SONG OF MINNESOTA

Growing Up In Fairmont and Southern Minnesota

in the 30s, 40s, and 50s

By

George Champine

Contents

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Preface

I sit here tonight writing this in a house that has electricity and central heat. I watch world events as they happen on a large screen color TV. Later I will go upstairs and get ready for bed in a bathroom with indoor plumbing and running hot water. I will get into a bed that is pre-heated with an electric blanket. Today, people take these and other conveniences for granted. Yet, as I feel the warmth of the bed I think back to my childhood in the 1930s in Minnesota where these amenities of modern life did not exist. Poor people today live in far greater ease and luxury than rich people did in the middle of the 20th century.

I also think about an earlier time (June of 1869) when my great-grandfather Charles Samuel Champine came to Martin County by covered wagon across the trackless prairie as a pioneer looking for farmland to homestead. After he found land to homestead in the south central part of the county, he had to leave his wife Lucretia and six children alone in the trackless wilderness while he took the horses and wagon running gear to Mankato to get lumber for a sod house. Lucretia and the six children were alone on the prairie for ten days while Charles was gone, with no shelter but the box of the farm wagon, and with no one around for miles except for a few Indians. I am amazed at the courage of Charles and especially Lucretia in coming to this new land. I wonder what she thought about during those ten long nights alone on the prairie, what her fears were for herself and her children, and what her comforts and hopes were. We will never know and can only guess because she left no record.

The time period from the arrival of Charles and Lucretia Champine in southern Minnesota in 1869 to when I was born in 1934 is about equal to the time period from my birth to the present. The changes in life style in the two periods are equally astonishing. My descendants may also wonder what it was like for me to grow up in the 1930s, 1940s and 1950s. They take for granted warm houses, paved roads, a large climate-controlled shopping mall a few miles away, fast food and gas stations everywhere, and an astonishing abundance of goods and services. I leave this written record so that they will know that my past was different from their time.

This monograph describes my experiences in growing up in Fairmont Minnesota in the 1930s, ‘40s, and 50’s. Fairmont is a Mid-western village, isolated in the midst of the Great American Prairie. At that time Fairmont was a nearly completely white, Christian, northern European and Yankee, middle class enclave. There was little crime, divorce, teenage or out-of-wedlock pregnancy, single parent families, or drug use. Teenage suicide was unknown. People commonly left their keys in the car, did not lock their houses, and let the kids have the run of the town without any concerns. Everyone knew most of the people in town. When you met someone on the street they would say "hello" because they knew you, or thought that they should know you.

Growing up in Fairmont was lots of fun, with five lakes in a town of 5,000, excellent schools and teachers, with most students going on to college, marching bands and most sports, many parks, and great camping among the lakes, streams, and woods. We could be out in the countryside by driving one mile from our house in any direction. Although Fairmont was isolated, it had essentially everything that I needed up to age 18 when I went to college in Minneapolis. There was no traffic; the fish were not contaminated with mercury, DDT, and PCBs; there was no smog or air pollution, and when we went camping we could drink directly from the lakes. Summers lasted forever; there was time to be a child and to enjoy life. It was a great time and place to grow up.

The time period and place described here are unique in American history. The first half of the 30 year time period covered here, 1930 to 1945, included two of the greatest challenges that America ever faced: the Great Depression, and World War II. Every American was profoundly affected by these threats to the American way of life. The Great Depression reduced most people to poverty, and many of those who had any money were only one paycheck away from hunger and homelessness. The country experienced 25 percent unemployment and people were reduced to eating grass and weeds. World War II consumed all of the strength, the resources, and will of the nation for five years and caused great loss of life. Medical care was extremely primitive, and people often died from infections and diseases now considered trivial. Tuberculosis and polio swept through the country periodically with no means of prevention or cure. Dental care was primitive, painful, and often ineffective. Many people had lost most or all of their teeth in their 50s or 60s. And, of course, the climate in Minnesota is very harsh.

The last half of the period, from 1945 to 1960, witnessed some of the most spectacular successes of American life. These spectacular successes included:

- economic growth for the working class
- social unity and cohesion
- the heyday of the nuclear family
- a well-defined external threat (Soviet Union) that unified the country
- unprecedented political stability (only three presidents in 28 years from 1932 to 1960).

Of course Minnesotans as a people are unique, and Minnesota as a place is unique and magical. Minnesota has been characterized by Time Magazine as “the state that works”. Minnesotans have strong personal discipline and high regard for education (and have historically had among the best schools and schooling in the country). Minnesotans are nicer than other people, more courteous, smoke less, recycle more, get their cars tuned up in the fall, and wear helmets while cycling. Perhaps as a consequence, Minnesotans live longer than almost all other Americans. The magic of northern Minnesota with its forests and lakes has been captured by Sigurd Olson in his books; the magic of southern Minnesota and the prairie has been documented by Laura Ingalls Wilder ("Little House on the Prairie", "The Long Winter", and many others) and Maude Hart Lovelace ("Early Candlelight").

The reader may suspect that I have forgotten the bad parts of growing up and remembered only the good parts. This monograph does seem to describe a utopian combination of the Minnesota village environment and the time period of the 1930s, ‘40s, and 50s. Nevertheless, in looking back, it seems that I had an almost ideal environment as a child. Fairmont was a wonderful place for a child to grow up. It was a bounded, self-contained, and completely safe environment. There was absolutely no violence or threats to safety. Because the town was so safe, children such as myself had the free run of the town. The influence of the church was so strong that the idea of the universal brotherhood of man was taken for granted, and no one ever thought of violence. The last half of this time period includes some of America’s greatest achievements.

Many writers have expounded on the virtues of the rural or small town environment. At least one person who agrees with me that the time period of the 1930s, ‘40s, and ‘50s was both unique and a high point in American life is Tom Brokaw as documented in his book “The Greatest Generation”. His book tells the stories of representative American heroes and heroines who came of age during the Great Depression and the Second World War, and went on to build modern America. He makes the point that this generation was united, not only by a common

purpose, but also by common values of duty, honor, economy, courage, service, love of family and country, and above all personal responsibility.

The primary focus of this monograph is on the life and times of growing up in Minnesota rather than on people. It has often been said that history is reflected in the lives of the people that live it, and there is certainly great truth in this assertion. Rather than talking very much about other people growing up in Minnesota, this monograph is about my own very personal experiences. Nevertheless, I do mention some other people that I met along the way and for whom I have great respect. Although the monograph talks about people, it is really not about people but instead is about the life and times in which those people lived.

In contrast to myself, many of the people I met during my life have accomplished great things, including Fritz (Walter) Mondale (Vice President), J. Presper Eckert (inventor of the first electronic digital computer), Maurice Wilkes (inventor of the world's first programmable computer), Bill Norris (founder and president of Control Data Corporation), Werner Von Braun (foremost rocket scientist of the world in the 1950s and 1960s), Hubert Humphrey (senator and Vice President), and Seymour Cray (world's foremost developer of super computers). I mention each of these very briefly along the way.

I warn the reader at this point that this is the story of an ordinary life. Nothing important happened to me, and I have accomplished nothing of significance. If this narrative is of interest it is <u>not</u> because it is unique but because it is completely typical of my times and because it has been experienced by millions of others. Nevertheless the cumulative experience of what has happened has been incredibly rewarding. Perhaps one of the most remarkable things that happened to me was growing up in Minnesota. I am sure that my experiences were typical of most boys growing up in small towns in the Midwest. On another level, however, growing up in Minnesota provided the best possible environment, as will become evident in the following narrative. Although I have lived in the east since 1980 it is now clear that I will never be an "easterner". Rather, I will always think like, act like, and talk like a small town Midwesterner and more particularly like a Minnesotan. As a transplanted Minnesotan I must get along with a weekly ration of Minnesota culture by listening to the Garrison Keillor Prairie Home Companion National Public Radio broadcast.

Why This Monograph

Each new generation starts out with "historical amnesia", initially believing that history started with their birth. When I arrived in the world, I accepted it for what it was at that time. I knew nothing about what went on before I was born until I was an adult, including:

- the Minnesota plague of locusts
- the Minnesota prairie grass fires
- the starvation of one million Irish and the Irish Diaspora to America (and Martin County) in the 1840s
- the Civil War where three million Americans fought each other (50,000 casualties at Vicksburg in 1862 and 50,000 more at Gettysburg in 1863)
- the Sioux Indian Uprising of 1862 (and the murder of 800 Minnesota pioneer settlers)
- the three day Indian battle of New Ulm and the mass hanging of 38 Sioux warriors in Mankato in 1862
- World War I

- the mass migration to Minnesota from Germany and the Scandinavian countries
- the depression of 1929
- the crime wave of the 1930s
- open industrial warfare in 1933 in Minneapolis.

I soon learned about all of them and much more.

Memories of the older generations fade quickly and it is important that information about the past not be lost. There is a tendency to think that because lifestyles are better now, that people who lived in the past were not as "smart" as the ones today. This is not true; the people that lived in the past were equally intelligent, articulate, capable, and motivated as the ones alive today. I am constantly astonished at the accomplishments and excellent command of language that many of these earlier people had even though they often had little or no formal schooling.

The lifestyles that my children and especially my grandchildren have are very different from the one that I enjoyed. In turn, my lifestyle was very different from those of my father, grandfathers, and great-grandfathers. The amount of change in lifestyle for each of the last four generations has been astonishing. My lifestyle was greatly different from my father's, in that I went to college, lived near a big city after college, worked with computers in science and engineering all of my life, and traveled around the world twice. My father Floyd lived on the farm and in a small town and did electrical work all of his life. He had the benefits of electricity, running water, indoor plumbing, cars, and the telephone. My father's life style was greatly different from (and better than) his father George Champine, who lived on the farm without electricity, running water, indoor plumbing, telephones, or tractors for most of his life. George's father Charles Samuel Champine was a pioneer and nomad farmer living on the frontier all of his life, moving from Bowmanville, Canada to Sheboygan, Wisconsin to Plainview, Minnesota and finally arriving in Martin County Minnesota in 1869 in a covered wagon pursuing the availability of free land. Charles's father Louis was an immigrant of French extraction from Canada who also was a farmer following the frontier all of his life.

Because my children and grandchildren have no good way to understand how different my early lifestyle was from theirs, I have decided to put it down on paper. The following is the set of pieces of my life experience as I have been able to capture them and get them on paper. I started writing this 16 November 1988 and have added to it periodically since then. I first wrote it for my own purposes to keep track of what happened when. Later I thought that my children might enjoy reading it so I added more detail. Now I think that my grandchildren might want to read it also, so I have added still more detail. This story relates the information that I think my grandchildren should know about what happened before they were born. Instead of them having to find it out themselves, they can find it here in one place, much more "efficiently". Perhaps this is another manifestation of my lifelong interest in efficiency.

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This book is dedicated to my grandchildren; Andrew Olson, Tyler Champine, Nicole Paton, Kari Olson, Luke Champine, David Paton, and Kelly Champine. Because they are easterners all, they will never know much about Minnesota except what we tell them. I hope that this will help them understand the rewards in my life of growing up in Minnesota.

Foreword

As one moves along the path through the fabric of life, one is exposed to a certain thread of experiences that, taken together, come to constitute what a person is. Each person has a unique set of life experiences that cannot really be communicated to others in any truly meaningful way. However, it seems useful to jot down what these experiences have been so that others, if so inclined, can get a better understanding of what happened, and what the experiences meant to the individual involved.

A benefit of writing the experiences down is that the written record is cumulative. Memory comes only in bits and snatches, and can be communicated to others in bits and snatches in the best of circumstances. A written document can expose it all at the same time. Another benefit of capturing the memories is that the recall of them in a coherent form can be most enjoyable, and once they are on paper they can be savored many times. It is also pleasurable to be able to reconstruct with some precision exactly what happened, and when. So the real reason I am writing this down is that it is fun.

At any point in time, things are both better and worse than they have been in the past. Therefore there are important lessons that can be learned from knowing and understanding the past. The social conditions today are no better and probably worse than they were at good times in the past. The period 1910-1920 was a very bad time in America, dominated by World War I. The 1920s were boom times as the United States emerged as the leading industrial power in the world following the war. Following the crash of 1929, the 1930s were a time of terrible depression, crime, and social problems. The 1940s were dominated by World War II, followed by perhaps the "golden era" for America in the 1950s. (There seems to have been a clear ten-year cycle of bad times and good times).

The best time for social conditions in my life were the 1950s and the 1960s, when America benefited from the unity and integration of society from World War II. Things then became worse starting in the 1970s with the Vietnam War, and one could argue that they have been getting worse from a social standpoint since then. The only uniform basis of improvement seems to be the technology base (and especially medical technology) that each generation has available to use.

There are two ways to write this story: 1) by topic (work, school, vacation, etc.), or 2) in chronological order. The first time I wrote this I did it largely by topic, but later decided that chronological order would be better. The current version is mostly chronological but some topics are followed for several years at a time. In order to provide a more coherent picture of my world in early life, I first try to paint a picture of my world just before World War II. Life had been stable up to that point, and then during and after the war things changed greatly.

1. The America Before 1934

History did not begin the day I was born in 1934; the determining factors that shaped the world I was born into had, of course, all happened earlier. I feel fortunate that I have been able to see the transition from the horse-and-buggy era without electricity to the age of space exploration. The world that I was born into was different in many ways from the world today.

The early 1900s had been a time of great change. Thomas Edison was America's greatest inventor. He died slightly more than two years before I was born. He patented more than 1000 inventions, most of which have improved modern life greatly. His inventions of the electric light

bulb, movies, and the phonograph, however, immediately improved the quality of life for millions. Other important inventions were the automobile, airplane, camera, electric generator, and radio. They had all started to come into use in the early years of the century about 30 years before I was born but were still in limited use by 1934. The country's first subway had opened in Boston less than 40 years earlier in 1897. The Wright brothers had flown the world's first airplane at Kittyhawk in 1904, 30 years and a few months before I was born. (I have long had a strange feeling that these inventions were introduced "just in time" for me. The automobile, radio, electric lights, and movies became available just in time for my use. TV became widely available just after I finished my B.S. degree and could afford to waste time watching it. Antibiotics became affordable when we needed them for our children, etc.)

America had been involved in many wars. At the time I was born, a number of Civil War veterans were still alive. Two of my relatives had fought in the Civil War; Jack Walcott and William Orlando Bassett. Both had been wounded but survived. The American war dead included:

Civil War	500,000 (1861-1865)
World War I	53,500 (1914-1918)

Yet to come were:

World War II	405,000 (1941-1945)
Korean War	33,600 (1950-1953)
Vietnam War	58,000 (1965-1975)

Those who have an interest in the social conditions and major events related to the settler interaction with the Indians and World War I that shaped America's destiny can read about it in the appendix.

1.1. America Up to 1920

America changed dramatically between 1850 and 1900, in part due to the upheaval caused by the Civil War. In 1850 there were almost no large organizations other than the armed services. There was only one city in America with a population greater than 250,000 (New York), and 85 percent of the population lived on farms or in rural towns. By 1900 the national population had tripled due to massive immigration, and 30 percent of the population lived in cities. Three cities exceeded one million in population. The amount of steel produced increased by 1000 times and the number of factory workers multiplied five times. The free land provided by the Homestead Act was exhausted and the frontier was closed. Whereas in 1850 the average citizen was largely self-sufficient and in control of his/her own destiny, by 1900 the average citizen felt frustrated by the perceived enemies of big government, big money, Wall Street, and industrial trusts.

Life for salaried workers was relatively harsh. The average workweek was six days and 50 hours for a weekly salary of $6, but steelworkers averaged 84 hours per week. Children were widely employed at very dangerous tasks, which often permanently crippled them or destroyed their health for a few cents per hour. Wealth in America was heavily polarized; the net worth of the top 60,000 families was the same as the bottom 25 million families.

There was little or no organized labor or labor unions at that time, and exploitation of workers in sweatshop factories was common. Working conditions were often unsanitary and very dangerous (no OSHA). Workers organized strikes to get better working conditions. In 1906, 200 employees of the Triangle Shirtwaist Company in New York walked off the job to get better

working conditions. The strike succeeded and the workers got some improvement in wages and working conditions. However, about six months later, a fire broke out and the workers rushed for the exits. All but one had been bolted shut to prevent theft, and 500 workers were burned to death, nearly all women. Reaction to this tragedy provided support for the passage of the first laws to provide a safe work place.

In 1912 Edgar Rice Burroughs, a one time cowboy, soldier, policeman, and gold miner, developed the character of Tarzan of the Apes. He wrote 24 Tarzan stories, and the Tarzan movies in the 1930s starring Johnny Weismuller were (and are) among my all-time favorites.

From 1900 to 1920, farmers enjoyed unprecedented prosperity. Worldwide food shortages coupled with World War I created a demand for food that far-outstripped supply, driving agriculture prices to dizzying heights. The price of wheat multiplied four times between 1900 and 1920, and other product prices increased correspondingly. In 1920, the bottom fell out of farm prices because world demand dropped with the end of World War I. Prices fell in half in the next 12 months. Many farmers who had borrowed heavily to buy land and machinery based on high farm prices found that they could not possibly pay back the loans at the low prices for their crops. Many had to abandon their farms or sell out at very low prices. Life on the farm was both profitless and physically harsh. Because the electric utilities saw no profit in rural electrification, farm life in 1925 was not much different from 1825. When the rural electrification program finally started in the mid-1930s, it provided work for my father for several years at a crucial time in his life.

