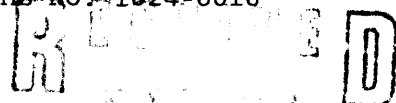


NPS Form 10-900
(Rev. 8-86)

OMB No. 1024-0018



United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
REGISTRATION FORM

NATIONAL
REGISTER

1. Name of Property

historic name: Dwan, John, Office Building

other name/site number: 3M/Dwan Building; The Sandpaper Museum;

2. Location

street & number: 201 Waterfront Drive

not for publication: N/A

city/town: Two Harbors

vicinity: N/A

state: MN

county: Lake

code: 075

zip code: 55616

3. Classification

Ownership of Property: private

Category of Property: building

Number of Resources within Property:

Contributing	Noncontributing	
<u>1</u>	<u>1</u>	buildings
<u> </u>	<u> </u>	sites
<u> </u>	<u> </u>	structures
<u> </u>	<u> </u>	objects
<u>1</u>	<u>1</u>	Total

Number of contributing resources previously listed in the National Register: N/A

Name of related multiple property listing: N/A

4. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of 1986, as amended, I hereby certify that this X nomination ___ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property X meets ___ does not meet the National Register Criteria. ___ See continuation sheet.

Signature of certifying official

Date

Ian R. Stewart, Deputy State Historic Preservation Officer

5/1/92

State or Federal agency and bureau

Minnesota Historical Society

In my opinion, the property ___ meets ___ does not meet the National Register criteria. ___ See continuation sheet.

Signature of commenting or other official

Date

State or Federal agency and bureau

5. National Park Service Certification

Entered in the National Register

I, hereby certify that this property is:

entered in the National Register

___ See continuation sheet.

___ determined eligible for the

National Register

___ See continuation sheet.

___ determined not eligible for the

National Register

___ removed from the National Register

___ other (explain):

Alouise Byers 6/11/92

Signature of Keeper

Date of Action

6. Function or Use

Historic: COMMERCE Sub: business
COMMERCE professional

Current : RECREATION AND CULTURE Sub: museum
DOMESTIC single dwelling
WORK IN PROGRESS

7. Description

Architectural Classification:

LATE 19TH AND 20TH
CENTURY REVIVALS:
Classical Revival

Other Description: _____

Materials: foundation WOOD roof ASPHALT
walls Weather- other Cornice:
board WOOD

Describe present and historic physical appearance. X See continuation sheet.

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NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

NATIONAL
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Section number 7

Dwan, John, Office Building Page # 1
Two Harbors, Lake County, Minnesota

The John Dwan Office Building is a two-story, wood-frame rectangle covered with clapboard. A plain molded cornice on the primary elevation and a simple denticulated entablature over the front door reflect the influence of the Classical Revival style in vogue in 1898, the date of the building's construction. It is located in Two Harbors, Minnesota, a town of about 3,650 inhabitants on the northwestern shore of Lake Superior.

The name "Two Harbors" is derived from the town's two bays, Burlington and Agate. The community's center of development edges the latter. In 1883, this natural harbor, a rarity along the rocky banks of Lake Superior, was responsible for the site's selection as the terminus of the Duluth and Iron Range Railroad, built to export iron ore from inland mines to Lake Superior freighters. By 1900, over 9 million tons of ore passed through the port. Two Harbors took the county seat of Lake County away from Beaver Bay in 1887, and became a major political and commercial center for the area. Lake County's population mushroomed from 108 in 1880 to 5,500 by 1900. In addition to mining, the region's economy was supported by lumbering, commercial fishing, farming and tourism.¹

The John Dwan Office Building is situated on a corner lot one block from the Lake County Courthouse and one block, in the opposite direction, from the main commercial street of downtown Two Harbors. The address is 201 Waterfront Drive. This was originally Poplar Street, which was changed to Sixth Street in 1928 and, later, Waterfront. John Dwan erected the building a block away at 113 Poplar Street in 1898, and moved it to its current site in 1909. Since this occurred during the period of significance, and since it remains in the same commercial setting, continues to edge the sidewalk, retains the same orientation (facing east), and apparently experienced no physical modifications as a result of the move, the relocation did not harm the building's historic integrity.²

The building's rectangular plan measures 24 by 36 feet, with the long dimension running east-west. The front (east) facade edges the sidewalk, which is separated from the street by a narrow boulevard. The exterior was

¹Two Harbors in 1900 (published as a special edition of the Iron Trade Journal, 1900), n.p.; Two Harbors in 1910, (n.p., 1910 [?]), 11.

