annual Edition, May 1893; AP, 22 February 1890, 3, 24 September, 10 December 1892.

1892

First Presbyterian Church (destroyed)
Corner of Third Street and Vaughn Avenue

Warren B. Hayes, Minneapolis, architect

In May 1891 members of the Presbyterian Church unanimously voted to build "a structure worthy of the church in Ashland and the city in which it will stand." They commissioned a recognized midwestern church architect, who had studied at Cornell University, to design a solid brownstone building for the site of their present church. The architect planned the Ashland church after Presbyterian churches in Madison and Minneapolis. The structure, 89 feet by 122 feet in plan, and with a seating capacity of 1,100, cost about \$40,000.

ADP, Annual Edition, May 1893, p. 18; AP, 30 May 1891, 23 July 1892.

1892-94

Ashland Post Office*
201 Second Street West

Willoughby J. Edbrooke, U.S. Department of Treasury, architect; Forster and Smith, Sault Ste. Marie, contractors

1894-95

L. C. Wilmarth Block Number One
Second Street, between Eighth and Ninth avenues west

L. C. Wilmarth, designer and supervisor of construction; T. E. Pugh, contractor; Archie Donald and Company, subcontractor for brick and stonework; J. W. Carr, plastering; Briggs Brothers, painting; Ashland Hardware Company, roof and tin work.

Nothing but Ashland brownstone, beautifully carved and with checkerwork, was used in the first story front of this large, two-story commercial block that measured seventy-five feet in width by ninety feet in length. Minnesota cream brick with brownstone trimmings faced the upper stories of the front, while buff-colored Ashland brick was used on three sides. Two large stores occupied the first floor, living rooms and offices the second and third. Wilmarth, himself, designed the building, and, when completed in 1895, put an addition on the Willmarth Block Number Two. These substantial buildings were thought to demonstrate his faith in Ashland's future.

AP, 14 April, 22 September 1894, 28 September, 16 November 1895.

1895

Emil Garnich Block
Second Avenue

[Henry E.] Wildhagen and [Herman] Rettinghaus, architects; Archie Donald and Company, masonry; H. Asseltine, carpentry

A wholesale and retail hardware establishment had built to order this four-story block, and occupied most of its space. Its splendid masonry work, for which the Excelsior Brownstone Company supplied the stone, was thought to make the building "a veritable Gibraltar." Emil Garnich had established his business in 1872 and had built one of Ashland's first brick blocks in 1884. This brownstone and brick structure of 1895 cost \$35,000. It was located convenient to the docks and railroad.

AP, 23 March, 20 April, 1 June, 14 December 1895.

- 1895 Wilmarth School
 913 Third Avenue West
- Henry E. Wildhagen, architect
- Brownstone quoins, beltcourses, and window and entry surrounds trim this cream-colored brick school.
- Barbara Wyatt and Diane H. Filipowicz, Henry Wildhagen
 Schools of Ashland, National Register of Historic
 Places-Inventory-Nomination Form, United States
 Department of the Interior, 22 December 1979.
- 1895-96 Masonic Temple
 522 Second Avenue
- Charles McMillan, Duluth, architect; Archie Donald and
 Company, foundation contractor; Nicholas Mueller,
 superstructure; P. J. Dullanty, plumbing contractor
- Standing in the commercial district diagonally across
 from the government building, this three-story block
 with a corner tower measures 134 feet by 50 feet in
 plan. The first story displays rough-cut brownstone
 and a round-arched main entrance that springs from
 flanking clusters of brownstone columns; upper stories
 are of pressed brick. The first floor contained two
 stores, the second offices, and the third the hall and
 Masonic rooms. In 1891 the Masons had decided to
 build within three years a new temple of solid brick
 or brownstone. This is the result.
- AP, 10 October 1891, 20 July 1895, 4 January 1896.
- 1899 Ellis Building
 Second Street
- An Ashland contractor built this brownstone-fronted
 commercial block.
- AP, 13 July 1899.
- 1899 Beaser School
 612 Beaser Avenue
- Henry E. Wildhagen, architect
- The brownstone of the raised foundation, beltcourses,
 window sills, cornice, and stepped-gable motif warms

and decorates this two-and-one-half story, cream-colored brick school.

Wyatt and Filipowicz.

1900

Ellis School
310 Stuntz Avenue

Henry E. Wildhagen, architect

This two-story brick school in the Georgian Revival style of architecture stands on a raised foundation of brownstone and displays decorative trim of brownstone.

Wyatt and Filipowicz.