The world was still a wild and dangerous place, only partly explored. There were many places in the world that had not been explored or mapped. The danger in the world (and the challenge) created many heroes. The north and south poles had been first reached only about 25 years before I was born by Robert Peary (1909) and Roald Amundsen (1911) respectively using dog sleds and canvas tents. Earnest Shackleton attempted the first crossing of the Antarctic continent using dog sleds in 1914, just 20 years before I was born. He failed when his ship was crushed by ice, and of course there was no way to get word to anyone to rescue him. His two-year battle to get himself and his men back to civilization, as documented in the book "Endurance", is one of the most astonishing stories of heroism, leadership, personal discipline, and resourcefulness that I have ever heard. The 29,000 foot summit of Mount Everest, the world's highest mountain, was reached for the first time in 1953 by Edmund Hillary and Tenzing Norgay.

The Temperance Movement

During this time, the Methodist Church was growing rapidly as was the temperance movement with which it was closely allied. The overwhelming majority of Americans supported prohibition of the sale of alcoholic beverages. Every town in the Midwest had a chapter of the Women's Christian Temperance Union (WCTU), which was militantly against the consumption of liquor. In 1917, Congress passed the Volstead Act (named after its author Representative Andrew Volstead of Minnesota where the support of prohibition was particularly strong) as the Eighteenth Amendment "prohibiting the manufacture, sale, or transport of intoxicating liquors". Almost before the ink was dry on the legislation, organized crime was ramping up production of illegal liquor. The economics were compelling. A commercial still could be purchased for $500 and produce 400 quarts of liquor a day worth $10 a quart, almost all of it profit. By 1918 when World War I was over, citizens starting making and buying large amounts of illegal liquor. The illegal liquor was often quite poisonous, and sickened, paralyzed, or killed thousands. An enormous industry of illegal liquor sprang up controlled and promoted by mobsters, thus initiating an era of lawlessness. "Bootlegging", the illegal manufacture and transport of liquor, became the country's most profitable industry. Bribery became widespread, and sometimes

entire municipal governments would be under control of organized crime. The huge profits from bootlegging were used to open new businesses in the numbers racket, prostitution, "protection", and murder for profit. Law enforcement intercepted at most five percent of the illegal liquor. There was widespread bootlegging of illegal liquor in every town including Fairmont. (Years later in the 1980s and 1990s exactly the same scenario was played out in the context of drugs.)

The Automobile

The first cars, available about 1900, were expensive and unreliable. They were not suitable for reliable or pleasurable transportation; the horse was still king. There was not a filling station in the country, and very few paved roads. Cars started to come into popular use in about 1906, 28 years before I was born. Ransom Olds (creator of the Oldsmobile) had developed the technique of mass-producing automobiles, and Henry Leland (of Leland Automobiles) had perfected the use of interchangeable parts in cars. Henry Ford combined these two techniques and added the assembly line concept to develop the world's first mass-produced automobile. By using these techniques he was able to greatly reduce the manufacturing cost of a car, and was able for example, to reduce the time to assemble a magneto from 20 minutes to five minutes. He introduced the Model T in 1908 at a price of $850, much less than his competitors. By the mid 1920s he was able to improve efficiency and productivity to the point that the price was reduced to $300, about 1/5 of the price of other cars of the day and he was selling all of the cars that he could build. At one point his factory was building 1/2 of all the cars being built in the world and he was personally earning $30 million per year. He was offering wages of $5 a day ($1300 per year) for unskilled factory labor; a salary so high that people could not believe it. The automobile provided an enormous improvement in the quality of life, especially for those on farms and in small towns, connecting them to the rest of America. Later, it would be a major factor in the decline and demise of the extended family unit as families became very widely distributed.

Radio

Radio was invented by the Italian Guglielmo Marconi, and the Scientific American (my favorite magazine) reported in 1899 on his successful transmission of a wireless telegraph message across the English Channel. After years of experimentation, Lee De Forest finally made wireless broadcasting practical by the invention of the vacuum tube amplifier in 1906 based on the "Edison effect" (which Edison noted but did not pursue). The early pioneers in radio considered it as a point-to-point communications replacement for the telegraph. Naval radio communications was in use in 1912 when the Titanic sunk after hitting an iceberg. Radio could have saved the passengers on the Titanic, except that the radio operators on the nearby ships were on duty for only a few hours during daylight. A nearby ship, the California, received the SOS in time to rescue the passengers, but decided not to respond to avoid delay in the schedule.

Some far-sighed people saw much more possibility as a mass information distribution medium. Westinghouse Company, a leader in radio manufacturing, set up the first commercial station KDKA in Pittsburgh and transmitted the Warren Harding presidential election results on November 2, 1920. That transmission, which started at 8:00 P.M. on that day at a power of 100 watts, reached out several hundred miles and started a communications revolution. A year later the power was increased to 1000 watts and the station was heard regularly in all of America, South America, Europe and the Hawaiian Islands. A young entrepreneur named David Sarnoff believed that radio had significant mass communications and commercial entertainment possibilities. As manager of the Radio Corporation of America (later RCA) he advocated the establishment of a network of commercial radio stations offering a variety of music, comedy, news, drama, and sports. By 1922 there were an estimated 550 radio stations and three million

radios in use. The demand for radio receivers, even at $275 each, was such that the major manufacturers were working 24 hours a day. In a country starved for entertainment and news, the growth of radio was explosive. My dad was an enterprising young man who saw the opportunity created by the boom in radios. He opened a radio sales and repair shop in Fairmont in 1932 near the height of the depression. In 1935 he hired Freddy Sahr as an employee to repair radios. Freddy had graduated from the University of Minnesota with a degree in Electrical Engineering. There were no jobs for engineers during the depression, so he took the job of radio repair. Unfortunately, as the depression continued and deepened, my dad's radio shop failed to be able to support his family. He sold the shop to Freddy in 1936 and had to find other work as an electrician. Freddy, with no family to support, was able to keep the store open and continued to operate it very successfully until his retirement in 1980. Freddy was always a very friendly, outgoing, and generous person. He died without heirs in 1997 and left his entire estate to scholarships for high school students.

The radio was very important in those early days. Because of radio, for the first time, people in Fairmont and elsewhere could know what was happening outside of town almost as it happened. Radio was seen as a cohesive force in family life, and it dramatically altered the habits of American life. Families gathered around the radio in the evening and enjoyed it as a group. It was the only link to the outside world, and everyone listened to the radio. The big name entertainers were on radio. I would lie in bed at night listening to the great evening radio programs, including Jack Benny, Fred Allen, Fibber McGee and Molly, the Great Gildersleeve, Edgar Bergen (with Charlie McCarthy), and Henry Aldrich. One of the programs that I liked to lie in bed and listen to was a quiz program called "Dr. IQ". He had a segment of the show that he called "the battle of the sexes", where a team of women would compete with a team of men to see who could get the most right answers. This title made no sense to me because I did not know what sex was, and I thought he called it "the battle of the Texans". I also liked Fibber McGee with his house at 79 Wistful Vista and his overflowing hall closet. He had a set of funny visitors including the Old Timer, and Mr. Whipple and his wife Sweety Face. Several phrases developed for the program have entered the American language including "Tain't funny McGee", and "That ain't the way I heared it"

During this time, numerous advertisers offered fascinating treasures designed just for kids. These included maps, sundials, badges, buttons, and colorful storybooks about the radio program. Sometimes these came in the product box but often the child had to send in box tops along with a nickel or dime to get the premium. In the morning I liked to listen to "Jack Armstrong", "Dick Tracy", and "Captain Midnight" while eating and getting ready for school. They were sponsored by breakfast food companies, and Captain Midnight had his "Secret Squadron" that listeners could join if they sent in two box tops from a chocolate drink mix called "Ovaltine" (I didn't like it that much). The Secret Squadron members had to be ready to help Captain Midnight in the war effort if he ever called on us. When I joined I waited anxiously for the membership kit to arrive. Getting anything through the mail was a real thrill. Mail was delivered twice a day, so I had two chances a day to get mail. When it finally arrived I was delighted to find the Secret Squadron emblem and official membership card. But the most important thing was the secret decoder ring. The decoder ring was very important because at the end of every program Captain Midnight would give a secret encoded message, and the only way to decode the message was to use the decoder ring. I decoded many messages given out at the end of the programs. I am still a member and ready to help Captain Midnight if he ever calls on me.

One of my favorite programs was Cedric Adams. He was a columnist for the Minneapolis Tribune. He also had radio programs on station WCCO at noon and 10:00 P.M. He came on after I was in bed, but I could hear the radio in my bedroom. He had a very folksy style and

talked about popular human-interest stories of the time. During the many years that he was active, he became almost a member of the family for a large number of people in the upper Midwest.

Overall, this period saw a tremendous increase in industrialization. Between 1900 and 1919 the use of electricity increased 15 times. In 1910 only 4000 tractors were built; by 1920 the number built was 50 times greater at 200,000. About half of all Americans lived on farms. By 1920, America was still oriented to small farm towns, and was highly puritanical, provincial, and preserved 19th century attitudes.

1.2. 1920s

As a consequence of the demand built up during World War I the 1920s were boom times. The Roaring Twenties brought the Jazz Age, speak-easies, easy money, flappers, and a general breakdown of moral standards in sex, political corruption, and organized crime.

The attitude of the national government 1920-1928 under Calvin Coolidge was that the least government was the best government, and that the purpose of government was to help business. If businesses were successful, the prosperity would flow to the workers also. (Years later in 1980 this approach was resurrected by Ronald Regan in his successful bid for the presidency under the title of the "trickle down" economics). Coolidge presided over the reign of prosperity that made the twenties "golden".

The roads were very poor in the 1920s. In 1919, an unknown Lt. Colonel named Dwight David Eisenhower (later president), led an army convoy across America from New York to San Francisco to show that it could be done and to determine how long it took. It took them 56 days. As a consequence of the explosive popularity of the automobile, federal road building began in earnest late in the 1920s. The first paved road in Martin County was built in 1921. By 1928 the country was spending about one billion dollars a year on road building and maintenance, and America had one of the best primary road systems in the world.

The Ku Klux Klan, begun during Reconstruction after the Civil War, arose again after World War I. It experienced phenomenal growth between 1920 and 1923, reaching a membership of five million and was growing at 3500 members per day. The Klan was as popular in the north as in the south and sought to repress blacks and immigrants, especially Catholics, Jews, Slavs, Poles, Greeks, and Italians. There had been an enormous influx of European immigrants, with 25 million arriving between 1885 and 1925. Big business had supported unrestricted immigration to provide a supply of unskilled low cost labor. The Klan was in part a reaction to this enormous immigration. The Klan became a significant political force in Indiana, Illinois, Ohio, Missouri, Arkansas, Oklahoma, Texas, and Oregon. In was also popular in Fairmont: everyone of any importance belonged. By 1920 there was widespread support for limitations on immigration, and a highly restrictive immigration law was passed in 1922.

Charles Lindbergh, a 25 year old small town boy from Little Falls Minnesota, had made his historic first solo flight across the Atlantic on May 20, 1927 to land in Paris almost exactly seven years before I was born. His airplane, the "Spirit of St. Louis" was designed for the single purpose of carrying one person across the Atlantic. Many earlier flyers had tried the flight and had failed, often losing their lives in the process. This airplane was stripped of all non-essentials including windshield, heater, radio, and parachute. The airplane had so much gasoline that it was a flying bomb, with gasoline tanks even in the cockpit. Lindbergh carried a compass, a few maps, a canteen of water, seven sandwiches, and a rubber raft. He navigated by dead reckoning rather than by using a sextant. In his excitement of preparing for the flight, he had not slept the

evening before the flight. Once in the air he encountered an ice storm off Newfoundland and had to fly a few feet above the water to find warm air. Sleepiness was a constant problem. After 33 hours in the air he landed in Paris and was greeted by 100,000 cheering Frenchmen. The president sent a war ship to bring "Lucky Lindy" home from Paris and 4.5 million people turned out to greet him when he arrived in New York. (Man walked on the moon 42 years after Lindbergh's flight). Real aviation was getting started, and "barn stormers" were giving rides around the country with airplanes made of wood and fabric. A new world airplane speed record was set in 1934 at 275 miles per hour.

Herbert Hoover was elected by a wide margin in 1928. He said in his campaign "We in America today are nearer to the final triumph over poverty than ever before in the history of any land." He was wrong.

Playing the stock market became a national pastime that rivaled baseball in popularity. People became obsessed with making money in the market and it seemed impossible to lose money. Not getting rich was seen as willful stupidity. Then on "Black Thursday" October 24, 1929 the stock and financial markets crashed. For example the stock price of General Motors fell from $72.25 to $7.63 in two days. The price of wheat fell from $1.32 to 49 cents. Purchasing almost stopped. The output of U.S. Steel fell to 19 percent of capacity. Unemployment quickly increased to 20-30 percent. The country soon was in the middle of the worst depression ever known. The auto industry, for example, crashed because people simply stopped buying cars.

Hoover constantly denied that there was a problem and did nothing to help. He believed that the business community had the responsibility of keeping the economy afloat, and the role of government was to help business, not people. As the depression continued to get worse, seemingly forever, Hoover became the most hated American president of all time, before or after.

For a good picture of life in a typical small town in Minnesota in this period, read "Main Street" by Sinclair Lewis. The book was written to reflect life and language in Sauk Center, Minnesota and was highly critical of that environment. My father-in-law Harold Nelson as a young man was the chauffeur to Sinclair's brother Dr. Lewis. Small world.

1.3. The 1930s

As our story opens in 1930, the life expectancy for men is 58 years and for women 61 years. The average manufacturing worker toils 50 hours per week with few rights and no benefits. Most Americans rent their homes rather than owning them. Most households have neither a refrigerator nor central heating; 30 percent lack inside running water, coal fuels most furnaces and stoves, with wood the second most popular fuel. One in 30 have a college degree, and most do not have a telephone. Most men over 65 years old continue to work out of economic need. The world population is two billion people, and the world is not yet over-populated.

Nationwide unemployment reached its peak on 1933 at 25 percent but it remained at 20 percent for the entire decade. In some places it was much worse: Detroit unemployment reached 50 percent and in Toledo it reached 80 percent. At the outset of the depression, recent immigrants were blamed for the unemployment and many were fired and forced to return to their home countries. Food riots broke out in the Midwest, and a person in Detroit died from starvation every seven hours. The Communists organized a march of unemployed autoworkers on the Ford plant in Dearborn to demand jobs. They attacked the plants. The plant guards and city police first tried to drive them off with water hoses, and when that failed they started shooting. About 26 people were shot. Prohibition brought in widespread lawlessness and organized crime, and in Detroit for example murder, extortion, and kidnapping became common.

With the loss of wages, Detroit had 150 rental evictions per week causing many families to become homeless. These homeless people often banded together and took over public or unoccupied land. They created slum towns that they called "Hoovervilles". They would dig a hole in the ground for warmth and then cover it with sheet metal or scraps of wood that they could find. Others built tarpaper shacks. They lived there summer and winter with no work and no other place to go. Empty pockets were called "Hoover flags"; newspapers were called "Hoover Blankets".

By 1934, the year I was born, all government attempts to pull the country out of the depression had failed. The depression seemed permanent, and everyone was afraid.

The depression had a profound impact on the family. As is usually the case, the children suffered the most. In 1930 in the second year of the depression, relief organizations were running out of money. Business interests opposed relief of any kind. Families were often broken up, with the parents going to a poor farm and the children to an orphanage. Sometimes children were given to relatives. Sometimes the husband simply gave up and abandoned his family. Children of age eight or nine were wandering the cities and countryside looking for food. By 1930 children in California and Pennsylvania were dying of starvation. Gangs of desperate men foraged municipal garbage dumps fighting over waste food. In Pennsylvania coal miners lived on roots and dandelions; in Kentucky people ate weeds. People delayed getting married, and the marriage rate decreased. So did the divorce rate. When people married they had fewer children and had children later. As a result the birth rate fell substantially. The families were also more closely knit.

Prices fell rapidly and money became very precious. A typical yearly wage for a bus driver fell to $1300, for a teacher to $1227, and for a waitress about $520. The price of meat fell to 20 cents a pound and potatoes to 2 cents a pound, causing many farmers to lose their farms to the bank, and many other people to lose their homes. The price of shoes fell to about $1.80 and a men's suit to about $11.

Today, if the Gross National Product (GNP) declines by three percent in one year, it is seen as a national emergency. In 1932, GNP had fallen by 50 percent in two years and was still dropping. The American economy was grinding to a halt.

Prices continued to fall in the early 1930s. The exact figures from the United States Consumer Price Index, taking 1930 as a base of 100, are:

1930	100
1935	82
1940	83
1945	108
1950	144
1955	160
1960	177

The low point was 1933, where the index was .78. From that point prices increased steadily through the 1940s and 1950s, more than doubling between 1933 and 1960. (In 1997 the index was 958, 12.3 times the prices in 1933.)

Franklin Delano Roosevelt (a distant cousin of mine through the Delano family) was born to a wealthy family in New York in 1882. He held several positions in state and national government

including under-secretary of the navy. In 1921 at age 39 he contracted polio and was never able to walk again. He could not stand without the use of heavy steel leg braces. He was elected governor of New York in 1928 and although seen as a lightweight wishy-washy intellectual by many, he won the presidential election in 1932.

There had been local bank panics in 1931 and 1932 but the government had been able to stabilize the situation. In 1933 confidence in the banks began to slip badly because most banks were heavily invested in bonds and mortgages of questionable value. A run on the banks began in Detroit in February and soon started in Maryland, Ohio, Kentucky, and Pennsylvania. (A "run" on a bank happens when so many people withdraw their cash that the bank becomes insolvent.) The states responded by closing the banks for a few days and declare a "bank holiday". Outgoing President Hoover did nothing to help. Roosevelt took office on March 4, 1933, and on the same day bank holidays were declared in Illinois and New York to prevent collapse of the banks. He immediately closed all banks for four days to stop the runs on the banks until more funds could be provided by special legislation. Even so, during the depression 11,000 banks failed and every depositor lost all of their money in those banks. Distrust of banks would persist for decades.