²See statement of significance (Section 8) below.

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CONTINUATION SHEET

Section number 7

Dwan, John, Office Building Page # 2

Two Harbors, Lake County, Minnesota

originally wood clapboard siding, which was subsequently sheathed in wood shingles. The shingles were removed recently, as part of renovation work by the Lake County Historical Society. The original clapboard is being restored when practical, and replaced by similar clapboard when necessary. The structure rests on wood posts which provide a small crawl space beneath the building. There is no basement. The building's flat roof is concealed on three sides (east, north, and south) by a low parapet topped by a plain fascia board. The front is trimmed by a simple, slightly projecting cornice, a replica of the original that was removed some time ago.

The building's main entry is a doorway in the northern corner of the east elevation. The door frame has a slightly projecting lintel built up from standard molding. The paneled door is approached by three steps, all within an entryway that angles inward. Recessed areas with beaded, vertical, tongue-and-groove panelling fill the splayed entry. The entryway is headed by a flat, unornamented frieze topped by a row of petite dentils and a simple cornice. A single, tall, fixed-pane window that fills much of the remaining eastern elevation on the first floor has recently been restored. Like the building's other original windows, the two one-over-one sash on the second floor of the east facade are framed by flat boards edged on the sides with concave molding and topped with a slightly flared, projecting lintel.

The south elevation is pierced on both the first and second floors by three original, one-over-one windows. The rear (west) elevation has two original windows on each floor. The north side holds two windows on the second floor. A five-panel door near the eastern end of the first floor leads to the base of the stairway, which rises along the interior of the north wall to the second floor. A similar five-panel door has been installed on the western end of the first floor in the original location of a one-over-one sash window. The new door was necessary to provide access to the museum that the building will house. Since the door's design echoes that of an original door, and since it fills an original opening, this alteration does not harm the building's historic integrity. There are two small, one-over-one windows between the doors.

A diminutive wood-frame storage shed is situated on the northwestern corner of the lot. Its walls consist of crude, horizontal, tongue-and-groove siding. The front (east) side of the shed is occupied by three doorways. No historical information about the shed is known to exist. It is a non-contributing building.

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Section number 7

Dwan, John, Office Building Page # 3

Two Harbors, Lake County, Minnesota

The entire Dwan building was originally occupied by office space. By the 1920s, the upper level had been converted into an apartment, its current use. The first floor was apparently adapted into a dentist's office in the 1950s. In June 1991, the Lake County Historical Society purchased the building from the dentist most recently occupying the first floor.³ The Society is in the process of restoring the exterior and renovating the first floor for a museum about sandpaper and the abrasives industry.

³Irwin C. Hillman resided at 201 Poplar according to a telephone directory for Two Harbors and vicinity published by the Duluth and Iron Range Railroad Company in December 1927 and available at the Lake County Historical Society, Two Harbors. Ray C. Lundgren, DDS, bought the building in 1957, according to Deed Record 49, page 572, at the Lake County Courthouse, Two Harbors.

8. Statement of Significance

Certifying official has considered the significance of this property in relation to other properties: statewide.

Applicable National Register Criteria: A

Criteria Considerations (Exceptions) : B

Areas of Significance: COMMERCE
INDUSTRY

Period(s) of Significance: 1902-1916 _____

Significant Dates : 1902 _____

Significant Person(s): N/A

Cultural Affiliation: N/A _____

Architect/Builder: N/A

State significance of property, and justify criteria, criteria considerations, and areas and periods of significance noted above.
X See continuation sheet.

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CONTINUATION SHEET

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Dwan, John, Office Building Page # 1

Two Harbors, Lake County, Minnesota

The John Dwan Office Building is significant under National Register Criterion A in the areas of commerce and industry for its close association with the origins of the Minnesota Mining and Manufacturing Company, better known as 3M. Now a major multinational corporation, the company was established in 1902 in the office of John Dwan, a Two Harbors attorney and the corporation's first secretary. The founders planned to mine corundum, a valuable and rare abrasive, for sale to grinding wheel manufacturers. While this goal was ultimately futile, it initiated an involvement in the abrasives industry and led to the company's first successful venture: sandpaper production. During the years from 1903 to 1916, when 3M's corporate headquarters were based on the second floor of Dwan's office building, the company evolved from a money-losing mining operation to an increasingly prominent and profitable sandpaper manufacturer. The company applied experience gained from making sandpaper, particularly the coating process, to develop many new products, such as cellophane tape -- commonly known by its 3M brand name, Scotch tape. William McKnight, who worked his way up through the young company to become president by 1929, acknowledged that "most of our widely varied 3M products are direct descendants of sandpaper. . . . Through years of striving to improve the quality of our sandpaper, we learned a good deal about the coating process." Thanks to aggressive and consistent growth, 3M now employs about 90,000 people worldwide, with a net income in 1990 of \$1.3 billion. The creativity and tenacity that allowed the company to survive through the difficult seminal years have become hallmarks of 3M's corporate culture. The John Dwan Office Building survives as the most intact physical representation of that important early period.⁴