1905

Ashland High School
1000 Ellis Avenue

Henry E. Wildhagen, architect

This large brick and brownstone school blends elements of the Neo-classical Revival and Richardsonian Romanesque styles in a central block flanked by wings. The main block features a round-arched entry flanked by paired polished granite columns topped with foliate-carved sandstone capitals and surmounted by a brownstone balcony. The entry tower originally was topped by a belfry.

Wyatt and Filipowicz.

Bayfield

1883-84

Old Bayfield County Court House*
Block bounded by Washington and Rice avenues and Fifth and Fourth streets

John Nader, Madison, architect; Cook and Hyde, Milwaukee, contractor

1886

School (destroyed)

S. E. Jenison, Chicago, architect; Periner and Webster, Ashland, contractor

This two-and-one-half-story wooden school rested on a raised brownstone foundation. It cost \$10,000.

BCP, 18 December 1886.

1891,
1898

Holy Family Catholic Church
232 N. First

Brother Adrian Weaver, OFM, designer

The small, gable-roofed church with a steepled central entry tower is built of coarsed, rock-faced brownstone. The church and rectory occupy a hillside plateau across from the Holy Family Catholic School (1910).

1892

Currie Bell Block
2 West Second Street

This brick commercial block displays grouped round-arched windows, corbelling, and brownstone trimming. It was built by Currie G. Bell, editor of the Bayfield County Press, promoter of the State Fish Hatcheries at Salmo, and member of Bayfield village and county supervisory boards.

1894-95

Lincoln High School
Block bounded by Third and Fourth streets and Sweeny and Lynde avenues

J. W. Hinckly, Minneapolis, contractor; Captain Padley, Ashland, superintendent of construction

Situated in the northern part of Bayfield, the high school was built as fireproof as possible of solid rusticated brownstone with stone partition walls and was finished in native woods.

AP, 20 October 1894, 27 November 1895; WN, 13 July 1894.

1894

Robinson D. Pike Summer House
On W-13, three miles southwest of Bayfield
Salmo

Built of Bayfield sandstone and wood in the Colonial Revival style, the Pike Summer House stands on a hill overlooking the bay, just north of Pike's quarry.

WN, 13 July 1894.

- 1895-97 State Fish Hatcheries
On W-13, two miles west of Bayfield on Chequamegon Bay
Salmo
- H. P. Hadley ? [Padley], architect
- In 1895 the Wisconsin legislature appropriated \$20,000 to establish a fish hatchery at Salmo on a one-hundred-acre site adjacent to Lake Superior. Twenty years earlier, Robinson D. Pike and his father, Elisha Pike, operators of Bayfield-area sawmills, had started a little fish hatchery where two trout streams (Pike's Creek and Birch Run) empty into Lake Superior. The hatchery of 1897 was designed after the gambrel-roofed barn of northern Wisconsin and built of local sandstone on the first story and wood shingles on the second.
- Guy M. Burnham, The Lake Superior Country in Story and in History (Ashland, Wis.: Ashland Daily Press, 1930); AP, 5 October 1895; WT, 17 September 1897.
- ca 1900 Power House
125 S. First Street
- R. D. Pike built this one-story, false-fronted structure of coursed brownstone blocks and rubble stone. A brown artificial stone addition of the same size and design as the original expanded the building and demonstrates the evolution from the use of stone to the use of cement building materials.
- 1903-1904 Carnegie Library
37 N. Broad Street
- Henry E. Wildhagen, Ashland, architect
- Designed in the Neo-classical Revival style by a German-born architect, the Carnegie Library is built of yellowish orange brick on a raised brownstone foundation and trimmed with brownstone. It cost \$10,000.
- BCP, 8 January 1904; WT, 23 April, 12 February 1903.
- 1905 First National Bank*
Northwest corner of Second Street and Rittenhouse Avenue
- Archie Donald, Ashland, builder and stonemason

Iron River

1907 Iron River Bank
S. Main Street

Port Wing

1903 School (destroyed 1980)

Henry E. Wildhagen, Ashland, architect; John H. Foster and Sons, Ashland, contractors

Brownstone from the Port Wing quarry furnished the material for the foundation and entrance to this eight-room, wooden school. It was thought to be large enough to accommodate all future needs of this small but ambitious lumbering, fishing, and quarrying center at the mouth of the Flag River and the only harbor of refuge on Lake Superior between the Apostle Islands and Duluth.

WN, 23 July 1903.

Sand Island

1881 Sand Island Light

Both the thirty-seven-foot-high octagonal light tower and the one-and-one-half-story dwelling to which it is attached are built of variegated sandstone quarried at the rocky point on which they stand.