Whereas Hoover had taken a hands-off approach to dealing with the depression, Roosevelt acted quickly and in a far-sweeping manner. He came to office in a country whose population was 44 percent rural and where 45 million people had no indoor plumbing. In a massive "100 days" program he asked congress for broad executive powers. He proposed a "new deal" where the federal government would finance relief, public works, unemployment insurance, social security, guaranteed right to collective bargaining, and crop reductions to reduce over production.

Many accused Roosevelt of establishing a socialist or communist state. He established a number of federal agencies to create jobs quickly. One was the Civilian Conservation Corps (CCC) to give work to 2.5 million young men, paying them $30 per month. The purposes were to take large numbers of unemployed and frustrated youths off the street while doing useful public works. Like many other farm youths, my mother's brother Merlyn worked in the CCC for a while. Farm prices were very low and I am sure that the money and training were welcomed. By mid-June 1933, 1300 camps in the woods had been built for the workers and one month later they were occupied by 300,000 youths. They did a great deal of useful work in creating or upgrading parks, planting trees, constructing bridges, building fire towers, building roads, restoring battlefields, etc. Together with the Forest Service they planted more than 200 million trees as "shelter belts" to fight soil erosion and to help reclaim the Great Plains. It also taught many young men a trade and the discipline that they needed to be successful. In total more than 2.5 million men participated in CCC, usually for 6-12 months. That usually was enough time to learn a trade, earn a little money, and get started.

Although some had predicted that it would be impossible to get trees to grow on farms in southern Minnesota, experience proved that with sufficient work they could be made to grow. By the 1930s every farm in Minnesota (including ours) had a grove of trees, usually on the north side of the building site to stabilize the soil, break the north wind, and to act as a snow break. One of the major tasks my dad and I undertook on the farm was cleaning out the dead trees in the grove and planting new ones. It was very difficult cutting trees by hand, and we had to carry water to the trees that we planted until they got well established.

The farmers had been in bad shape financially since the collapse of prices in 1920, but with the depression in 1930 they became much worse off. There was widespread destruction of crops to reduce the agriculture surplus and stop the decline of farm prices. This included the destruction of 6 million pigs in 1933. There were many farm mortgage foreclosures, and the farmers began

demonstrating to stop the foreclosures. In Iowa 500 farmers crowded into a courtroom to demand suspension of foreclosures. When the judge refused, they nearly lynched him. They would go to foreclosure auctions and drive off the attendees to stop the auction. They blockaded Sioux City IA and prevented food from being brought in. They intercepted milk trucks and emptied the milk into the ditch (the price had fallen to three cents a quart). The governor of Iowa had to declare martial law and call out the National Guard. Similar things happened much later in 1985 when 10,000 Minnesota farmers gathered on the steps of the state capitol in St. Paul to rally for a moratorium on farm mortgage foreclosures.

There was open industrial warfare in Minneapolis. In 1933 truck drivers had begun to organize and in early 1934 they went on strike, shutting off the lifeblood of the city. On May 22, 1934 armed businessmen clashed with strikers and two were killed. Governor Olson called out the National Guard to restore order. The strike was suspended but resumed in July. The police sent out a scab truck with an armed escort. When strikers tried to halt the truck the police opened fire and shot 67 people, two of whom died.

When Roosevelt took office for his second term in early 1937, he said that: "I see one-third of a nation ill-housed, ill-clad, and ill-nourished". This was an understatement. Although Roosevelt worked hard to end the depression with the "New Deal", it failed to solve the problems. It took the start of World War II to end the depression. Following World War II, America enjoyed 35 years of unprecedented prosperity.

Of course there was no TV, and only about half of the homes had radio in 1939. Radios were a "growth industry" in the 1930s. Electric appliances were not common; many houses still had iceboxes rather then refrigerators. Central heating was not common. Farmhouses were heated by burning corncobs in the kitchen range and in a pot bellied stove in the living room. During the depression the price of corn dropped to 10 cents a bushel and became cheaper than coal, so the farmers burned corn rather than coal.

Wood or coal heated town homes. We were one of the lucky ones that had a central forced hot air furnace. The furnaces were very big, with a very large firebox. Because the warm air was circulated by convection, there were very large pipes to the rooms. Thermostats were almost unknown. Coal was kept in a coal bin in the basement. Each fall my father would order some coal from the local supplier. A couple of days later a big red truck, massive and dirty, would arrive. The driver would jump out and stick a coal chute through the window into the coal bin. He would then unload the coal into the coal bin. It took about three tons of coal to heat a house in the winter.

Coal had to be shoveled into the furnace by hand. As the days grew colder, my dad would start getting up early in the morning to shovel out the ashes and add coal to the firebox. As the fire died down more coal had to be shoveled to maintain temperature. As the weather grew colder, the coal fire would burn down during the night and the house would get very cold. My father got up often in the middle of the night in the winter to add more coal to the fire. Even so, people were frequently cold. If I got cold I would go into the basement and stand by the furnace to absorb the heat and watch the flames through the window in the door. Often when I got up in the winter mornings the house would be very cold. I would huddle by the hot air registers to soak up what ever heat was coming out until I could get dressed.

When natural gas became available, it made an enormous difference. The coal bin was taken out, and the bulky furnace was replaced with a tiny natural gas furnace controlled by a thermostat. Houses were warm everywhere all of the time. We suddenly had a lot of room in the basement.

Many, but certainly not most, people had cars, but no one I knew had two cars. Although many women could drive, not everyone thought that women could or should drive.

The medical care was very primitive. The top five leading causes of death at that time were, in order:

- Pneumonia
- Tuberculosis
- Diarrhea
- Nephritis
- Diphtheria

(Fifty years later none of these was a major cause of death). There were no AIDS or Lyme diseases, but diphtheria, polio, and tuberculosis killed far more people and there was no way to prevent them or cure them. Tuberculosis was such a killer that all school children were tested for it periodically. Diphtheria and polio often killed quickly, in a matter of hours to days. Most sick people were cared for at home, and babies were born at home, as I was. There were no antibiotics, and doctors could not treat very many diseases. Many women died due to complications in pregnancy or childbirth (the childbirth death rate was 50 times higher in 1940 than 1990). There were no vaccines except for small pox. People rarely went to the doctor or dentist unless they were extremely sick because there was little that the doctor or dentist could do.

There is a common belief that many people died in their 40s during this time. This is false. Although the average life expectancy around 1900 was about 40 years, this life expectancy was strongly distorted by a high rate of infant mortality. Infant mortality during this time was about 20 percent, but once a child got past infancy, he or she had a good chance to live a long time. My own family was near the average. Both of my grandparents lost one child out of 5-6 births, and my paternal great grandfather lost two out of 12 births, all near the typical 20 percent. All of my grandparents lived to age 85 or more except for my father's mother who died at age 77.

People used carbon paper rather than Xerox machines and the first computer would not be developed for 12 more years. There was no plastic except Bakelite and that was used rarely. People had little knowledge about what happened outside of their own towns. Few farms had electricity. All farms had horses and the transition to tractors was in process.

Government was seen as "too big" even though it only spent 3 percent of Gross National Product (in 1995 the national government alone spent 21 percent of Gross National Product).

1.4. Travel

Travel was very difficult. Roads were mostly dirt or gravel, and were laid out from town center to town center. Tires lasted a few thousand miles at most and getting a flat tire during a trip was common. If the car broke down, you were on your own. At that time tires had tubes in them. A common failure mode for tires was to blowout while traveling at road speed, at which point the tire would go flat instantly and the driver could lose control of the car. Sometimes a blowout would cause the car to roll over; a friend of mine in college had that happen and his mother was killed in the accident. Cars often got stuck in mud holes, overheated, had flat tires, or just broke down. Travel in the springtime was especially difficult because the dirt roads turned to mud. A muddy section of road could last up to 300 feet or more, and would be worse than a wet plowed field. Cars driving through it made it much worse because of high pressure, narrow tires. With

careful driving one could often get through the stretches of mud by keeping the momentum up and not spinning the wheels (the same skills as driving through snow). But sometimes you got stuck anyway. Farmers living near the muddy roads got used to helping to pull cars out of the mud. One time about 1940 I was riding with my grandfather Northway when he tried to get through a long stretch of mud driving the family the 12 miles from his farm to Fairmont. We got stuck and no amount of creative driving or rocking the car would get us out. Pretty soon the car was in mud up to the axles. He had to walk to a nearby farm and ask the farmer to bring his tractor and pull us out. Although we were stuck for only about 30 minutes, it was a rather scary experience for a six-year-old child.

Burma Shave signs were distributed across the entire country. An amusing jingle would be painted one line to a sign for several signs spaced out over a half-mile or so. The last sign always said "Burma Shave". The jingles were always cute with a surprising ending, and were very popular. They made the time pass more quickly.

Here is one example:

"Grandpa's whiskers, old and gray,

Often get in Grandma's way.

Once she chewed them in her sleep,

Thinking they were shredded wheat."

Burma Shave

Here is another example:

"When roads were muddy; deep-rutted too

Our Model T still got us through"

Burma Shave

And finally:

"This old world

Wouldn't be uptight

If people simply

Did what's right"

Burma Shave

It was a good thing that there was something to pass the time because it took a long time to get anywhere. For example, the 125-mile drive from Fairmont to Minneapolis was about five hours.

1.5. 1930s And Crime

The 1930s were a time of a serious crime wave in America. The laws outlawing liquor had been passed in 1920 and had led to wide spread moonshining, speakeasies, smuggling and organized crime (much as the laws against drugs did in the 1980s and 1990s). (A "speakeasy" was a nightclub that sold liquor illegally.) Extortion, bank robbery, numbers rackets, and bootlegging of liquor were widespread in the large cities. If storeowners resisted paying extortion, they were beaten, bombed, or murdered. Gangsters like Al Capone and "Lucky" Luciano killed or had killed more than 100 people each and were getting $10 million per month from crime. Other

well-known mobsters were Pretty Boy Floyd, Baby Face Nelson, Ma Barker, Machine Gun Kelly, and Bonnie and Clyde. The FBI eventually captured all of them. There was also a lot of inter-mob warfare. Al Capone was reputed to be behind the "Valentine's Day Massacre" of seven rival gang members in 1929 in Chicago. My mother was in Chicago at the time and heard the gunfire. "Scarface" Al Capone came to control Chicago liquor trade and politics. He and his henchmen could not be convicted because they routinely murdered witnesses, prosecutors, jurors, and judges. St. Paul Minnesota had its share of local mobsters and crime, and was also the preferred place for Chicago gangsters to go to let things "cool off". Police corruption was also common. The St. Paul police did not bother the Chicago gangsters when they were in town. J. Edgar Hoover, head of the FBI, and Tom Dewey, governor of New York, had become famous for fighting the gangsters.

The case of John Dillinger is representative of the times. Dillinger had committed ten murders, four bank robberies, and three jailbreaks, and was ranked by the FBI as "public enemy number one". Dillinger came to be a folk hero because he robbed banks, and banks were widely believed to be responsible for the depression. The FBI went after Dillinger aggressively even though he had not committed any federal crime. He was hiding out in St. Paul, and when the FBI caught up with him there was a big gun battle. Dillinger was wounded but escaped to northern Wisconsin. The FBI followed him there and surrounded the building where he was hiding, but in the resulting gun battle two men were killed and Dillinger escaped again. Dillinger went back to Chicago. On the evening of July 12, 1934, the FBI got word that he had gone to a movie. The FBI staked out the movie, and when Dillinger came out of the movie he was shot dead.

1.6. 1930s And Weather

Minnesota summers are often hot, with the temperature in the 90s or over 100. Of course there was no air conditioning. We developed various strategies to try to keep the house cool, such as keeping the shades, doors, and windows closed during the day and keeping the air circulating with a fan. At night we would open up the house to cool it off as much as possible and store the coolness into the next day. I spent a lot of time in the lakes, which were delightfully cool.

The 1930s brought extremes of weather including the dustbowl. The country experienced a serious drought and heat wave for several years. Millions of acres of once valuable land were rendered unusable from the combination of extreme dryness, gale force winds and very poor farming practices. Soil conservation practices were unknown. Farms were literally blown away into the air across a large area of America's midsection, and a huge dust bowl emerged. The swirling dust turned day into night and caused people to vomit dirt. The dust penetrated everywhere. Farms became unrecognizable as layers of dust and dirt piled up against fences and machinery, and rippled over the ground. Women tried to keep dust out of the home by packing every windowsill, doorframe, and keyhole with rags or towels, but it still penetrated. The first major dust storm occurred on November 11, 1933, about seven months before I was born. It was so extensive that it darkened the sky in Chicago one day and as far east as Albany the next day. A succession of storms destroyed an estimated 35 million acres of good farmland and severely damaged another 125 million acres. The Dust Bowl swelled to giant proportions as it spread over 756 counties in 19 states. Farms looked more like deserts than farms. After about four years of no rain, about 25 percent of the farm families abandoned their farms. Thousands of displaced farmers and their families abandoned farms in the Dust Bowl regions. Entire families were on the road in trucks piled high with household furnishings, or in antiquated automobiles which stood little chance of making it to journey's end. (The novel "Grapes of Wrath" by John Steinbeck describes this situation well). In May 1934, the month I was born, a series of giant dust storms lifted the vital topsoil of a large portion of the Great Plains and swept it upward in

opaque clouds of dust. Two years after I was born, Minnesota experienced its all time record high temperature of 114 degrees on July 6, 1936. The drought lasted five more years.

During those years the weather was extremely cold as well as extremely hot and dry. A few months after I was born, during the winter of 1934-35, the temperature in Minneapolis was below zero continuously for 36 days.

1.7. Other Aspects of the 1930s Environment

Other parts of the scene in 1934 were bums, tramps, and hobos. After the financial collapse in 1929 many men had either failed to find employment or simply gave up, abandoned their families, and traveled from place to place by walking from town to town or hitching rides on trains (called "riding the rails"). It was estimated that there were 2 million young men between the ages of 16 and 21 who were hobos. The word "hobo" (initially " hoe boy", an itinerant young man who worked in gardens) implied a certain dignity, suggesting a person who had deliberately chosen a wandering life. The word "bum" implied someone who was too lazy to work and just wandered. Bums and hobos were not welcomed by local authorities, who were afraid that they would end up on public assistance. The sheriffs usually hustled them off to the county line with instructions not to come back. In Georgia, hobos were put in chain gangs for 30 days and then expelled. Hobos often tried to get free rides on the railroads, and in one year Southern Pacific Railroad threw nearly 700,000 hobos off trains. In the 1960s we had "hippies" and "dropouts" who corresponded roughly to hobos and bums. When hobos or bums got hungry, they would often stop at a house at random and offer to work for food. This was a reasonable thing to do because there was a great deal of manual work to be done, especially on farms. Many times the housewife would give them food without requiring any work. When a generous household was found, the hobo would often mark the fence or house so that other "knights of the open road" would know that they could probably get food there. A system of marks evolved that described the household, such as bad dog, generous housewife, mean husband, or whatever. Many hobos later became successful including James Mitchner (author), Robert Michum (actor), and Melvin Belli (lawyer). When hobos died they went to the "big rock candy mountain".

The world was a hostile and dangerous place, and each person was responsible for staying out of trouble. There were no product liability laws, and the prevailing attitude was that the individual was responsible for using the products properly. If there was an accident, it was the responsibility of the individual. Because of this attitude, machines did not usually have guards on them and many products were quite dangerous. My mother had a motor-driven washing machine (in contrast to my grandmother who had a hand-driven washer). The washing machine had a motor that washed the clothes by turning the agitator. My job was then to run the clothes through the wringer into the rinse water in the laundry tubs. If a person's finger got caught in the wringer the arm would be pulled in and there could be a serious injury. There was no occupation safety agency like OSHA. Many people were seriously injured or killed in farm and factory accidents. I knew two people who had lost arms in the Fairmont Canning Co. when their arms got caught in the corn husking machinery.

The year I was born, 1934, was an eventful year in America.

- Bruno Richard Hauptmann was arrested and charged with the kidnapping and murder of the son of Charles Lindbergh
- Adolph Hitler consolidated his power in Germany through a bloody purge of his opposition
- John Dillinger, America's "Number One badman" was killed in a machine gun confrontation with police

- The country was racked by drought, depression, prohibition, and crime

As the 1930s came to a conclusion, America stood on the brink of war. America had disarmed rapidly after World War I and was strongly isolationist in its international affairs. At the end of the 1930s America had a smaller army than Portugal and wanted no part of the continuing strife in Europe. America was very poorly prepared to fight the world war that was rapidly approaching.

2. Fairmont as a Midwestern Village

Fairmont is the county seat of Martin County. Fairmont lies isolated in the long grass prairie country, and the surrounding land is absolutely flat. In addition to being isolated, Fairmont was also very stable. My parents and all grandparents lived in Martin County all of their lives. Most of the kids that I started kindergarten with graduated with me from high school. Throughout the time that I lived there, I saw very little change. People were oriented to saving money, and I also started to save money as a child. The banks paid three- percent interest and seemingly always had. First class letters cost three cents to mail, and post cards cost one cent.

I did not realize that Fairmont was isolated because everything that I needed was available in town. The central business district was about four blocks by four blocks, but had everything that I could want. Alleys are provided down the middle of each block, so deliveries and garbage pickup can be made at the backs of the stores rather than in the front. I often walked down the alleys as a short cut rather then on the streets. The town was highly integrated. The local power company provided electricity to the town, and the waste heat from the generators was used to heat the business district (now called co-generation): nothing was wasted.

In the Fairmont area, the glaciers had left a chain of lakes starting in Iowa, extending north to the Minnesota River, and eventually to the Mississippi River. The chain of lakes started at the Iowa border with Iowa Lake (where the Cedar Point Boy Scout camp is located) and going north to South Silver, North Silver, and then the lakes in Fairmont which include Amber, Hall, Budd, Sisseton, and George.