⁴Detailed accounts of 3M's early years are given in two histories prepared for the company's fiftieth and seventy-fifth anniversaries, respectively: Virginia Huck, Brand of the Tartan: The 3M Story (New York: Appleton-Century-Crofts, 1955), and Minnesota Mining and Manufacturing, Our Story So Far (St. Paul, MN: By the company, 1977). McKnight is quoted in Leonard Inskip, "3M Maps Plan to Boost Sales to Billions in 10 Years," Minneapolis Tribune, 13 December 1959. Employment and net income statistics are from 3M Annual Report, 1990.

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Dwan, John, Office Building Page # 2

Two Harbors, Lake County, Minnesota

Early History of the Minnesota Mining and Manufacturing Company

The inception of the Minnesota Mining and Manufacturing Company is tied to the speculative mania surrounding the mining industry in northern Minnesota around the turn of the century. Along with the successful mining of iron ore came the hope that other marketable minerals would be discovered in the area. The opening of a corundum mine in Ontario in 1898 focussed attention on that mineral, ranked second only to diamond in hardness, and in the spring of 1901, a Duluth prospector announced his discovery of corundum deposits northeast of Two Harbors. Further up the shore another site rumored to hold corundum, Pickwick Bay (later renamed Crystal Bay), was purchased by Henry S. Bryan, an executive with the Duluth and Iron Range Railroad.

The Minnesota Mining and Manufacturing Company was officially founded on June 13, 1902. According to its articles of incorporation, the company was established:

to engage in and carry on the business of Mining, Quarrying, Crushing, Analyzing, Smelting, Shipping and Marketing abrasives and all kinds of Minerals and Metals and the Manufacturing of abrasives of all kinds.

At the first meeting of the board of directors on that date, the principal place of the corporation's business and the site of all shareholder meetings was declared to be the "Office Building of John Dwan at No. 113 Poplar Street." The corporate by-laws also authorized a branch office in Duluth. The corporation was apparently based in Dwan's own office on the first floor until spring 1903, when 3M rented the entire second floor for \$15 per month, plus water and electricity costs. At that time, it was outfitted with "office furniture, rugs and office equipment . . . for the price of \$255.59," according to a report in the minutes of the first annual meeting, held in the Dwan building on May 5, 1903.⁵

At the organizational meeting in June 1902, Bryan traded his title to the Crystal Bay property for 100,000 shares of 3M stock and became president of the company. He was joined on the original board of directors by two vice

⁵Articles of incorporation, by-laws, and minutes from board meetings and annual meetings of the shareholders are located at 3M Corporate Archives, St. Paul.

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Dwan, John, Office Building Page # 3

Two Harbors, Lake County, Minnesota

presidents: Dr. J. Danley Budd, a general practitioner in Two Harbors and chief surgeon for the Duluth and Iron Range Railroad, and Hermon Cable, owner of a local meat market. William McGonagle, an executive with the Duluth, Missabe and Northern Railroad, became treasurer. The secretary's position was taken on by John Dwan, who not only maintained a busy law practice but also, at various times, represented fourteen insurance companies, was active in politics, helped create the Two Harbors Commercial Club, and served as a member of the volunteer fire department and town library board.⁶

Of these men, only Hermon Cable was employed by the company on a full-time basis, serving as general manager with responsibility for setting up and operating the mine. John Dwan, however, seems to have worked virtually full-time as well, despite many other professional, political, and social activities. His letters, a diary, and a multiplicity of 3M records leave a trail of his dedicated service to the company during the period that it was based in Two Harbors. Virginia Huck, author of a history of 3M, observed that Dwan:

had visions of Two Harbors becoming not only the nation's leading shipping center for iron ore, but for corundum as well. Since the company's incorporation, he had worked long hours drawing up papers, writing letters to friends on the corundum proposition, and keeping meticulous records of 3M's affairs.⁷

Following its incorporation, the company's development began slowly. In December 1902, beginning a tradition of expansion through acquisition, the company bought out a potential competitor, the Duluth-based Minnesota Abrasive Company. Minnesota Abrasive held title to another reputed corundum deposit

⁶Ibid; Huck, 4-15.