AP, 21 December 1895.

Washburn

1889 Union Block
Southeast corner of Bayfield Street and Central Avenue

Peter Nelson and F. J. Meehan erected this sandstone block for their respective hardware and clothing stores, after fire had destroyed their wooden buildings in a blaze that burned much of Washburn's central business district. Two stories in height, and fifty feet by eighty feet in ground dimensions, the fireproof structure was built of coursed rubble on the side and rear walls, and evenly laid ashlar from the quarries

at Bayfield on the Bayfield Street and Central Avenue walls. Corbelling ornamented the cornice line, voisoirs the upper front windows, and a false pediment the front facade. The Washburn News for 29 December 1888 remarked as follows: "Hardly anyone suspected for a moment that that corner would be graced by such an ornamental and good looking structure which now stands there. True, most folks knew that the building to be erected was to be Brownstone, but that such expense and care would be given to the work few indeed even dreamed of. It is without any question one of the finest buildings in the state outside of the larger cities and reflects credit upon its owners in no small degree."

WN, 29 September 1888, 26 February 1889.

- 1889 Bayfield County Bank
Bayfield Street
- 1889-90 Washburn State Bank*
Northwest corner of Bayfield Street and Central Avenue

Conover and Padley, Madison and Ashland, architects
- 1893-94 Walker School (destroyed 1947)*
T. Dudley Allen, Cleveland, architect
- 1894 Bayfield County Court House*
Block bounded by Fifth and Sixth streets east and
First and Second avenues east

[Fremont D.] Orff and [Edgar E.] Joralemon, Minneapolis,
architects; John Halloran, contractor
- 1895 F. J. Meehan Store
Bayfield Street

R. Orff, architect; J. E. Layne, construction superintendent

This one-story commercial building with a brownstone front that extends on Bayfield Street for seventy-five feet was built for the Meehan Mercantile Company, which F. J. Meehan had developed into one of the leading businesses in Washburn and one of the "model institutions" in northern Wisconsin. Stone, brick side walls, and iron columns made it fireproof. Begun in May, it was completed in three month's time.

WN, 28 July 1903; WT, 8, 22 May, 24 July 1895.

- ca 1900 Al Lien Block
Bayfield Street
- This small, one-story sandstone block now serves as the post office.
- 1902 St. Louis Catholic Church
Northwest corner of Washington Avenue and West Seventh Street
- Brother Adrian OFM, La Crosse, architect
- Evenly coursed brownstone was employed in this church that measures 140 feet by 60 feet in plan. The stepped, end-gable front features an outsized portico flanked by smaller entrances. The outlandish proportions and design, executed in native sandstone, give the St. Louis Catholic Church a distinctively vernacular appearance.
- 1903-1905 Free Public Library*
Southeast corner of Washington Avenue and West Third Street
- Henry E. Wildhagen, Ashland, architect; Sheridan and Swain, contractor

Douglas County

Superior

- 1888,
1891 West Superior Hotel
Corner of Tower Avenue and Belknap Street
- Carl Wirth, architect; Howard Thomas, chief engineer of the Land and River Improvement Company, supervisor of construction
- In 1891 the Land and River Improvement Company built an addition to its four-story West Superior Hotel, giving the hotel a total of 175 rooms and bringing its investment in the structure to \$225,000. The hotel, built of St. Louis pressed brick and Lake Superior brownstone in what the newspaper said combined the Old Colonial and Romanesque styles of architecture, stood at the center of a new business and residential district predicted to become the very heart of the city.
- SET, 23 May 1891; SDL, 26 February 1891.

- 1890 Trade and Commerce Building*
Northeast corner of Broadway and Hammond Avenue
Clarence H. Johnston, St. Paul, architect
- 1890 Commercial Block
712-714 Tower Avenue
Rock-faced, red sandstone ashlar decorates the front walls of this three-story, brick commercial block. The structure features Romanesque-arched windows with paired columns on the second story and foliated ornamentation carved in stone.
- 1890-92 Church of the Redeemer
1408 Cumming Avenue
The parishioners of this Episcopalian Church built what the local newspaper thought would be one of the handsomest churches in the city. It said, "the edifice will probably be built of Amnicon stone, and will cost not less [than] \$15,000." The cornerstone was laid 25 August 1891, and the church was dedicated 26 February 1892.
Eau Claire (Wis.) Diocese, Church of the Redeemer
(Eau Claire, Wis., 1955); SET, 3 June 1890.
- 1890-91 James Roosevelt Block
Corner of Ogden Avenue and Twenty-first Street
Carl Wirth, architect; Smith Brothers, contractors
This three-story terrace of eleven twelve-room houses was constructed of pressed brick with brownstone ornamentation at a cost of \$80,000. It marked "a new departure in residence building" in Superior and reflected the growing need for high quality tenements.
SET, 7 October 1890.
- 1890-91 A. W. Stow Block
Northeast corner of Broadway and Hughitt Avenue
Brownstone furnished the building material for the first story and trim of this six-story, pressed LaSalle brick office building. It measured 50 feet by 130 feet in plan, and cost \$150,000. Granite pillars supporting massive cut-stone arches flanked entrances from each street. The local newspaper