The original inhabitants of the Fairmont area were the Winnebago Sioux Indians, who lived by farming, hunting, and fishing. Lake Sisseton, on which our house is located, was named after a branch of the Winnebagos of the same name. The Chief of the Sisseton branch of the Winnebago Sioux lived in tepees in a village in the woods on the east shore of Lake Sisseton in the late 1860s. They probably lived exactly where our house is, and ironically lived there at the same time as my great grandfather Charles was arriving in Martin County about 15 miles to the south.

When the first European settlers arrived in the Fairmont area, they had to walk through grass and flowers over their heads, but they did not have to clear the land of trees—they simply had to break the sod. The area was overrun with buffaloes. An interesting note is that many of the early pioneers in Martin County came from St. Lawrence County, New York via Wisconsin as my ancestors had.

Calvin Tuttle, a Connecticut Yankee who in 1856 was the first settler to come to the Fairmont area, walked there, as did almost all of the early settlers. The log cabin that he built on the shore of a lake was probably one room of 12 feet by 14 feet, a typical size at that time. A cabin that size might hold a family of two adults and 5-7 children. Life in those days was very physical. Tuttle boasted that he would boss the county as he did his family, and would not live in a county where he could not whip every man in fisticuffs. No one challenged him for six years. In 1862

Sam Carver challenged him to a fight. Tuttle lost and left the state, leaving the lake named after his family.

For more information on Martin County, see "Know Your Own County" by Arthur Nelson written in 1922 and published by the Martin County Historical Society. Mr. Nelson, called Major Nelson by everyone from his appointment in the Spanish-American War and World War I, lived up the street three houses from us. He worked for the Fairmont Sentinel newspaper for 43 years and the book is a compilation of a series of articles he wrote for the paper.

The Spirit Lake (Iowa) massacre in March of the year after Calvin Tuttle arrived (1857) spread fear into the settlers. The Indians killed 42 adults and children in Spirit Lake and took four women as slaves. They proceeded to Jackson (30 miles directly west of Fairmont) where the Indians killed eight more settlers and looted dry goods, guns, and gunpowder. They took the clothing that the women were wearing and gave it to their squaws. The women prisoners had to carry packs weighting about 125 pounds through knee-deep snow. If they weakened and fell, they were beaten with clubs. If they fell too often they were killed with a hatchet. Word of the killings in Sprit Lake and Jackson arrived quickly in Fairmont. Although no one was killed there, the town emptied quickly with most people fleeing to the east. About 2/3rds of the Fairmont inhabitants left town never to return.

Fairmont was platted this same year of 1857. The town was initially called “Fair Mount” because of its location beside and above the central Minnesota chain of lakes, and because it had a wonderful view across the lakes and adjoining country.

The Sioux Uprising of 1862 was much worse; about Minnesota 800 pioneers were killed. News of the Sioux uprising arrived in Fairmont on August 26, and by the next day the town was deserted, with most people fleeing to the east to get away from the Indians. Their fear was well founded, as a number of settlers were killed in Worthington, 60 miles to the west. As a direct consequence of this Indian uprising, Fort Fairmont was constructed on the top of a hill overlooking Lake Sisseton in Fairmont. The fort was a wooden stockade enclosure surrounding the old log courthouse and had a garrison of a company of about 75 soldiers. The fort was on a bluff perhaps 100 feet above Lake Sisseton looking out over the water. There was never any fighting of the Indians from Fort Fairmont, but the food and other purchases of the fort brought an early level of prosperity to Fairmont. The county courthouse stands on the location of old Fort Fairmont. See the Appendix for more information about the 1862 Sioux uprising

During this time, the “west” was Indiana and Michigan, and Minnesota was the “far west”. The far west was a lawless place. As an example, the Jesse James gang had been robbing banks and trains in Missouri and Iowa since 1866. There were eight men in the gang: Jesse and his brother Frank, Coleman Younger, and others. In the summer of 1876 the gang decided to rob the bank in Northfield, Minnesota. During the course of the robbery the townspeople found out what was going on. Many of the townspeople were armed and they attacked the outlaws as they were coming out of the bank. In the resulting gun battle, three of the bandits were killed and three were captured. The Younger brothers were badly beaten during their capture and spent most of the rest of their lives in the federal prison in Stillwater. Jesse and Frank escaped; they continued to rob banks and trains for another ten years but never came back to Northfield. This failed robbery attempt became famous, and when I was a child there were many reenactments during Fourth of July celebrations. The robbery is still re-enacted during “Jesse James Days” in Northfield.

On of the spectators of the Great Northfield Robbery was A. G. Crooker. He subsequently came to Fairmont where he operated Crooker Jewelry store for 66 years up to 1951. His store was next

to the Sweet Shop where my mother worked. My parents gave me a quality watch from Crooker Jewelry as a present for high school graduation.

2.1. The Champine Family Arrives in Minnesota

Large numbers of pioneers began to arrive in Minnesota in the 1860s. Typical of these was my paternal great great-grandfather Louis Champine arrived in Plainview Minnesota in 1860. He came from the Toronto Canada area by way of Sheboygan Wisconsin with several members of his extended family and probably some friends and neighbors as well. Plainview is about 15 miles inland from Wabasha, a Minnesota river town on the Mississippi. They probably traveled up the Mississippi River to Wabasha or Winona by boat, and then overland to Plainview. Although Europeans had been in Minnesota since the early 1800s, my ancestors were on the leading edge of an enormous wave of immigration flooding into Minnesota via the Mississippi River. In 1869, Louis Champine's son (my great grandfather) Charles Samuel Champine and his family set out from Plainview in a covered wagon traveling southwest across the trackless prairie looking for land for a homestead.

Although Charles and his family arrived in Martin County after the Indian uprisings of 1857 and 1862, they were there during the snowstorm of February 1872. It created a total whiteout for three days and blew snowdrifts 10-12 feet high. A number of farmers lost their way trying to get from their house to their barn and froze to death. Other farmers were traveling to or from town and were caught in the storm. Some traveled for hours in circles and finally froze to death. In a couple of cases, the farmers killed the oxen pulling the wagon, cut them open, and crawled inside for warmth in order to survive. The following January 7 of 1873, an intense blizzard started which lasted several days. About 70 people in Minnesota froze to death including two young girls in Martin County whose bodies were not found until spring. Another notable snowstorm hit in 1880 with drifts ten feet high. The trains had to go through, so the railroad brought in several hundred workers from Minneapolis and Chicago to shovel out the tracks (by hand, of course). An example in my own family is the blizzard of January 1909. The storm raged for three days and visibility was zero. My grandfather Homer Northway had to stretch a rope from the house to the barn so that he could care for the livestock during the storm without losing his way. Several less fortunate farmers lost their ways and froze to death. My grandmother went into labor with her third child (my uncle-to-be Orville) during the storm. I do not know what help she had during the storm, but the baby did not survive long after birth.

The Champine family was there during the great grasshopper plague that started in 1873 and continued for four years devastating crops. Swarms of grasshoppers darkened the sun and consumed everything green, causing starvation and great suffering. The grasshoppers even ate clothing hung out to dry. In 1875 Fairmont had 30 houses and a population of 300. The prairie grass fire of October 1875 burned over half of Martin County, destroying homes, stables, haystacks, live stock, and groves. The dry prairie grass burned very quickly, and the fire moved faster than a horse could run. Many settlers abandoned their homesteads and the land reverted to the government. Nevertheless new settlers arrived in immense numbers.

The benefits of farming in Minnesota were widely advertised in England and elsewhere in Europe. The trip from Liverpool, England to New York took 11 days by steam ship (by then available). The trip from New York to Winnebago, Minnesota took three days. Winnebago was the end of the railroad for many years. The normal first class fare from New York to Winnebago was $56. The railroad offered fare to Minnesota at 1/3 of the normal price for men that would come to look at railroad land for sale. If they purchased the land, the train trip was free. The railroad arrived in Fairmont in June 1878. This immigration program was very successful, and 12

years later by 1890 the county was mostly settled with a family on almost every quarter section. The land had gone from being nearly empty to fully settled in 30 years.

A large number of English people came to Fairmont during 1873-1878. They were usually the sons of wealthy English families who received an allowance, but who did not inherit the family property. They thought that they could "get rich quick" by hiring cheap local labor to farm the cheap land. They spent money lavishly and built several beautiful homes. They enjoyed fox hunting in their traditional red coats along with other leisure and social activities. Their dreams of making quick money did not materialize, but many stayed on to live in Fairmont. Most were members of the Church of England and they built the first church in Fairmont, an Episcopal Church, in 1876. (For more information about the English in Fairmont, see "Gentlemen from England" by Maud Hart Lovelace.)

Figure 1 First Street about 1930

The year of 1878 was an important one for Fairmont: the town was incorporated, and the railroad arrived. For the first 23 years of farming in Martin County, people had raised only crops for their own use because there was no way to send additional produce to market. Then the railroad came to Martin County in the year of the 23rd crop and changed the town radically. My grandfather George Champine was a part of that change. He had purchased his first farm in 1873, and during the years of farm prosperity that followed he purchased several more. Within 20 years, Martin County because a major wheat producer. That began to change around 1900, and within another decade corn became the primary cash crop. By 1930 where our story opens Fairmont had a population of about 5000. The above picture shows a view of First Street looking west towards the Court House taken in the 1930s.

Although one normally thinks of a village as a New England or European entity, the Midwest in general and Minnesota in particular has many villages. Fairmont qualifies in every respect as a village even though it is in the Midwest. Fortunately, Fairmont was laid out before the advent of the automobile, and is compact enough that there was no real need to have a car. Fairmont was not deliberately laid out as a village (as opposed to something else); it was just the way that people organized their infrastructure. Even though we lived on a quiet street beside Ward's Park and on the shore of Lake Sisseton, I could walk to the commercial district in five minutes, I could walk to church and the library in another three minutes, and to school in less than five minutes

more. With my bike I could go anywhere in town in ten minutes, and town had everything that I needed! People walked home for lunch every day along shady tree-lined streets.

The "village" has often been characterized as being the ideal social environment. Fairmont certainly qualifies as a village and it has all of the advantages of a village. People are at home in the entire village, and a house is simply a private part of the village. The following attributes have been identified as characterizing a village.

The edge of the village is sharply defined. Fairmont changes abruptly to farmland at the edge of the town. When I was growing up there, if one traveled one mile in any direction, one would be in farmland.

There is a high density of people and houses, so that a person walking down a street would not attract attention. This is true of Fairmont; house lots are 50 feet to 75 feet wide and perhaps 5000 square feet in size. People walk everywhere, although not as much as they used to.

Social contact occurs naturally and everywhere. This is true of Fairmont, where you meet friends everywhere and you know about most people in town.

Public space is more important than private space. Fairmont has an abundance of parks, lakes, public playgrounds, and other common spaces. They are very important to the quality of life. This is in contrast to the suburbs where most space is private.

A child is secure in public places. This was certainly true in Fairmont and the entire town was a safe enclave. Children had the complete run of the entire town; it never occurred to anyone that the children might not be safe.

2.2. Fairmont Lakes

Fairmont has five lakes in town, all connected by channels (which is why the town was initially called "Chain of Lakes"). Most of the people that I knew lived on or near a lake. My universe for the first few years was confined to our street. It went up the hill (to the north) four or five houses, and it extended the other way to the end of the park, about one block. This was an enormous world, full of interesting things in the park and in the lake, and I spent many hours exploring it. The park was full of large trees and overgrown areas that were mysterious and foreboding. One could hide in it and not be found. The lake also was full of interesting things like pretty stones and fish. I felt that my world was infinite. (Today my domain of travel is the entire world, and it seems very finite.) The Dutch elm disease killed most of the trees in the park in the 1980s, and many of the remaining ones were cut down in the name of progress, so the park is now very open.

A system of trails runs along the banks of the chain of lakes. We kids called them "Indian trails". Minnesota had been a complete wilderness less than 80 years before I was born, and indeed the trails probably had been used by the Indians 60 years earlier. Indians had probably lived on the shores of the lakes for thousands of years, and only a few years earlier many arrowheads and other Indian relics had been found there by the hundreds by our friend Allan Moore and others. The extensive arrowhead collection of Allan Moore is now on display at the Martin County Historical Society Museum in Fairmont.

The trails went through areas very heavily grown over by brush, vines, and trees, and it was like having a deserted jungle only a few hundred feet from home. It was fun to spend hours there pretending to be a jungle hero like we saw in the Saturday afternoon movies, exploring new areas and embarking on exciting adventures. We would swing out over the lake on the vines, making

Tarzan calls. There were always some trees on the shore that had fallen over and extended out into the lake, and we liked to climb out on them and look into the water for long periods of time pretending we were miles from civilization in a remote and dangerous jungle. Of course we could always get home in five minutes from our "jungle" if we needed to.

2.3. Interlaken

South of Fairmont between Hall Lake and Amber Lake is an area called "Interlaken". Fairmont pioneer Frank Wade had purchased 36 acres on the narrow strip of land between the two lakes in 1915 and opened a park to visitors. By 1919 he had built a recreation area including a 50-room hotel, a Japanese garden with a number of streams running through it, an amusement park with carnival rides, a nine hole golf course, a zoo, a picnic area, and a beach with a large water slide. There were beautiful bridges spanning the streams. There was also a dance hall and a roller-skating rink. It was common to have 4000 visitors on a weekend. Many people arrived on the lake boat "Concord" from around the area. People had more time then to enjoy life, and there were wonderful parties aboard the boat. In 1917 Wade expanded the park by another 137 acres.

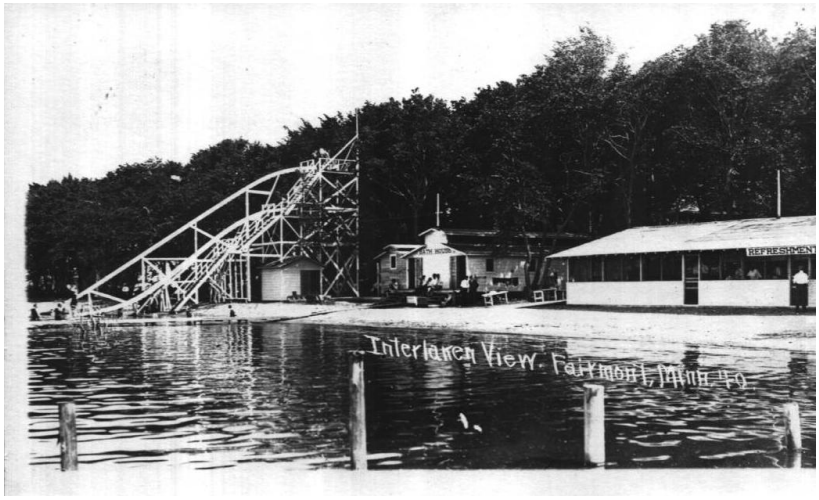


Figure 2 Interlaken

The park thrived during the early 1920s, and on the Fourth of July 1922 over 20,000 people visited the park on that single day. Important people came there to give speeches including William Jennings Bryan. My mother Genevieve worked in the hotel as a waitress during this time and heard Bryan give his speech. Many people went there for a picnic every Sunday to enjoy the beauty. I liked to go there in the late 1930s with my dad because it had a "dodge-ums" bumper car ride and an airplane ride. The park was very popular during the 1930s but was slowly going down hill in the 1940s. The dance hall and the roller rink lasted the longest, into the 1950s, and we went there often during high school in the evenings to skate and dance. Now it is entirely gone. For more information on Interlaken, see "The Story of Interlaken Park" by T. J. Arneson published by the Martin County Historical S

The chain of five lakes in
1900s Fairmont was som
summer days and nights.
immediately behind our h

The "Concord" excursior
large steam-driven boat a
at the boathouse just belo
two decks, and carried up

Figure 3 The "Concord" at the foot of Webster Street

of the five lakes carrying passengers and tourists. The boat was popular for parties, and could carry an orchestra for dances. The northern terminus was below our house at the foot of Webster Street. From there it carried passengers to Hazelmere or Interlaken Park, both on Hall Lake. The transit time from Sylvania to Interlaken was about one hour and cost 25 cents for a round trip.

The boathouse below our house was huge. The Concord boat excursions had ended before the time I remember. John Livermore built rowboats there when I was about five, and he rented boats and sold fishing tackle in addition. He also sold shiners and minnows that he seined in the lake near shore. The bulk of the boathouse was used to store ice taken from the lake in the wintertime.

In the late winter through the 1930s, people would cut ice and harvest it from Lake Sisseton behind our house. In that area the ice freezes about three feet thick. They cut the ice with large handsaws several feet long and then pulled it out of the lake with horses. The ice was then stored in the boathouse immediately below our house packed in sawdust. This way the ice would last most of the summer. Although we had a refrigerator because my dad was in the appliance business, most of our neighbors had iceboxes. An iceman would sell ice going house to house. The ice came in large 50-pound blocks. The iceman would put a large piece of leather on his shoulder, pick up the block of ice with large tongs, and throw the block of ice on his shoulder to carry it into the house to put in the icebox. We kids would run along behind, picking up pieces of ice that fell off the truck. By the mid-1940s most people had purchased refrigerators and the ice people went out of business. Another icehouse on the edge of town on the Lair Road was still there in 1950 and some of us made some home movies with a mystery plot that used the icehouse in the plot.

In addition to harvesting ice, the same crews seined rough fish (carp etc.) from below the ice and shipped them to the Jewish markets in the east.

The boathouse below our house was torn down in the late 1940s. We got a much better view of the lake in the process, but an important part of Fairmont history was gone.

Ward's Park borders Lake Sisseton and starts about 100 feet from our house. Some of my earliest memories are of the park and of the lake. Al Ward had been the richest man in Fairmont in the early 1900s, and in the earlier days he owned many farms and businesses. He loaned money to local people who needed it at an interest rate of 30 percent. He donated land not only for the park named after him but also for the Methodist Church. Although I never met him I owe him a great deal for adding substantially to my quality of life.