⁷Several boxes of Dwan's correspondence and miscellaneous papers are maintained in the 3M corporate archives. Biographical information on Dwan is included in Leland Schubert, An Incomplete History of the Family of Helen and John Dwan, 1862-1945 (Shaker Heights, Ohio: Corinthian Press, n.d.). Quote is in Huck, 13.

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Dwan, John, Office Building Page # 4

Two Harbors, Lake County, Minnesota

near Two Harbors, but had been unable to raise enough capital to develop a mine.⁸

Minnesota Mining fared better. In March 1903, Cable travelled to Chicago and Detroit with samples of the Crystal Bay mineral for testing. He reported to a board meeting at their Two Harbors office that the mineral appeared "fairly satisfactory," and recommended that plans to develop the mine proceed. The directors concurred and soon embarked upon construction at Crystal Bay, awarding contracts for work at monthly board meetings in Two Harbors. Battered by Lake Superior's temperamental storms and delayed by problems obtaining supplies and equipment, the construction took longer and proved more costly than anticipated. The facility was finally ready for use by January 1904. At the company's annual meeting, held on May 3, 1904 at their Two Harbors office, stockholders approved all "acts and things pertaining to the development of the Company's product at Crystal Bay." This had included the erection of a crushing and screening plant, a warehouse, a dock, and a tramway to transport the material from the mine to the plant about a quarter of a mile away. With certainty that the hardest times were behind them, the board awarded themselves generous salaries.⁹

The optimism seemed well founded. By the time of the annual meeting, over two tons of product were ready for market. A sales office and distribution warehouse had been established in Chicago. In March 1904, the company had filled its first order. It was also, however, to be the last. Apparently, manufacturers were leery of the Crystal Bay product, and for good reason: it was ultimately proven not to be corundum, but, rather, a low-grade and essentially worthless anorthosite. It is not known when the founders discovered their critical mistake, but stockholders were not informed until the 1910s. By the end of 1904, in any case, the board of directors concluded that they would have to set up their own manufacturing operations to use the

⁸For more information on the Minnesota Abrasive Company, see Huck.

⁹A description of the Crystal Bay facility is given in Iron News, 14 August 1903. For more information on this period, see minutes from board meetings and annual meetings, Huck's Brand, Our Story, and Two Harbors Centennial Commission, Two Harbors, 100 Years: A Pictorial History (Dallas: Taylor Publishing, 1983), 108-110.

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Dwan, John, Office Building Page # 5

Two Harbors, Lake County, Minnesota

output from the mine. Rather than produce grinding wheels, they decided to venture into sandpaper.¹⁰

Money, however, was a problem. The Crystal Bay facility had run far over budget. The company had incurred operating expenses since incorporating in 1902, but had received income only from its single sale of "corundum". As a result, the company was \$14,000 in debt, and needed an additional \$25,000 to set up a sandpaper factory. The future looked bleak until Lucius Ordway, a wealthy St. Paul businessman, sent a proposal to the company's office offering financing in exchange for sixty percent of the outstanding stock. With Ordway's investment, the company launched into the manufacture of sandpaper. Dwan and others had hoped that the factory would be located in Two Harbors, but no dockage could be found there. Instead, the former Imperial Flour Mill in Duluth was converted for sandpaper production.¹¹

The first true glimmer of hope for profitability appeared during the next few years. In 1908, Cable wrote from Duluth to Dwan:

I thought you would be pleased to know . . . that our sales for August were \$14,053.82. Please note that this is all domestic business. We hope before many moons, to be on the \$20,000 monthly basis. . . . I feel pretty good at this showing.

On the other hand, any remaining aspirations for the Crystal Bay mineral faded. It worked as inadequately for sandpaper as it had for grinding wheels. The company began purchasing other abrasives from outside sources.¹²

At the annual meeting in Two Harbors on May 4, 1909, the board was given authorization to relocate the factory, and in 1910, operations were moved to St. Paul. It was believed that the Duluth humidity interfered with the drying process of the sandpaper. Also, Ordway wanted to keep a closer eye on the company, in which his investment had grown to over \$100,000. Despite its

¹⁰Ibid.

¹¹Ibid.

¹²Hermon Cable to John Dwan, 5 September 1908, 3M Corporate Archives, St. Paul.