compared the design of the Stow Block to that of the Palladio Building in Duluth. A. W. Stow intended to build another structure identical to this one on a nearby lot connected to the Stow Block by a courtyard.

SET, 19 November 1890.

1890s

Commercial Block
1513-1515 Belknap Street

This two-story, Richardsonian Romanesque block contains two stores and apartments. Built of rock-faced brownstone, it remains in nearly original condition.

1891

Church of the Redeemer (destroyed)
Corner of West Fourth and St. John Avenue

W. T. Towner, architect

This Gothic Revival style church was built of brownstone from the Arcadian Brownstone Company and the Port Wing Quarry Company quarries. Forty feet by eighty feet in ground dimensions, the church held 275 people. It cost \$9,000.

Ernest Robertson Buckley, On the Building and Ornamental Stones of Wisconsin (Wisconsin Geological and Natural History Survey, Bulletin No. 4, Economic Series No. 2 [Madison: State of Wisconsin, 1918]), p. 217; SL, 25 June 1891.

1891

T. W. Marble Double House*
1311 John Avenue

1891

Omaha Depot (destroyed)

C. W. Gindele, Chicago, contractor; Assistant Engineer Sheldon, supervisor of construction

The stone building material gave the Omaha Depot "the impression of solidity" and "a suggestion of richness." C. W. Gindele called the Omaha Depot at Superior one of the best railroad depot buildings on the Northwestern line and attributed the use of stone rather than brick to the insistence of Marvin Hughitt, the president of the railroad.

SL, 28 October 1891.

- 1891 John W. Palmer Building (planned)
Corner of Tower Avenue and Seventh Street
- Carl Wirth, architect
- John W. Palmer proposed building a seven-story, 138-room office block of brick with brownstone trimmings and with granite columns that would be "one of the finest buildings in the city."
- SDL, 19 February 1891.
- 1891 Warehouse and Builders Supply
South side of Third Street between Tower and Ogden avenues
- J. L. Rose, Mt. Pleasant, Iowa ?, contractor
- Plans for this four-story business block, measuring seventy-five feet in width by one hundred feet in depth, called for construction in Peerless pressed brick with brownstone trim. Estimated costs were \$35,000.
- SDL, 17 March 1891.
- 1891-92 Minnesota Block*
Southwest corner of Tower Avenue and Belknap Street
- Charles Coolidge Haight, New York City, architect
- 1891-92 Breunig Block (destroyed)
Tower Avenue and Broadway
- Emil W. Ulrick, architect and superintendent; Butler Brothers and M. P. Ryan, general contractors; Keaough Brothers, painting and interior decoration; Wray and Murphy, plumbing; Moore and Sons, Milwaukee, heating system; Wisconsin Electric Light Company, electrical work
- A plain, substantial wide entrance of brownstone lent an imposing appearance to the front of this two-story commercial building with 130 feet of frontage on Tower Avenue and 100 feet on Broadway. The structure was of St. Louis pressed brick that "harmonized well" with its brownstone trimmings. Special attention was paid to getting as much light as possible into each store and office, the halls, and the stairs. Jacob Breunig had emigrated from Bavaria to Jefferson County, Wisconsin,

in 1854. He and his son, George Breunig, invested earnings from their Jefferson County brewery business first in Dakota lands, then in Duluth real estate, and finally in Superior real estate because they thought Superior would surpass Duluth. The Breunigs bought property on the corners of Broadway and Tower Avenue, Fifth Street and Tower Avenue, and Hammond and Winter. The Breunig Block was the first structure of several they planned to build. The Superior Leader noted Breunig's unbounded faith in Superior and termed the Breunig Block "a monument to foresight, energy, and ability."

SL, 2 October 1891, 12 June 1892.