3. Martin County

Martin County was officially opened for settlement following the purchase from the Indians of the land south of the Minnesota River and west of the Mississippi River in the Treaty of Traverse Des Sioux in 1851 and the land survey in 1856. This treaty ceded all Sioux land in Minnesota to the U.S. government except for a strip 10 miles on each side of the Minnesota River and 150 miles long (3000 square miles of some of the best land in Minnesota for 6000 Indians).

Martin County, established in 1857 with 451,000 acres, is in the southern-most tier of counties in Minnesota, bordering Iowa. It contains 20 townships and extends 30 miles east to west and 24 miles north to south. It is centered in the state from east to west.

Martin County has some of the richest farmland in the country. Because of the rich soil, many people also had gardens. Garden fresh vegetables taste much better than “store bought” vegetables— they are sweeter, juicier, and have a wonderful smell. There is nothing that can

compare with sweet corn cooked when it is less than 30 minutes old -- it is far sweeter than anything from the store. The same is true of peas. The "store bought" vegetables often taste and feel like rubber by comparison. Working in dirt with the hands is a very primeval experience. Contacting, feeling, working, smelling moist warm dirt is very sensory, as is smelling the plants as they grow and flower. Dirt is the source of food and the source of all productivity for the farm. Dirt allows us to recreate the garden that Adam and Eve started, and therefore relates us to them. A farm kid understands this; a city kid never can.

The climate and farmland in Martin County are such that some of the best sweet corn and peas can be grown there. The local availability of these crops gave rise to the food processing industry at the Fairmont Canning Company. There had never been a crop failure in Martin County in recorded history until 1993 when everything got flooded out from heavy rains.

In 1895 the population of America had been 60 million with half living on farms. By 1930 the population of the United States had risen to 120 million (doubling in 35 years!). About 30 percent of Americans lived on farms, and the percentage in Minnesota was much higher. This large farm population around Fairmont almost guaranteed a large market for the stores in town. However, the farm population has been falling steadily since then (presently approaching 1.5 percent), and the Fairmont business environment has been falling with it.

The country experienced a boom in the "roaring 20s" and Fairmont also seemed to have reached its peak in the 1920s and early 1930s. The growth caused by people moving in to the open farmland had created great vitality, and there was a large and youthful population on the farms. As an example of the high level of activity in Fairmont at that time, the National Corn Husking contest was held in Fairmont in 1934. Yields had been pushed all of the way up to 50 bushels of corn per acre (now they are 120 bushels per acre). The contest attracted about 80,000 people and 25,000 cars to Fairmont. The contest was won by a Minnesotan for the first time: Ted Balko of Redwood Falls who picked 25.87 bushels in 80 minutes (by hand of course). I know how hard that is because I picked quite a bit of corn by hand on the Northway farm.

The nearest town of any significance to the east was Blue Earth, 17 miles east with a population of a few thousand. The town of Welcome was about seven miles to the west with nothing but open farmland in between. Welcome had a population of 600 (in 1920) or so, much as it has today. Fairmont, with a population of 5000, was the largest town in the area until one got to Mankato 50 miles to the northeast. When we wanted to go to the "Big City", we went to Mankato with its population of about 35,000. Of course there was Minneapolis, 125 miles to the northeast, but that was so very far away that people in Fairmont went there only rarely. Iowa was 12 miles to the south, and had no towns of any size until Des Moines about 120 miles south.

4. Minnesota

Perhaps more than any other state, Minnesota has been defined and shaped by water. It is bounded on three sides by water, and is famous as the "land of 10,000 lakes". Lakes have always fascinated people, including me. Henry David Thoreau said "a lake is earth's eye; looking into which the beholder measures the depth of his own nature". The Mississippi River, the largest river in America, has its headwaters in Minnesota at Lake Itasca. The early logging operations in Minnesota used the St. Croix River to float logs downstream to Stillwater.

Until the 1930s, gambling had been legal in Minnesota, and there were many slot machines and punchboards around. The state government decided that the evils of gambling were too much to tolerate, so all forms of gambling were outlawed in Minnesota. Counties were given the local option of outlawing sale of all forms of liquor, and Martin County was one of the counties that

went “dry”. This of course made “bootlegging” of liquor from the state liquor stores in Iowa both popular and profitable.

Up until that time everyone used butter for cooking, but in the early 1940s margarine was introduced. The state decided to outlaw colored margarine to protect the large dairy industry. Margarine came in its natural color of white, and there was a small capsule of dye in the package that had to be kneaded to spread the color through the margarine. Many people did not want to spread the color through the margarine, so they went to Iowa where they could buy colored margarine legally. Later, soybeans became an important crop in Minnesota and also the key ingredient in margarine.

There are really two Minnesotas, the southwest one characterized by the prairie, and the northeast one characterized by forests. The cultural differences between the northeast and southwest Minnesota were at least as great as the geographical and physical differences. The approximate dividing line runs from Red Wing to Pembina. (In the early days, a rough wilderness trail called the Pembina-Henderson Trail ran along the southwestern edge of the woods between the two Minnesotas.) The southwestern Minnesota is prairie, English, German, and Yankee with some of the best farmland in the world. The northeastern Minnesota is forest and Scandinavian. The glaciers had left it with thousands of lakes, swamps, and poor soil that in many cases could not be farmed.

4.1. Northeastern Minnesota

Northeastern Minnesota was always mystical to us in the prairie country. We referred to it as “up north”. It is characterized by trees, rocks, waters, Indians, and freedom. There were two major areas of interest to us: the north shore of Lake Superior, and the Boundary Waters Canoe Country.

Trees grow very well in northeastern Minnesota and they supported a very large lumber industry for a while. Enormous log drives were made down the St. Croix and Mississippi Rivers to the sawmills in 1870-1900. When all of the virgin timber was cut, the lumber industry collapsed and never returned in any great size. Later iron mining came to northern Minnesota, bringing the Finns and Yugoslavs, some of the poorest people in Europe at that time. The iron mines were largely exhausted by World War II, and were later replaced by taconite mines, but on a smaller scale.

In about 1939 we took a one-week vacation to northern Minnesota with the Luedtke and Ledebur families. We stayed at the Cragun’s Cabins on Gull Lake. The cabins were very inexpensive and were only a few feet from a sandy beach. There were boats available for cabin people to use, and I learned to row and otherwise handle a boat. I have liked boats ever since. The resort is still there. Perhaps on the same trip we drove through the famous Minnesota Iron Range. I remember the large open pit iron mines, but it looked very dirty and seemed like a terrible place to live. I gave it the name “Dungeon Town”. Many years later I learned that town was Hibbing. On this trip I also saw an Indian for the first time. There were a few of them selling birch bark canoes and other items along the roadside. The Indians were all very poor.

This was the only vacation that I remember the family taking. Paid vacations were characteristic of salaried professional workers. There were almost none of these in Fairmont; for most people, if you did not work you did not get paid, so people rarely took vacations. For those people who did take travel vacations, they stayed in cabins. There were few if any hotels for families of modest means, but all towns and cities had cabins at the edge of town for travelers. The cabins were essentially “wooden tents” with few if any amenities such as indoor toilets or heat. In

Fairmont we had Colvin's cabins near Sylvania Park on Lake Sisseton. Farmers from Iowa and elsewhere would stay in Colvin's cabins for a week during the slow time on the farm between planting and harvesting to enjoy the lake coolness and fish.

In about 1942 Allen Moore, one of our friends in Fairmont, invited us to his cabin in northern Minnesota. The cabin was on a lake and was in the middle of the woods. I remember the wonderful smell of the woods. Of course there were some problems—the mosquitoes were very thick, and we kids were constantly getting ticks from walking in the woods. Every night we would have to have a "tick check", and if we found a tick we would try to get it out with tweezers, the heat from a candle, or gasoline. There were also a lot of leeches in the lake where we swam. We hated leeches, and every night we would have to check between our toes to see if we had picked up any leeches. Usually we had.

4.2. Boundary Waters Canoe Area (BWCA)

The Boundary Water Canoe Area near the town of Ely perhaps best represents the mysticism of northern Minnesota. The BWCA is a great legacy of the glaciers. Here a large number of lakes populate the area so densely that one can travel long distances by water with only minimal portages. The lakes are embedded in a forest of birch, pine, aspen, maple trees, loons, and roving bands of wolves. The BWCA is clearly unique in the world. It has been preserved (so far in spite of the assault of local politicians) as a million acres of wilderness with no roads and no houses. Motors, airplanes, cars, cans, and bottles are forbidden. It is forbidden to cut down trees. There is absolute solitude, and one could spend a week in complete silence without seeing another human. Being out in the woods alone at midnight in complete silence is a very moving experience. It is easy to get lost, as all lakes look the same. As Charles Kuralt the news commentator said, one could visit a different lake every day in the Boundary Waters area and not see them all for one hundred years. Ely was not founded by fun-seeking campers but instead was founded by Swedes, Slavs, Finns, Irish, and Norwegians to support the nearby deep-shaft iron mining industry, now abandoned.

My son Mark and I made many enjoyable trips to the Boundary Waters area in the 1960s canoeing, backpacking, and camping with some other people from work. These camping trips were father-and-son outings, and there were usually 5-6 fathers and an equal number of sons. We worked through an outfitter named Bill Rom, who provided everything we needed, including tents, food, cooking utensils, matches, and canoes for $5 per day. All we had to do was show up. After picking up our equipment at Rom's in town, we drove east on Fernberg Road about 15 miles to Moose Lake. Because we drove to Ely after work, we would usually arrive at Moose Lake around 10:00 P.M. There we would load up the canoes (in the dark) and launch off into the wilderness. We would usually camp on an island to avoid encounters with bears, and rarely saw any people outside of our own party. I remember vividly one trip when a heavy rainstorm came up shortly after we launched the canoes. My son Mark (who was probably eight years old) was huddled in the front of the canoe under a tarp while I was in the back paddling in the rain. Of course everything got soaked with water. We arrived at the island where we wanted to camp around midnight. We pitched the tents in the rain and crawled into our wet sleeping bags to get some sleep. The next day we hung everything out to dry in the sun. It was great fun!

While things were drying out we paddled from Moose Lake through New Found Lake to Sucker Lake and on to Prairie Portage as we often did on these trips. Prairie Portage is on the boundary with Canada. Although we could portage the canoes a few hundred yards into Birch Lake in Canada, we usually just walked across to the ranger station on the border. A beautiful and fast-flowing stream connecting the lakes parallels the portage, flowing over a small waterfall. The

kids were always intrigued by a large woodchuck that lived under the ranger station. It was all very pretty. On other camping trips we went to Snowbank Lake which was much larger but not as well connected to other lakes.

What makes the BWCA wilderness so special and so mystical? The answer is probably different for each person that experiences it. For me, it is the peace, silence, and solitude on a quiet early morning, with only the loon call from across the lake to disturb the silence. It is the chance to see the majesty of the sunrise across the lake in complete silence. It is the set of smells from the lakes, the woods, and the flowers, uncontaminated by engines or gasoline. It is the chance to see and experience the great natural beauty of a land that has not been corrupted by "development" by humans and modern civilization. It is the chance to experience a great ecosystem that functions today much as it has functioned for thousands of years. It is the opportunity to experience great personal awareness, of being alive, of deep understanding in an incomparable wilderness setting, far from the frenzied artificial chaos of modern society. It is the chance to travel by primitive means, of meeting the wilderness on its own terms, of the physical contact with the natural world in all its glories and trials. The experience gives me a oneness and wholeness with nature, a timelessness, connected to the indefinite past and to the indefinite future. Time ceases to exist. To me, the natural state of the wilderness unchanged by humans is perfection and the BWCA is the closest approximation to that perfection that I know.

Sigurd Olson

While camping in the BWCA, I believe that I felt and understood what Sigurd Olson felt and understood. He was the Minnesota version of Henry David Thoreau. One evening when he was camped in the BWCA, he climbed to the top of a local hill just in time to see the sun set over the lakes, and experienced a deep connection with nature, almost a religious experience. Years later, he described it in his first book "The Singing Wilderness" where he said:

"The sun was trembling now on the edge of the ridge. It was alive, almost fluid and pulsating, and as I watched it sink I thought that I could feel the earth turning from it, actually feel its rotation. Over all was the silence of the wilderness, that sense of oneness which comes only when there are no distracting sights or sounds, when we listen with inward ears and see with inward eyes, when we feel and are aware with our entire beings rather than our senses. I thought as I sat there of the ancient admonition, "be still and know that I am God," and knew that without stillness there can be no knowing, without divorcement from outside influences man cannot know what spirit means."

Later he said:

"Wilderness offers a sense of cosmic purpose if we open our hearts and minds to its possibilities. It may come in burning instants of truth when everything stands clear. It may come as a slow realization after long periods of waiting. Whenever it comes, life is suddenly illuminated, beautiful, and transcendent, and we are filled with awe and happiness."

Having been there, I know what he means as I have had the same sense of awe.

He spent much of his life trying to protect his beloved wilderness from government and commercial exploitation, so that people would have at least one place to go to experience true communication with nature. Unfortunately it is a losing battle in the face of unrelenting population growth.

Ansel Adams

Another one of my heroes was Ansel Adams, the famous photographer and naturalist. He combined two of my strong interests in one person: the beauty of nature, and photography. He

was born 20 February 1902, two years after my dad. Much of his work was done in the late 1920s through the 1940s. He had the opportunity and motivation to photograph and record forever the great beauty of the American west before it was despoiled by super highways, strip malls, parking lots, and condos. In doing so he became probably the foremost landscape photographer of the century, working almost entirely in black and white media.

Ansel Adams was a superb photo technician, and invented the "zone system" for matching the luminosity of the scene to the capability of the film to record it with maximum fidelity. His prints are technically superb and feature a very long gray scale (difference between brightest and darkest parts of the picture).

The power of his work comes from something beyond technique. He was caught up in the majesty, beauty, and fragility of the wild places on our planet, and determined to convey this in his photographs. More than that, he was determined to enlist his images in the cause of conservation. His pictures were undoubtedly a key factor in creating a favorable climate for the environmental legislation of the 1970s and 1980s.

Beyond his technical skills, his pictures offered millions of people a vision of the landscape that was extraordinarily beautiful. His belief in the redemptive powers of nature was grounded in the kind of experience other could share. And his investment in the power of the image helped shape public opinion and establish a community committed to preservation of the land.

As a conservationist, he stood above all for the integrity of the national park system as the repository of some of the most beautiful parts of America. In the 1930s he lobbied Congress to create the Sierra's Kings Canyon into a national park. He was able to put the parks in a realm that gave us an enduring vision of the earth as a place entitled to its own integrity. Shortly after his death in 1984, an 11,700-foot mountain in Yosemite Valley was named after him. To the south of Yosemite, connecting the park to the John Muir Wilderness, Congress established the 229,000-acre Ansel Adams Wilderness. For these and other reasons, his name will endure.

4.3. North Shore of Lake Superior

One of the favorite vacation places for people in the north central U.S. is the north shore of Lake Superior, or to Minnesotans simply the "north shore". In the spring of 1959, we traveled up the north shore, then and now one of our favorite places in the world. The north shore is astonishingly beautiful, and this trip was the first time that we had traveled there. In order to hold the cost down we rented a tent trailer from a dealer in Hopkins. Our daughter Renee was about nine months old. Nights were quite cold so we would put her in two sleepers, one inside the other, so that she would be warm. My brother John who was 13 years old at the time also went with us on that trip to help baby sit. We camped on the shore of Lake Superior at various places for about a week between Duluth and the border with Canada. For the first time I saw the attractions on the north shore of Lake Superior and they made a deep impression on me.

On the way to the north shore we explored Duluth. Barbara had been born in Duluth and had lived in nearby Proctor for several years, so she knew exactly where the interesting places were. We drove first to Enger Tower, and got a bird's eye view of the Lift Bridge and harbor. From there we drove to the Lift Bridge to watch the iron ore boats enter and leave the harbor. In order for the ore boats to pass, the entire bridge is lifted perhaps 50 feet. The operation is quite spectacular. From there we drove out on Minnesota Point, a long peninsula that extends into Lake Superior. There is an amusement park and beach at the end of Minnesota Point. Lake Superior never gets very warm, and although people swim in it, no one can stay in very long before they get numb. The lake dominates the temperature at the end of Minnesota Point so it is

always very cool. There is also very little pollen there, so between the clean air and coolness Minnesota Point was a popular tourist destination in the summer.

After Duluth, we stopped at Gooseberry Falls campground and set up the trailer. This was to be a favorite first destination for our many trips that we were to take to the North Shore over the coming years. I remember clearly this first time that I stood at the mouth of the Gooseberry River and looked out over the beautiful Lake Superior. It was early morning, with mist rising over the lake. It was magnificent. We started at the mouth of the river and walked upstream to the falls, perhaps ½ mile. Although there was a substantial amount of water going over the falls, we climbed the falls as we did many times in the future. The falls are spectacular, with water running across a broad cliff of rock; we climbed them with water running all around us.

Farther up the lake, Split Rock Lighthouse was very scenic, with its great view from the rock cliffs over the lake. Even more spectacular was the view from Palisades Head near Silver Bay. We stood at the top of the cliff, a few hundred feet above the lake and could look perhaps 50 miles out over the lake in every direction.

Another place that I liked especially was Baptism River Falls. The falls are perhaps a mile from the highway, and we decided to walk in with baby Renee. Because it was spring, the falls were very full, and in my mind are the most beautiful falls in Minnesota—certainly my favorite. We spent quite a bit of time at the base of the falls because we had a lot of time, and then regretfully walked back out. On the way out I picked up a small round stone to take with me as a reminder of the falls and the day that we discovered them. We kept a sharp eye out for bears, but saw none. I kept the stone for many years.