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Dwan, John, Office Building Page # 6

Two Harbors, Lake County, Minnesota

success selling sandpaper, the company still required a subsidy to stay afloat. Some office supplies were moved to the new factory, but because of Dwan's work as secretary of the corporation and his firm roots in Two Harbors, the corporate headquarters remained in Two Harbors. Dwan emphasized the importance of the office in a letter concerning the corporate seal:

It would be entirely impractical, not to say, unlawful, to have the Corporate Seal at the factory to be used by persons not officers of the Company. The law makes the Secretary the sole custodian of the Corporate Seal and no one else, not even another officer of the Corporation, and it simply must not be affixed by anyone not having the authority to do so. Besides this, there are documents coming to me to be executed as Secretary . . . day after day, consecutively, and I simply must have the Seal here.¹³

With the manufacturing operations growing in St. Paul, however, the days of 3M's corporate presence in Two Harbors were numbered. The company's final significant activity in the John Dwan Office Building was the annual meeting held there on May 2, 1916. During the meeting, it was decided to sell all of the machinery and equipment at the Crystal Bay site, as well as lease the facilities, to a Duluth businessman for conversion to lath and saw mill use. At the same time, the stockholders voted to change the company's official place of business from Two Harbors to St. Paul.¹⁴

The endurance of investors in 3M eventually paid off. Three months after closing the Two Harbors office, the first payment of dividends in the company's history was announced. 3M has made dividend payments every quarter since that time.

The Abrasives Industry in the Early Twentieth Century

¹³John Dwan to Edgar Ober, 21 November 1911, 3M Corporate Archives, St. Paul.

¹⁴Corporate meeting minutes, 3M Corporate Archives, St. Paul, Box 126-13-4B.

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Dwan, John, Office Building Page # 7

Two Harbors, Lake County, Minnesota

With the rapid expansion of industry in the late nineteenth century, there was intense demand from manufacturers for more and better abrasives. Preparation of everything from cradles to coffins, hats to shoes, steam locomotives to thimbles -- in fact, practically any industrially-produced product -- required some type of abrading. This was typically done with grinding wheels, which were made of abrasive particles held together by a bonding material. Vitrified wheels, which featured a baked clay bond, were by far the most versatile, claiming over eighty percent of the market share. The vitrified wheel was first commercially produced in the 1870s; by 1915, thirty plants in the United States and Canada were devoted to this industry.¹⁵

Because of its durability, corundum was one of the abrasive minerals in great demand by wheel makers. This led to a high price, since corundum was relatively rare, with deposits in Canada, India, Brazil, and, in the United States, only in Georgia. Despite the costliness, the quality of corundum, like that of all natural minerals, was inconsistent. Towards the end of the nineteenth century, many inventors were searching for a means to make artificial abrasives. Apparently unbeknownst to 3M founders, one had succeeded over a decade before the company was established. In 1891, Dr. Edward G. Acheson fused carbon and silicon in an electric furnace into an artificial abrasive he dubbed carborundum, which was similar in composition to corundum. Other artificial abrasives were created soon thereafter. It was cheaper to manufacture artificial abrasives than to mine and transport most natural abrasives, and quality was easier to maintain. As a result, products like carborundum soon dominated the abrasive industry, and corundum mining declined.¹⁶

¹⁵For information on the grinding wheel industry, see Walter C. Gold, "Grinding Wheels," Metal Industry 13 (November 1915): 450-52, and P.M. Heldt, "Grinding in the Automotive Industry, Part I: Abrasives and Grinding Wheels," Automotive Industries 45 (11 August 1921): 265-69.

¹⁶Discussion of different abrasive materials can be found in R. G. Williams, "Selecting Abrasives for Specific Uses," Industrial Management 52 (January 1917): 461-68. A detailed study of corundum is in Canada Department of Mines, Abrasives, by V.L. Eardley-Wilmot, vol. 2, Corundum and Diamond (Ottawa: F.A. Acland, 1927).