1891-99

St. Alban's Episcopal Church
1404 Cumming Avenue

R. J. Haxby, architect ?

The tower and superstructure of this church, a clumsy derivation of the English Gothic, is of poor-grade, red-and-white-mottled sandstone rubble trimmed with higher grade red sandstone. Half-timber completes the upper portion of the nave. This church was planned and built in stages over time in the 1890s. As early as 1892, F. H. Weeks, president of the Land and River Improvement Company offered lots on Sixteenth Street and John Avenue and approved plans for a structure designed the previous year by R. J. Haxby. The local newspaper noted, "it will be built of stone, as Mr. Weeks would not allow the use of any other material, not even brick."

SL, 7 July 1891, 30 June, 3 November 1892.

1892

St. Francis Xavier Catholic Church and Rectory
Corner of East Fourth Street and Twenty-fourth
Avenue East
East Superior

This Gothic Revival church of red brick trimmed with brownstone stands on a raised foundation of rock-faced red sandstone. The rectory is solid red sandstone laid in regular courses. The stone for the church came from the Arcadian Brownstone Company quarries, just east of Superior.

SL, 25 September 1892.

- 1892 Hotel Arthur
 Corner of Third Street and Hammond Avenue
- John R. DeWard, architect; J. C. McRae, contractor
- This solid brick and brownstone hotel overlooking the harbor was ready for occupancy by the summer of 1892.
- SL, 17 April 1892.
- 1892 Grand Republic Mill and Elevator
- H. A. Hand, architect
- Sandstone trimmed this brick and iron mill and elevator.
- SL, 25 September 1892.
- 1892 William Listman Company Flouring Mill (Todd and Listman Mills)
- Barnett and Record, contractors; Moran, Taylor and Moran, foundation contractors; Allis Company, Milwaukee, milling machinery
- This eight-story flour mill was built of red brick, of iron, and of brownstone from the Arcadian Brownstone Company quarries.
- SL, 25 September, 20 November 1892.
- 1892-93 Osborne-Burke-Chase Wholesale Grocery
 Hughitt slip
- R. J. Haxby, architect; Seymour and Hart, contractor
- A wholesale grocery company built this four-story structure of St. Louis pressed brick and Bayfield sandstone on the front wall and of Minnesota brick on the rear walls. Called by the Superior Leader "the finest and largest building for wholesale purposes at the head of the lake and one of the most substantial and commodious in the northwest," the building advertised the success of a grocery business that extended beyond Superior and advertised the belief of the stockholders--local, Chicago, and North Dakota men--in the future of Superior.
- SL, 4, 25 December 1892.

1893

Northern Block
 Corner of Fifth Street and Thompson Avenue

Conover, Porter and Padley, Ashland and Madison,
 architects

The Northern Improvement Company erected the Northern Block of the finest Arcadian brownstone, and of iron, steel, and brick. The four-story office, store, and bank building measured sixty feet by one hundred feet in ground dimensions and cost \$75,000.

SL, 8 January 1893.

1901-1902

Superior Public Library (Carnegie Library)
 Corner of Hammond Avenue and Twelfth Street

Carl Wirth, architect; Schmidt Brothers, contractors;
 Stack Brothers, plumbing; Neil and Company, electrical
 work

Designed in the spring of 1901 in the Neo-classical Revival style of architecture and built of yellow pressed brick with a raised foundation, cornice, and portico with large Ionic columns of red Portage Entry sandstone, the Superior Public Library was completed in May 1902. It measures ninety-three feet by eighty feet in plan and stands one and one-half stories on a raised foundation. The main floor held a vestibule, lobby, stacks, reference room, librarian's room and two large reading rooms. The upper floor contained a director's office and art room. The ground floor had a large museum, lecture room, work rooms, and furnace room. Andrew Carnegie donated \$50,000 to pay for the library. The board thought it as fine as the library in Duluth.

SET, 27 July, 24 August, 20 September 1901; (Superior) The Inland Ocean, 3 August, 21 September, 5 October 1901, 24 May, 16 June 1902.

ca 1910

Central High School
 1015 Belknap Street

This three-story, red brick building stands on a raised brownstone foundation and features a giant portico with paired Ionic columns of brownstone.

- ca 1911 Amtrak Depot
West side of Oakes Avenue at Broadway
- One story wings flank the two-story central portion of this large, hip-roofed, red sandstone railroad depot.
- ca 1925 Bungalow
2115 Hughitt Avenue
- This bungalow is constructed of red sandstone, stucco, and half-timber.

Iron County

Hurley

- 1906 St. Mary's Church
Northeast corner of South Fifth Avenue and Iron Street

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