That night we camped in the campgrounds at the mouth of the Temperance River. It is called the Temperance River presumably because it has no (sand) bar at its mouth. As the sun set, we stood on the shore and looked out over Lake Superior, not able to see the other side. It was almost like a Zen experience.

The next day we continued up the shore drive to Grand Portage and the Pigeon River that forms the border between the U.S. and Canada. We walked across the bridge just to say that we were in Canada. There was a store on the Canadian side with china and other Canadian goods. The exchange rate was 97 cents U.S. for a Canadian dollar as it had been for many years. (Now it is about 67 cents U.S. for a Canadian dollar). Regretfully we turned around and headed back home.

On later trips we often camped at the Middle Falls campground on the Pigeon River. The river and falls are extraordinarily pretty. We hiked upstream and found more falls and spectacular views of the river valley. We also found sluice ways that were used in early logging work.

4.4. Southwestern Minnesota

Southwestern Minnesota is prairie country. The prairie should not be confused with the Great American Plains, which start just beyond the western border of Minnesota at the 98th longitude. (Minnesota claimed almost all of the northern prairie, and left only about 60 miles of it for the Dakotas.) The difference is that there is enough rain to grow corn in the prairie but not in the plains, although wheat will grow in the plains in most years. Martin County is at about 94.4 degrees longitude and 43.6 degrees latitude, and therefore is comfortably in the prairie.

The prairie is some of the most fertile farmland in the world, because after the last glacier period the Gulf of Mexico extended up into southern Minnesota and laid down six feet of incredibly rich soil. Trees do not grow naturally in the prairie country except along lakes and streams, and this is the situation around Fairmont. The average precipitation in Minnesota is 26 inches per year, about half that of the Boston area.

A characteristic of southwestern Minnesota is that the sky seems to be very close to the ground. I presume that is because there are few trees to hold up the sky. Conversely, in northeastern Minnesota the sky seems to be very high, held up, no doubt, by the trees. Another characteristic, first pointed out to me by my son Mark, is that in Minnesota people live where there are no trees, and where there are trees no one lives there. Again conversely, in New England, people live where there are trees.

Like all farm county in the Midwest, southwestern Minnesota land is laid out on a grid of roads running north-south and east-west spaced exactly one mile apart in each direction. Each square mile is one "section" and is 640 acres. This was very convenient in the 1800s when farms were 160 acres ("quarter section") or 80 acres (one-eighth section) and thus were accessible from roads spaced on one-mile intervals. The only exception to this perfect grid is around lakes and towns. In 1935 a year after I was born there were 200,000 farms in Minnesota with an average size of 160 acres. This size was entirely adequate to support a family, and was about the largest farm that one family could manage. By 1995, sixty years later, there were 73,000 farms (not counting hobby farms less than 50 acres) and it required about 1800 acres to support a family.

In spite of its flatness and isolation, southwestern Minnesota including Fairmont area is very appealing. Calvin Tuttle said it very well, that Martin County was "a land of many and beautiful lakes and streams, and rivers of clear pure water abounding with large quantities of fish of many kinds, ducks, geese, swans, and other water fowl". That statement was and is true. What he did not say was the weather is quite severe in that area. Spring brings tornadoes, hail, and tremendous electrical storms. On June 11, 1924 a storm left two feet of hail on the ground. Snow lasts into May in sheltered areas. Summer brings temperatures of 100+ degrees. Frost comes in mid-September, and winter brings temperatures of 20 degrees below zero. One has to be a native to enjoy it.

5. My Family and Me

I have been fortunate to participate in the three major phases of life in America:

- The agriculture age
- The large industrial organization age
- The information age

I guess that this is my life journal, but one written mostly long after the fact.

Three major events strongly influenced my life. They were:

- the depression, which lasted until I was seven years old
- World War II, which lasted from age seven until age 12
- my position in the family as oldest, and only child for the first six years of life.

These factors have had enduring and obvious impacts on my behavior and outlook on life.

5.1. The world I was born into

I was born at home at 312 South Prairie Ave. in Fairmont, Minnesota on May 16, 1934 at 10:10 A.M. My parents Ashley Floyd (Ted) and Genevieve (Gen) Champine were living in a house owned by my paternal grandmother's sister Ila Personius. My mother tells me that I was late by several days and therefore was larger than usual. The year of 1934 was a year of the dust bowl

drought in the Midwest, and the day I was born my mother tells me the temperature was 104 degrees (the highest temperature ever recorded in Minnesota is 114 degrees). There were many dust storms that year and one was in progress on that day. I was born at home. The nurse that was helping wetted a small sheet and put it over the window to keep the dust out. The windowsills were coated with dust. Dr. E.E. Zemke was the attending physician, and he had to deliver me with the help of forceps. I later went through high school with his son Bob, who also became a doctor and continues to practice in Fairmont. Later Dr. Zemke delivered my two brothers also. On 17 May 1934 the Fairmont Sentinel duly recorded the event in the "Locals" section, saying that I weighted 8 1/2 pounds. The temperature for that day was not recorded, but there was an article that said the temperature had been above 101 degrees for several days. The same paper had an article about a kidnapping by John Dillinger in Chicago, and dust storms that covered hundreds of miles and destroying all of the seed crops that had been planted. There was an advertisement for a new Pontiac for $715 and a new Plymouth for $530.

Other people born about the same time included Gloria Steinem, Shirley MacLaine, Sophia Loren, the Dionne quints, Elvis Presley, Julie Andrews, and the comic book character "Superman". The Dionne quintuplets were a major news story of the day, born 28 May in Callander, Ontario Canada 12 days after I was born. The quintuple identical babies; Marie, Emilie, Annette, Yvonne, and Cecile; were born at home and collectively weighed 11.5 lbs; the first quints that had been known to survive. There was such enormous public interest in the Dionne quints that they greatly improved the economy of Ontario during the depression, attracting 6000 visitors a day and bringing in $500 million to the local economy. Donald Duck was "born" the month after I was, and Elvis Presley was born the following January 15. Julie Andrews was born 17 months after I was on 1 October 1935. Flash Gordon, the popular science fiction character, was "born" a few months earlier in January 1934.

The comic book character "Superman" was also born in 1934, created by Jerry Siegel. Superman was the "man of steel"; able to leap tall buildings in a single bound, faster than a speeding bullet, and more powerful than a locomotive. He was a doer of good deeds. His mission in life was to come to the aid of orphans, battered wives, and oppressed minors. He shunned gratuitous violence and refused to take human life. His friend Lois Lane openly campaigned against capital punishment. In all of these matters Superman reflected the ethics, cultural ideals, and social attitudes of the time.

Franklin Roosevelt was president when I was born and was to remain in office for a total of 12 years. Prices were very low because of the depression. A gallon of milk cost 45 cents; a new Ford cost $575, a gallon of gas was 10 cents, and a new house cost $6,000. The average family income was $1500. Thus a car cost 4.6 months income, and a house cost four years income.

Even at these prices, our family did not have much money. When I was growing up, having no money did not seem to be an advantage. I now consider my growing up in an environment of scarcity to be a major advantage in leading a rewarding adult life. People growing up poor expect little and therefore are happy when they accomplish something. It is my observation that most of the people that achieve much in life have had disadvantaged childhoods. I discovered much later that growing up in an environment of affluence, ease, and comfort is a major handicap to living the good life. Growing up in comfortable surroundings means that there is only one way to go and that is down, and that having wealth leads to unhappiness. This was certainly true of the Dionne quints, Elvis Presley, and many, many others. People are far better at dealing with adversity than dealing with success.

5.2. My Parents

We lived on South Prairie Ave. for one year but I have no memories of that house. We then moved to 232 South Main Street, which was to be my home until I left for college, my father's home until he died, and my mother's home until the present.

Everyone called my father Floyd or Ted, even though his name was Ashley Floyd. As shown in the picture below, he had a striking resemblance to the actor James Cagney in both facial features and stature. When I first understood about work, he was an electrician who did work around town and who also had a crew of men who wired farms for the Rural Electrical Association (REA). REA had started in Martin County in 1935. Earlier, he had a radio repair and sales shop in town, but that had failed during the depression. After the REA work was completed, he went back to working alone as an electrician. We never wanted for anything, but money was always in short supply, and my mother had to work during most of the time I was growing up. I grew up in an environment of scarcity (as did most of my friends at that time) and always believed that it was the normal situation. Although we had little money, we did not consider ourselves poor. We very much felt that we were middle class, but without much money. I remember one time when I was five or six that there was no food in the house except oatmeal, so we had oatmeal for supper. Since people had relatively few possessions, each one took on considerable importance and was taken care of. Wasting anything bordered on the immoral, and I still feel that way to the present.

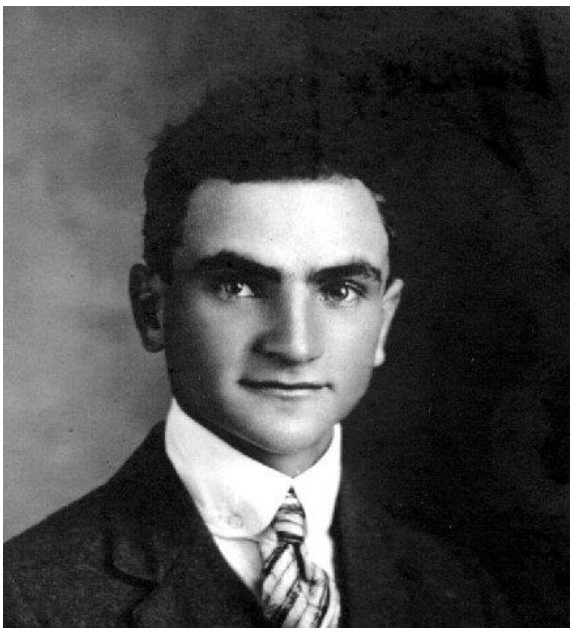


Figure 4 Ted Champine

My mother Carol Genevieve Northway was born on 13 Dec 1912 on a farm near Alpha, Minnesota. She was the second daughter and third child of Homer and Allena Northway. Genevieve grew up in a musical home. Homer and Allena were both very musical. Homer played the organ in college. Allena had majored in music at Cornell, and taught piano to local children for "pin" money for about 50 years. One of the students that Allena taught was Larry Krause. Later, after working as a missionary in China, Larry taught world history in the Fairmont High School and was a favorite of Genevieve's three boys. Larry was also the organist at the Fairmont Congregational Church, and in that capacity was the organist for the wedding of Genevieve's son George. Allena played piano for Methodist Church services in Alpha, Sherburn, and Triumph for over 50 years. The Northway family was very active in the Methodist Church all of their lives. They traveled to Sunday School and church every Sunday in a horse-drawn surrey until they bought their first automobile in 1914.

In about 1926 or 1927 when his health had improved, Homer found out from the bank in Reinbeck Iowa that they had foreclosed on a farm two miles east and a mile south of Triumph (now Trimont), Minnesota. He sold the implement business and purchased the farm from the bank. The farm was initially 40 acres, and later Homer bought 40 more acres.

A major attraction was that Triumph had a four-year high school. The farm was three miles from town and was on one of the very few gravel roads that had been put in a year or two earlier.

Interestingly, Genevieve's future husband Ted Champine helped build that road. About this time, the family bought its first car: a gray Buick touring car with side curtains. It was only driven during the summer to church, and in the winter it was put up on blocks and covered with blankets. Homer bought a pony for Genevieve and Merlyn to use to drive to school. They drove to Dolliver, Iowa to get the pony, put it in the back seat of the Buick, and brought it back to the farm. They named the pony Dolliver after the town that it came from. The children drove a buggy in the summer and a sleigh in the winter, rain or shine or snow. The pony was extremely strong-minded and did what it felt like doing. Often in the beginning, when the children wanted to go to school, the pony would start out for school, but when it got a mile or so from the farm, it would turn around, lay his ears back, and race back to the barn no matter what the driver tried to do. One day, after a few episodes like this, Homer rode in the buggy with the children. When the pony turned around to race back to the barn, Homer used the whip on him to adjust his behavior. The pony never misbehaved again.

Life was busy for Genevieve and her family. The children had chores to do on the farm every day after school. There were animals to feed; the barn to clean out; and water to be carried. In the winter there was much extra work to shovel paths through the snow.

Genevieve liked school and did very well. She had been able to skip second grade. She was in several plays during the three years she was in high school in Triumph. The last year that she was in high school there was a great deal of snow, so Genevieve lived with a family in Triumph for the winter, working for her board and room. She did the washing, ironing, and watching the kids. She went home on weekends. She got to know the sister of the wife of the family that she stayed with. The sister was married to a wealthy man, Mr. James Royal, and lived in a luxury hotel in Chicago overlooking Lake Michigan. Genevieve graduated from high school at age 16 in the spring of 1929. Mrs. Royal offered Genevieve a job as a live-in nanny with them in Chicago. This offer was to have a profound impact on her life. She moved to Chicago in the fall of 1929 (still at the age of 16).

My parents had been married on Thanksgiving Day in 1932 in Chicago. My mother had been working in Chicago since graduating from high school in Triumph Minnesota, and her two brothers and sister all lived in the Chicago area. This picture was taken for their wedding.

Figure 5 Genevieve Northway Champine in 1932

My dad also taught me how car engines worked and about electricity. He had not been able to finish high school because he had to work on the farm, and he always felt deprived of an education because of that. He was always interested in new things, and had gone to radio and electricity school in Kansas City around 1920 and was a self-taught electrician. In later years he was very interested in amateur radio as a hobby. Amateur (ham) radio was a popular hobby during this time, and many of our friends were quite active. The radio amateurs were able to make radio contact all over the world, and it was a wonderful way to expand horizons beyond the

small prairie town that Fairmont represented. The Fairmont amateur radio club had yearly contests, where the members would try to make as many contacts around the world as possible in a 24-hour period. My dad never obtained a license but bought some army surplus short wave receivers and monitored transmissions. He attended the club meetings of the amateur radio club (occasionally taking me), and I remember his explaining to me, at various times, how electricity, alternating current, car engines, and radio worked. It did not make any sense at the time, but looking back what he told me was exactly right. I know he would have liked me to become active in amateur radio, but at that time one had to learn Morse code to get a license, and I was not interested in doing that.

The Masonic organizations were very popular in middle America in the 1920s and 1930s, and Fairmont was representative of this interest. My dad and mother were both very active in the Masonic organizations, my dad in Masons and my mother in Eastern Star. My dad had worked up to the level of a 32nd degree Mason and had a large fancy hat with a fez as well as a sword. My mother was an officer in Eastern Star for many years, becoming Worthy Matron and then Worthy Grand Matron . The Masonic organizations for teens were also active, the Job's Daughters for girls and DeMolay for boys. I was active in DeMolay during my teen years. We had meetings once a month to work on the degree activity. We also sponsored a number of dances with the Job's Daughters which were a lot of fun.

People had by necessity a very stoic attitude towards life. Children are strongly influenced by what they are told by adults and they internalize the attitudes of the adults. By the time I was four years old I learned many important things from my dad, including that:

- life is hard
- people have to earn anything that they get
- education is very important
- to get things done right, do them yourself
- always finish things you start
- if something is worth doing, it is worth doing well
- all work is honorable
- there is always room at the top
- one should cultivate good habits so that doing the right thing becomes automatic without having to think about it.

He said that if a person had a trade such as carpentry or plumbing, then the person could always find work. He believed strongly in self-sufficiency and personal responsibility. Above all he believed in persistence and endurance; endurance could overcome all obstacles. If a person worked hard, had persistence, and did reasonably intelligent things, that person would prosper. If bad things happened to a person, it was probably the fault of that person. My dad also said that most people go through life "in a fog" without objectives and without a plan always taking the path of least resistance. He believed that without objectives and plans one could not accomplish anything of consequence.

In some ways, we led a very sheltered life. I never heard anyone in our extended family ever tell an off-color joke or curse. It simply was not done, and no one did it.

5.3. Our house

The house on Main Street had a great location for a kid. It was on the edge of Lake Sisseton, on the edge of Ward's Park, and two blocks from the business district. There was a sidewalk that bordered the park, and I liked to roller skate along the edge of the park. The skates were of the kind that clipped on my shoes, and they worked fairly well but would often come off. I could walk everywhere I needed to go. The primary school was three blocks away and high school was about six blocks.

The house had cost $1800. It was paid for in part with a gift of $600 from my maternal grandparents to my mother which was the money that they would have given her if she had gone to college as her brothers and sister had. The house had been built in 1900 out of lumber taken from a brewery that stood on the same location earlier. The large beams in the basement came from the brewery. The lot that the house was built on was a small city lot about 50 feet wide. The small size did not matter, as we were only a few hundred feet from the lake and park. As early as I can remember the lot had six very large oak trees on it—today 50 years later those six oak trees are still there and still look just the same as they did in 1940. The house initially had two bedrooms and one bathroom. There was a wooden porch on the front, and I used to roller skate there because the surface was smooth. Later, in 1945 when I was 11 and my brother John was on the way, the house was remodeled to add an upstairs with another large bedroom. The house had been built with 10-foot ceilings and an attic, so my dad lowered the ceilings by two feet and built a large dormitory-style bedroom in the attic. The house was a terrible mess while that was going on because we had to knock all of the plaster off the ceilings. My two brothers and I always slept in the upstairs while we were growing up.

The house looks out over Lake Sisseton. It is about 40 feet above the lake and about 150 feet from the shore. The house has an ideal location with a wonderful view of the lake and of sunsets over the lake. It is one house from Ward's park and two blocks from the shopping district. Immediately behind our house is a fishing pier put in by the city every year. In the early 1960s the porch was enclosed to form a front room and bedroom, and the kitchen was doubled in size to provide a much larger eating area.

Telephones were very "automatic" in those days. Our phone number was 216. To call someone, you simply had to pick up the receiver and give the number to the operator. Since Fairmont was a small town you also could simply give the name of the person that you want to call since the operators had memorized most of the names and numbers in town. If the person you wanted was not at home the operator would find them for you.