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Dwan, John, Office Building Page # 8

Two Harbors, Lake County, Minnesota

The same period that witnessed the development of the grinding wheel also saw the emergence of sandpaper. Although prototypical forms of sandpaper had existed for centuries, commercial production of sandpaper did not begin until the nineteenth century. Previously, users made it themselves. The technology for manufacturing sandpaper developed slowly, with each company inventing its own "makers" and keeping the designs secret. The outcome was sometimes a mystery even to those who operated the makers. Atmospheric conditions could wreak havoc on a day's run. Quality control for the three components of sandpaper -- abrasive, adhesive, and backing -- was problematic. Despite these difficulties, competition was fierce, with the industry being dominated by East Coast manufacturers who held monopolies on the best supplies of abrasives.¹⁷

Because 3M came into the industry rather late, breaking into the market was a particularly tough challenge. Problems with quality in the early 1910s convinced the company that careful testing was essential to maintain standards for the finished product. In order to pinpoint complaints and get ideas for new products, 3M salesmen followed the lead of one of the company's first sales managers, William McKnight, and talked to the factory workers actually using sandpaper. These practices, unusual for the time, were in large part responsible for the company's profitability by 1916. Fortuitously, at about that time, growth in the American automobile industry substantially increased the demand for sandpaper. With 3M's concern for quality and innovation well established, the company was ready to produce sandpaper and develop new products for the burgeoning auto business.¹⁸

The John Dwan Office Building

The building that housed the 3M's corporate headquarters for fourteen years was built by John Dwan in the summer of 1898 on land leased from Mirriam and George White. Dwan paid \$25 per year for a ten-year term. There was

¹⁷Good descriptions of early twentieth-century sandpaper manufacturing are in "Abrasive Paper and Cloth Manufacture," Machinery (October 1914): 90-91, and Sherwood Westlake, "Sandpaper and its Manufacture," Sibley Journal of Engineering, December 1921: 167-68.

¹⁸Huck, 62-78.

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Section number 8

Dwan, John, Office Building Page # 9

Two Harbors, Lake County, Minnesota

apparently no building on the lot when the land was leased, since the lease stipulated that "all buildings and improvements which shall be placed upon said leased premises by said second party [Dwan] . . . during the term of this lease may be removed therefrom . . . at any time prior to the termination of this lease. . . ." Dwan took advantage of the clause in 1909 when he moved the building one block north to its present location. John Dwan died on October 10, 1920, leaving the office property to his wife. In 1923, she sold the building to Dennis Dwan, John's younger brother. By the late 1920s, the upstairs had apparently been converted into an apartment. A subsequent owner had established a dental office on the first floor by the 1950s. In June 1991, the Lake County Historical Society purchased the building, and is currently restoring the exterior. The first floor is being developed into a museum on 3M's early years and on sandpaper. The upstairs remains an apartment.¹⁹

Conclusions

The John Dwan Office Building remains the best physical tie to the early development of the 3M Company. The Crystal Bay plant was demolished and only a few artifacts remain, including the cement footings of the crusher plant and some materials submerged in the icy waters of Lake Superior. While these items are of archaeological interest, they do not visually invoke a sense of the facility's original appearance and activities. The Duluth flour mill that housed 3M's first sandpaper factory is no longer extant. The first St. Paul building remains near the intersection of Forest Avenue and Fauquier. Subsequent additions to the plant have engulfed "Building #1," however, and the structure itself has been greatly altered.²⁰

¹⁹John Dwan requested permission from the city council to move the office building in 1909, according to City Council Minutes C, 5, at Two Harbors City Hall. See footnote 3 of Description (Section 7) above.

²⁰Information on the Crystal Bay site is in Ronald Thureen, "Crystal Bay," Equal Eyes 7 (September 1985): 8.

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Dwan, John, Office Building Page # 10

Two Harbors, Lake County, Minnesota

The Two Harbors office saw the company through a trying period of change and development. Every annual meeting of 3M's stockholders, from the first in 1903 until 1916, was held at the company's offices on the second floor of the John Dwan Office Building. Key decisions regarding the construction of the Crystal Bay plant and the initiation of sandpaper production were made in the building. Also, Dwan, at his Two Harbors building, devoted hours every month over the course of more than a decade to take care of essential day-to-day business matters for the company.

In analyzing this period, historian Huck comments:

It is remarkable that under the circumstances everyone concerned didn't give up and write the whole thing off as a bad experience. But the records do not give the slightest hint that anyone even thought of giving up. As in the past, they stumbled on, trying to find constructive solutions to seemingly insoluble problems.²¹

Even though the "corundum" never proved profitable, the founders' misplaced optimism in the mine kept the company alive long enough to find a marketable product, sandpaper. Sandpaper, in turn, taught the company about coating, the basis for the development of the thousands of other products that have propelled 3M's outstanding growth and prominence.

²¹Huck, 44.

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Two Harbors, Lake County, Minnesota

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NATIONAL REGISTER OF HISTORIC PLACES
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