5.4. The Sweet Shop

My mother worked periodically at the "Sweet Shop" to help with family income. Gus Boosalis, a Greek immigrant, had started it in 1911 initially as a candy store. The Sweet Shop was really four businesses in one, each helping the other. The four businesses were bakery, candy shop, soda fountain, and restaurant. Each business was one of the best in town and stressed quality over price. This was necessary in a small town as all business is repeat business, and news about poor quality or value spreads throughout the entire town in a matter of hours. At that time essentially all business was local, as there were no franchises. In particular all bread was baked locally. Although farmwomen all baked their own bread, the town women usually purchased "store bought" bread. Making bread was big business at the Sweet Shop, and Gus started making bread at about 4:00 A.M. each day. It was called "Mary's Loaf" after his wife. One of the best things about walking by the Sweet Shop was the wonderful aroma that came from the baking.

As shown in the picture below, the front half of the Sweet Shop was divided into two sections with a walkway in the middle. The candy shop was on the south (right) side and the bakery showcases were on the north (left) side. In the back part, the soda fountain was on the south side of the aisle and the restaurant was on the north side. The restaurant could seat about 100 people. Beyond the soda fountain and behind a wall was the kitchen for the restaurant, and behind the restaurant was the bakery with the big ovens for bread, rolls, donuts, sweet rolls, pies, and cakes. Gus made candy in the basement in great kettles and rolled it out on large marble tables. Running four businesses, making candy, baking, and cooking for the restaurant must have been

an enormous job for Gus and Mary. My mother worked there in various capacities over the years, as waitress, sales person, and hostess.

The Sweet Shop menu of June 1940 is very interesting. A typical dinner entry was beef tenderloin steak, potatoes, rolls, salad, dessert, and beverage for 75 cents. The same dinner with a half chicken instead of steak was 55 cents. This was before the inflation caused by World War II. They were serving the same beef meal in 1954 for $1.85.

Gus and Mary not only worked very hard but were very generous, as most of the towns people were. They made substantial but anonymous donations of school lunches and Christmas baskets of food to the needy for over 50 years.

Because my mother worked, she hired live-in girls from time to time to take care of me. The first one that I remember was Nellie Blanck (now Oanes), who was just out of high school. She first came to take care of me in 1937 was three years old. I had just awakened from a nap, and when I saw her, my mother says my first words were “You go home to your house”. Nellie was very patient with me, and brought me a "Popeye" doll to get acquainted, one of my favorites at that time. She often took me for walks in Wards Park. I remember one warm and glorious spring day

Figure 6 Sweet Shop about 1940

that she and I went for one of our walks in the park. I remember that I asked her what month it was (I was just learning about months), and she answered that it was the month of May.

In the early 1940s the front bedroom was rented out to a number of girls who worked in town including Carlene Plumoff and Violet Meyer. Later, Lois Weiske (Blint) stayed with us. I suspect that money was scarce and this provided a small supplement. I can imagine that the one bathroom was a pretty busy place with all of those people.

Grocery stores were very different in the 1930s. In those days there were four or five thriving grocery stores in downtown Fairmont because of the large families that everyone had (now there are no grocery stores downtown). The stores had a counter at the front with a clerk or two to wait on customers. The customer told the clerk what was wanted, and the clerk got the item from the back room. The customers did not have access to the merchandise. There were perhaps a dozen restaurants in town also. Each generally had a counter and the better ones also had booths. I always liked sitting at the counter (and still do) for the rapid and informal service.

Figure 7 George and first bike

At about the age of five I learned to ride a bike, and at that point I wanted a bike more than anything in the world. After what seemed to be quite a while I got my first bike. It was a used ½ size bike that had solid tires and cost $2. My dad painted the frame red and I was the happiest kid around, even though as I recall the bike did not work very well. I had many bikes in my youth and liked them very much as they let me ride all over town in just a few minutes.

5.5. School

I started kindergarten in the fall of 1939, going half days in the morning. The first six grades of school were all in the same building—Fairmont Central School, which had been built in 1928. Kindergarten was a lot of fun. Each student went half days and I went in the morning session. My teacher was Mrs. Madsen. We made a lot of fun things like a chair out of an orange crate and an apron out of a piece of oilcloth. We also learned many interesting things like the alphabet and numbers. First grade was even more fun because we learned to read.

The classroom was quite disciplined. Every morning we stood at attention and recited the Pledge of Allegiance to the flag with our hands on our hearts. We were constantly admonished to be quiet in the classroom and to maintain order. Children that persisted in whispering in class were disciplined, sometimes by having to stand in the corner and sometimes by having to stand in the coat hall that was part of each classroom. The teacher control of the classroom was unchallenged and never questioned, even through high school.

I was disciplined only once for whispering in class, and that time I was made to stand in the coat hall. Shortly after I went in the coat hall, a surprise fire drill was held. The teacher forgot all about me in the coat hall and was occupied with getting the other children out of the classroom. I did not know what to do. Since the last instructions I had received were to stay in the coat hall until told I could come out, I just stayed in the coat hall during the fire drill like an obedient child. When the teacher got back she was quite embarrassed that she had forgotten about me.

Holidays were very important in grade school. Valentine's day was very important, and each child sent a valentine to every other child. One of the holidays that we celebrated that has now been lost was "May Day". We filled small baskets with candy and gave them to our favorite friends. We delivered the baskets after school and I remember driving around dropping off the baskets at the door and then leaving quickly.

In second grade we greatly expanded our vocabulary. The teacher read us a number of stories, and I remember that two of my favorites were Web Adams (a story about a boy and a house with several secret passages) and Mary Poppins, a story about a no-nonsense governess in London that had magical powers. I still like Mary Poppins and loved the Disney movie. In third grade we learned about fractions, and in fourth grade we learned about decimal numbers. Both were fun. One thing that was not fun was the weekly list of spelling words. The list was given to us on Monday, and on Friday we had the test. We learned to spell a lot of words.

During recess we often played “Pump Pump Pullaway”. There were two safe zones, and one had to run between them without getting tagged. If you were tagged you had to go in the middle and try to catch the others still running. The last person caught was the winner. I also liked to jump rope. This was usually considered to be a girl’s activity, but I did it anyway in spite of the adverse peer pressure, and liked to try the different modes of jumping.

I was a real bookworm as a child—I loved to read. Often my mother would chase me outside to play instead of reading, worried that I was not getting enough exercise. My favorite magazines were the Saturday Evening Post and especially the Readers Digest. Much of what I learned about the world I got from the Reader’s Digest, and there is no doubt that it shaped my view of the world. I also liked Popular Science, which I always read from cover to cover. I read the classified ads very carefully, and often sent for the things advertised there, such as how to make a home built rocket engine.

I spent a lot of time at the libraries and checked out large numbers of books. (The free library system is one of the great unique American success stories. There is nothing else like it in the world. It is a strong factor in equality and equal access.) The library in Fairmont, shown in this picture, had been built in 1904 with a grant of $9,700 from steel magnate Andrew Carnegie of Pittsburgh. Carnegie funded 1800 libraries around America

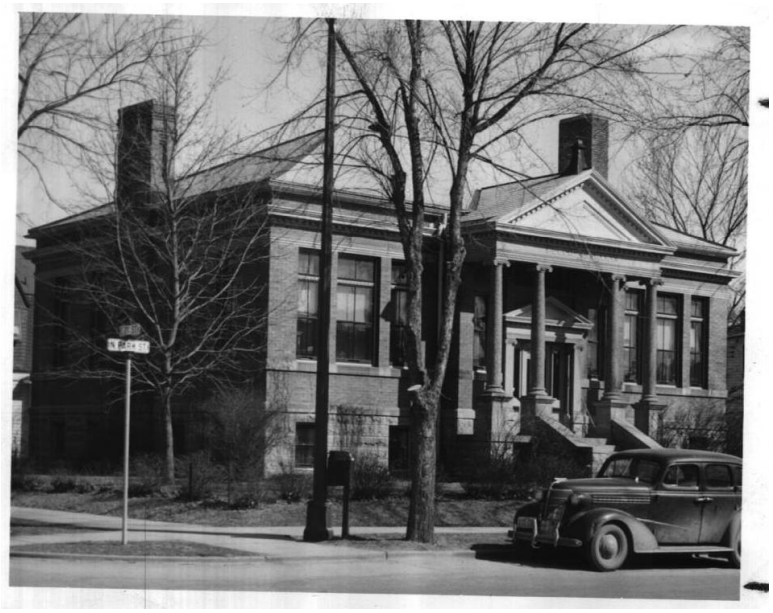


Figure 8 Fairmont Public Library

with the stipulation that the local towns provide support after construction was complete. It was a two-story building and had wonderful stone pillars and stained glass windows. I especially liked books about the physical science, especially astronomy. I believe that I read every book in the library on astronomy. I was constantly filling up my library card and having to get a new one. It got to the point that the librarian would not ask me for my card but would simply ask me for my card number (which I had memorized). At one time I decided that I should read every book in the Public Library. Fortunately I never completed that goal but I probably read a large fraction of them. (The columns from the library are now part of the Martin County Historical Society building.)

A favorite pastime was to go next door to the Arthur Nightingale house and read their Compton's encyclopedia. I would pick one at random and page through it, reading everything of interest. I found the articles extremely interesting, especially the ones that explained how things worked. I never tired of this, but they probably got tired of me sitting there reading.

One of the favorite family activities was to go for a car ride on Sunday afternoons. The ride seemed boring to me so I would always take a book along to read during the ride. My dad would yell at me to quit reading and watch the scenery.

My brother Charles Clayton Champine, shown in this picture, was born January 2, 1940. He was born at the Fairmont Community Hospital, which was only half a block from our house. He was the first baby of 1940 to be born in Martin County, so my mother got a lot of prizes and gifts from the local merchants. I was six years old by then and had been an only child for that time. At six years old I was beginning to learn to live by the rules, and it came as quite a shock to find that the new baby did not live by the rules.

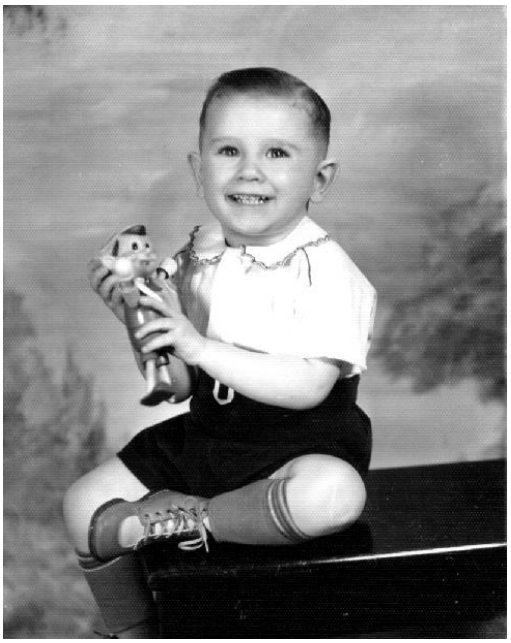


Figure 9 Charles Champine about 1943

My dad had a workbench in the basement with a number of his electrical tools on it. I liked to build things, either simple mechanical things or electrical things. I experimented with small motors and electrical circuits using light bulbs as resistors, and measuring the current and voltage. I made some simple radios and amplifiers. Later, when I was in college and had taken a course in electronics, I salvaged some of the old amplifiers that my dad had gotten from junked jukeboxes and fixed them up. The 45-RPM records had become popular, and I played the records (at high volume) through the amplifiers that I made.

Almost all meals were eaten at home as a family. However, on very rare occasions, we would go out to eat, maybe two or three times a year. One favorite place was "The Oaks", a small but high class dinning room on the south edge of town. Eating out was very expensive—a good steak dinner at The Oaks could cost as much as $3.00.

5.6. Ceylon and Lake Belt Township

Much of my family history and many of my experiences in the 1930s and 1940s took place in the very small, very rural village of Ceylon Minnesota. It is a village of perhaps 500 people, and

seemingly always has been. It was founded in the winter of 1898 when the North Western Railroad built its rail line through the area. As it was the closest town to the Champine farm (four miles), it was the town where my grandfather did much of his business and where he later retired. The most distinctive thing I remember about Ceylon is the very wide main street, which is wide enough for cars to part diagonally in the center, as they often did. Perhaps the most notable thing about Ceylon is that it is the birthplace of Vice President Walter Mondale. His father Theodore was the minister at the Ceylon Methodist church, and his congregation included many of my family members.

As described in the booklet "History of the United Methodist Church of Ceylon" dated 1977, the first preacher in the Ceylon area arrived in 1870, just one year after my family arrived in Lake Belt Township in a covered wagon. The preacher was unpaid but walked to every family home in the several townships near Lake Belt. He held church services in many of the homes that he visited. A Methodist congregation was organized in 1900, and they built their first church in 1904. The church was built entirely by hand by the members.

Figure 10 Sibyl and Alfred Severson

In about 1941 my father's sister Sibyl and her husband Alfred Severson moved off the farm and into Ceylon. The reason for the move was the death of my grandfather George. The terms of his will were that his two sons each got a 160 acre farm and each of his three daughters got a bare 80 acre farm with no buildings. The rationale for the difference was that husbands were supposed to provide for their families. This made it quite important for the two boys to get farms so that they could provide for their families, but it was not important for the girls to get farms because they would be provided for by their husbands. Sibyl and Alfred had been living on the farm of my grandfather George, one of the 160-acre farms. The farm was immediately to the south of the original family homestead, bordering the Iowa state line. Therefore they had to vacate the farm when my grandfather died in 1940. After living in Ceylon for a year they moved to Fairmont. They never had any children and they were our only nearby relatives, so I sort of adopted them. I could ride my bike to their house in about ten minutes and went there frequently. This picture shows them at the time of their wedding in 1913.

A big attraction at my Aunt Sibyl's house was that they got the Saturday Evening Post, which I read cover to cover every week. The printing industry had made major advances in the first couple of decades of the 20th century and made possible a weekly magazine with high color glossy photographs. The Saturday Evening Post was a weekly magazine and was the most popular magazine in America. It was widely sold door to door by kids for five cents an issue. It had wonderful stories and great pictures. I especially liked the pictures on the cover by Norman Rockwell (1894-1978). He was one of America's most popular artists and still today is my favorite artist. I have two books of his pictures. He had an amazing ability to capture important ideas and messages in a very appealing manner. He never considered himself to be an artist but always called himself an illustrator. One of the things I liked best about his pictures is the almost photographic quality that they have, in detail and resolution, in realistic colors, and in perfect

geometric perspective. With most pictures, as you move closer they dissolve into mush lacking in detail. With a Rockwell picture, as you move close you see increasing detail. After we moved to Massachusetts we went to see his home and museum in Stockbridge, MA. They were great. My other favorite artist is Maxfield Parrish (1872 - 1966). I especially liked his picture entitled "Daybreak", which is easily his most famous paintings. It is estimated that in 1925, a few years after its publication, reprints were in one in four of all American homes (my taste in art is very "populist"). The picture has two golden-hued nymphets lounging by a clear lake with cascading lavender mountains fading into a blue-white haze. It is reminiscent of a vista from ancient Greece or a surreal scene from Lake Tahoe. His style was that of an illustrator as was that of Rockwell.

5.7. Mothers Club

Because life was difficult at best, people networked extensively to help each other cope with problems. My mother belonged to a "Mother's Club", a self-help group of women that exchanged information about how to best raise children. The prevailing thought about how to properly raise a child was that they should not be pampered. Life was difficult at best, and a child had to learn early to be stoic, to expect adversity and disappointment, and to rise above it. Children had to learn their place, to endure, to expect failure, to "be seen and not heard", and to show respect for their elders. Strong self-discipline and good habits were strongly emphasized and were believed to be necessary to survive. The organizational meeting was held in March 1936, and in addition to my mother the founding members included Mrs. V.K. (Pete) Peterson, Mrs. Lynn Kerns, Mrs. George Livermore, Mrs. Roy McClement, Mrs. Glenn Reed, Mrs. Elmer Sorenson, and Mrs. John Flynn, all who were to be long time Fairmont residents (no first names were recorded in keeping with the tradition of the times). Meetings were held the second Tuesday of each month. My mother was elected as the first president. The women used study programs from the University of Iowa and local guest speakers to improve their child-rearing ability. There were also family social outings, such as the annual Christmas party and the annual summer picnic. Up to 40 children attended the events. At its peak there were 28 members.

I loved going to Mother's Club meetings. In the summer the meetings were held in the shelter house in Lincoln Park. We had hamburgers with all of the fixings. I always ate them with pickles, raw onions, mustard, and ketchup. For dessert we had all of the ice cream cones we could eat, (and we kids could eat a lot of them). The Christmas Mother's Club meeting was a very exciting time, and I looked forward to it all year long. Every Christmas the Mother's Club had a party at which a "real" Santa Claus in full costume would come and give a present to every boy and girl. The Santa looked very authentic and was very convincing.

More than 60 years later the Mothers Club was still meeting with many of the same members including my mother. It finally disbanded in April of 1998 on the occasion of the death of my mother.

5.8. Having fun in Minnesota

One of the earliest significant events was my trip to Camp Kiwanis in about 1945; a summer camp for kids run by the Kiwanis Club organization. The camp was on the St. Croix River near Marine-on-the-St.-Croix and lasted for a week. We slept about six to a cabin and ate in a dining room. I gained about ten pounds during that week, with all of the exercise and dining room food. We learned to paddle a canoe and took a canoe trip down stream a few miles. They had a small library there and I discovered the "Tom Swift" series of books. They were about a young

scientist, his inventions, and his adventures. I read every one of them cover to cover. I went back a second year to the same camp and learned to spin a rope and ride a horse.

Later when I was a teenager and travel was easier, we went to Minneapolis to see the Christmas displays in the windows at Dayton's department store, probably the leading department store in the city. The displays were true works of art and were very innovative. Many of the figures in the windows were animated. Sometimes they had skaters that moved; sometimes they had animals that moved. Each year they had a theme; one year it was a Dickens village. We always looked forward to them. Later they established a shopping area inside where only kids could shop. They had sales people to help the children shop and had gifts in every price range.

I now realize that one's personality and interests are formed early and are relatively permanent. My early hobbies were photography and music. I got an inexpensive camera from my school friend Darrell Weinman as a birthday present when I was about 10, and started a life long interest in photography. A few years later I built a darkroom in the basement and developed my own films and prints while I was in high school. The dark room was built out of a refrigerator box, and I used empty whiskey bottles that I found uptown to store the chemicals. As a young child I was always afraid of the dark, and always wanted to have the bedroom door open a bit at night so that some light could come in. After spending quite a bit of time in the darkroom, I now felt very comfortable in the dark.

Not having much money, at first I could only make "contact prints" which were the same size as the negatives—about 2 inches by 3.5 inches. I made a "print box" from a light bulb and cardboard box (probably dangerous). Later I got a cheap enlarger that opened up wonderful new opportunities for me. I had a radio in the darkroom, and would listen to may favorite radio programs as I developed pictures. These included "Terry and the Pirates", "Jack Armstrong", and "Dick Tracy". During my senior year in high school I was an official photographer for the yearbook. We used 4"x5" press cameras with cut film for the year book pictures. The quality was wonderful with the big negatives.

I took piano lessons from the Catholic sisters (Sister Charlotte) for 50 cents per half hour when I was about nine, lasting about three years. We used the John Thompson set of books and I got into the third grade book. In seventh grade I joined the high school marching band, playing baritone for five years and tuba the last year. The band was much fun and made high school interesting when much of the course work was boring. The instructor was Richard Scherer, an ex-Marine who was a strong disciplinarian. I also made many close friends in band. We played and performed half time marching shows at all of the home football games, and put on two or three concerts a year. We also went to a number of the away games. The uniforms were red and white, and were very impressive. The high school song was "Anchors Aweigh", and even today every time I hear it memories come flooding back about high school.

About my sophomore year I joined the high school chorus and also sang alto in the Methodist church choir.

I still enjoy playing keyboard instruments but have lost much of my skill.

Later I added the hobbies of camping, genealogy (picking up the work that my dad did) and amateur finance (playing the stock market). I have also enjoyed writing, and have done so many times and in many ways over the years. Here I am doing it again.

The idea of chores on the farm carried over to chores at home. The prevailing thinking was that children needed the discipline of regular tasks at home to develop good habits for later life. In addition, running a home involved a large amount of manual labor, so there was plenty of work to do. Although there were clear roles for fathers and mothers, there was considerable cross-

gender training of children. My tasks around the house were to help make the beds, dry the dishes after washing, and do light ironing. Later, I came to regard the automatic dishwasher to be one of the greatest inventions of mankind. My future wife was in a family of girls and was expected to be able to build things out of lumber, fix the car, and do yard work.

My first camping trip was with the Boy Scouts. I had been a Cub Scout from the age of nine or ten, with Mrs. Beech as my Den Mother. Probably about the age of ten some of us Cubs went camping with the scout troop in the Methodist Church. We went to an open field on the edge of Fox Lake about ten miles from home and set up tents. I remember getting up the first morning after having slept in a tent and thinking that this was a wonderful experience. I have enjoyed it ever since. I continued with Cubs and Scouts up through about age 14, mostly because we went camping a lot. Summer camping was always in tents in various places near town. We also went winter camping at the Camp Cedar Point, the Boy Scout camp, about 12 miles south of town on Lake Iowa on the Iowa State line. We stayed in a building in the winter called the Wade Memorial, after one of the important families in town who had donated the funds for the building. The Wade Memorial was a large log building with a giant stone fireplace at one end. It was great fun for a young boy to be out in the woods in the summer or winter, exploring nature, boating, swimming, and goofing off with friends.

My brother John Willard Champine was born on Valentine's Day February 14, 1946 in the Fairmont hospital about 100 yards from our house. As my mother was bringing John home from the hospital she slipped on the ice on our sidewalk walking from the car to the house and fell down. She broke her leg in the fall, but was able to toss John into a snow bank as she fell so that he was not hurt. She said afterwards that she knew it was broken because she heard it snap. She was laid up several weeks with the broken leg and it gave her a lot of trouble for some time after that.

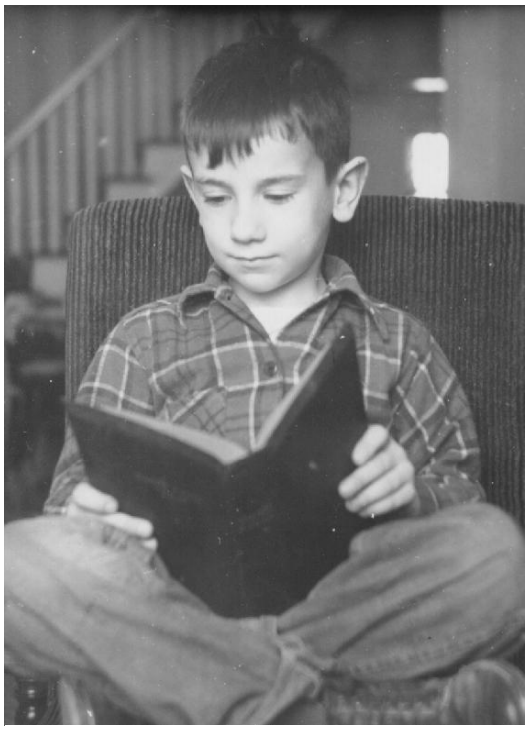


Figure 11 John Champine about 1949

5.9. The Mondales

Every young boy has a group of "best buddies". In the early teens I had several buddies, including Jim Coult, Jim Fancher, Darrell Weinman, Jim Plorde, and Jim Marquardt. Later I spent a great deal of time with Morton Mondale, brother of the future vice president Walter F. (Fritz) Mondale. Mort's dad, the Reverend Theodore S. Mondale, had been the Methodist minister in Ceylon during the years 1927-1932. Fritz had been born in Ceylon on 5 January 1928, making him about six years older than Mort and me. Fritz and his older brother Clarence (whom everyone called Pete) were both very energetic children but they were never "deliberately naughty" as remembered by the towns people. In Ceylon Mrs. Mondale organized and directed two choirs, and was responsible for the music program including playing the church organ. A highlight of her music program was the Easter Cantata, which most of the town looked forward to. I had many relatives in the Ceylon area and most of them were Methodists. In reading newspaper accounts of weddings and funerals, it is interesting to note that Rev. Mondale officiated many times for my relatives there.

At that time, Methodist ministers were moved relatively frequently as directed by the central conference, and the Mondales were no exception. The Mondales moved to Elmore Minnesota in 1936 and to Fairmont in about 1947. I remember Rev. Mondale at that time as a semi-retired Methodist minister and quite elderly. He worked around our church and always called me "the scientist". I suspect that people in general thought me to be "serious" and reliable. Rev. Mondale died only about a year later. Mort's mother Clarabelle was much younger (second wife). She became superintendent of the Methodist Youth Fellowship (MYF) group and directed the choir. She was by far the most ethical and morally conscientious person that I have ever known. Religion could not be taught in the schools, so we had "released time" of one hour per week when those who wanted to could go to an outside facility for training in religion. Mrs. Mondale taught religious education during the released time that we had each week. She was a very sincere and dedicated Christian and taught us about her heroes of Ghandi, Schweitzer, and Kagawa.

Occasionally I stayed over night at Mort's house, and had breakfast with them the following morning. Mort was interested in cameras also. He had a much better camera than I did (a German-made Rollicord) and also had built a darkroom. Photography was a primary hobby for both of us, and we had great fun taking (black and white) pictures, developing the film, and then making prints. Often we would enlarge them to enormous sizes just for fun.

Fritz was off at college at the U when Mort and I were in high school. However, during vacation Fritz would be in Fairmont at his mother's house and we had some very interesting conversations. I remember one Sunday morning probably in 1950 (I had stayed over night), we were all gathered around the breakfast table. Fritz was talking about the propagation of social problems from one generation to the next, such as family violence, poverty, and lack of education. I had never heard of these ideas before and found them very interesting.

While Fritz was in college he had managed Hubert Humphrey's first successful U.S. Senate campaign in 1948. Humphrey had given a speech in Fairmont as part of his campaign. They had rented a public address system from my dad for the speech. Fairmont has always been very Republican and people were not very receptive to Humphrey's liberal ideas, but people continued to like Fritz anyway.

Hubert Humphrey was the most articulate person I have ever met. He was able to say exactly the right things for any occasion without any apparent effort or preparation. He had graduated from the U and had later taught there, and then went on to become senator from Minnesota 1949 – 1964, Vice President with Lyndon Johnson 1964 – 1968, and was the Democratic nominee for president in 1968, losing to Richard Nixon by one percent of the vote.

Later when I had gone to college at the University of Minnesota, the Mondales moved to St. Paul. Mrs. Mondale became Director of Christian Education at Hamline Methodist Church, and Mort attended college at Hamline. Fritz lived there as well. I remember one time when Fritz had been on a late Saturday night date. When Mrs. Mondale went out to get in the car Sunday morning the engine was still hot. She shook her head and said something to the effect that Fritz would come to no good.

Sitting in Mrs. Mondale's kitchen on that Sunday morning in 1950, we all believed the Fritz was destined for great things, but we had no idea how great. After graduating in political science in 1951 and law school in 1956 from the U, Fritz went on to become Attorney General of Minnesota (1960), senator from Minnesota (1964), and was elected to the office of Vice-President of the United States for Jimmy Carter on 2 November 1976. He was the Democratic nominee for president in 1984, but lost to Ronald Regan. He then returned to private law practice until he was appointed U.S. Ambassador to Japan on 13 August 1993 and served until

1996. The University of Minnesota established the Hubert Humphrey Institute of Public Affairs, and the circle was closed when Fritz was appointed a Distinguished Fellow there. Hubert would have been very pleased.

On March 9, 2000 the University of Minnesota Board of Regents approved the renaming of the Law Building complex as the Walter F. Mondale Hall. Former President Jimmy Carter spoke at the dedication on May 17. In conjunction with this event, the Law School received a $1M gift from Toyota Motor Corporation and $1.5M from the Minneapolis law firm of Robins Kaplan Miller & Ciresi.

If anyone had told us that Sunday morning in 1950 in Mrs. Mondale's house what the future held, none of us would have believed it, but it shows that in America anything is possible.

6. Going to High School

In Fairmont, grade school lasted through the sixth grade and high school started at seventh grade. When I started seventh grade I soon got involved in many extra curricular activities, and I remember that I would normally run the six blocks to school because there were so many things that I wanted to do. Or maybe I ran because I was a "type A" personality.

Many of the teachers were women. Teachers maintained tight discipline in the classroom. It never occurred to anyone to challenge the authority of the teacher. No one could talk in class without permission. No one could be outside of the classroom without a pass from the teacher. When students failed to follow the rules, they were given detention, which meant that they had to stay after school in the Study Hall. Everyone was afraid of being sent to the Principal's office for discipline. Our gym teacher, Herb Wolf, gave out the strictest disciplinary action. If anyone broke the rules such as by swearing, failing to take a shower after gym, or failing to use the foot powder box (to prevent athlete's foot), they got a warning the first time. The second time they broke the rules they were told to "grab their ankles" and they were given a vigorous swat on the rump with a large wooden paddle. No one broke the rules a third time.

I had never been concerned about grades until I got to ninth grade, and grades were never a topic of discussion at home. In ninth grade I took Latin from Miss Parkos. I was interested in taking a foreign language and the only other choice was Spanish. I would have preferred French or German, but decided to take Latin. It was very interesting, and we learned not only about the language, but also quite a bit about the Roman culture. We students used to have "Latin parties" where we would get together to do the many translations that we were assigned. That way we could learn from each other. It never occurred to me that I might actually visit Rome and Italy many times some day.

Also in ninth grade I got my first real exposure to science and mathematics, and found that they held a strong fascination for me. I presume that this came from the influence of my dad who was an electrician. Strangely, I did not like the biological sciences, did not do well in them, and avoided them as much as possible. Starting in ninth grade I decided to try to improve my grades. I took algebra in ninth grade from Frank Budde. I was amazed at the power of algebra to solve problems. Later I took physics and chemistry from Homer Knoss and enjoyed them both very much. I also took geometry, solid geometry, and higher algebra, all from Miss Evans and found them all very interesting. One of my favorite courses was social studies from Mr. Maloney. His real interest, however, was coaching. He showed us a lot of movies and had us read Time magazine in class every week. I loved Time magazine and read it from cover to cover each week. I was fascinated by the current events, and had never had that much access to the events in the outside world. He also organized a field trip to the state hospital for the mentally retarded in

Faribault. Here we saw hydrocephalics, microcephalics, and other very serious mentally retarded children and adults. I had not had any previous contact with people that were not relatively normal -- this field trip was a real eye-opener!

By this time I was too busy to walk the six blocks or so to go home for lunch at noon, so I started to take my lunch (there was no lunchroom in the high school). Everyone who brought a lunch ate in the main study hall. My mother always made the same lunch for me: three roast beef sandwiches (six slices of bread) heavy on the mayo, a dill pickle and an apple. I would eat quickly and then go to work on the "Echo", the school paper.

One of my ambitions at that time was to be able to read and understand the Scientific American magazine that I saw in the library. Scientific American was first published on August 28, 1845: it reported on the success of the Morse telegraph between Washington and Baltimore in the first issue and became the longest published magazine in America. When I finished college I could indeed understand it. My new wife Barbara subscribed to it on my birthday in May of 1956, a month before I graduated from college, and I have subscribed ever since. It is and always has been my favorite magazine.

At about this point I stumbled across a book that I really loved: it was "Mysterious Island", by Jules Verne. It was great! Later I read "20,000 Leagues Under the Sea" also by Verne which I also liked very much. A central character in both stories was Captain Nemo. I decided at that point to read all of the Jules Verne books. After a couple I found out that they became very repetitive with long anti-war sermons. That did not detract from the first two books, however. I still have the books. Years later I used the name "Captain Nemo" as my "handle" for Citizen Band radio. I liked stories about the sea and read all of the books in the library about "Horatio Hornblower" the English sea captain of the 1800s.

About this time I also got very interested in books about submarines. I read all of the books in the library on this subject. I thought that they were very exciting. Mort Mondale and I tried several approaches to making diving helmets or masks, using a tire pump to supply air. We finally made a diving helmet out of the top of an old water heater. We put in a glass faceplate and fastened lead weights on the bottom. We hooked it up to a manual tire pump. We took it out to the lake to try it out. The helmet was so heavy that we could scarcely stand up with it on. We walked out as far as the hose would allow, but the lake was too shallow to get under water, so we had to sort of "lie down" to get the helmet under water. It sort of worked and validated the idea, but was not really satisfactory.

While I was dreaming about submarines, another Minnesotan Charles "Swede" Momsen was living the dream. Like me, he had been enthralled by the Jules Verne book "Twenty Thousand Leagues Under the Sea". During Momsen's career with the navy, submarines sank with dismaying frequency, and the crew was always lost because there was no way to rescue them. In his career with the navy, Momsen developed an escape lung for submariners trapped in a sunken submarine in shallow water. In doing so he had to battle bureaucratic red tape and skeptical navy management. Later he developed oxygen-helium breathing mixtures so that navy divers could go deeper than ever thought possible.

His greatest achievement, however, was the development of the Rescue Chamber, a pressurized diving bell, and its role in rescuing the crew of the Squalus. While the Rescue Chamber was still being developed, the submarine Squalus sank on 23 May 1939 in 243 feet of water. He was able to rush the Rescue Chamber to the site and save the 33 crew members that had survived the sinking.

One of my friends, Norm Sjoblom, lived on Hall Lake and had a rowboat with a ten-horse outboard motor. He also had an "aquaplane" that we could pull behind the boat and ride on. The aquaplane was a piece of plywood perhaps 2.5 feet wide by five feet long with a rope that we could hold onto. By shifting our weight and leaning we could steer the aquaplane back and forth across the wake. The most fun was on corners when we could swing wide, going almost sidewise and could build up a lot of speed. Falling down was a lot of fun too. It made me want to learn to water ski, but I did not have access to a boat or motor that was capable of pulling a skier.

A Few Problems

People were very concerned about health because doctors could due little to cure disease. I remember my mother giving me cod liver oil each morning during the winter in order to get enough vitamins. It tasted awful.

I had the childhood diseases that were common at that time, including mumps, chickenpox, and measles. One morning, I really did not feel like going to school, so I decided to tell a "little lie" and tell my mother that I did not feel good and did not want to go to school. She let me stay in bed, but much to my horror, she called the doctor. When the doctor came, I was very worried because I was sure that I would be found out as a faker, but there was nothing that I could do. The doctor checked me over and stated that I had the measles, which I did. The measles hit me quite hard. I had a high fever so that my lips developed a crust, and I think I was out of my head for a day or so. I missed a couple of weeks of school. Fortunately I missed the really serious diseases of diphtheria and scarlet fever, although there were many cases of them in town. We always knew, because the house and everyone in it had to be quarantined. When a house was quarantined a sign was put up on the front saying that no one could go in or out for six weeks. The food and mail would be left on the front steps, and then someone from inside would later come out and pick it up. At the end of the six weeks the house was fumigated and completely cleaned before the quarantine sign could be taken down.

Sometime when I was about eight I was playing on the playground equipment at Sylvania Park. I was swinging on the rings when I fell off and broke my right arm. I did not understand about broken bones, but knew something was seriously wrong. The bones had slipped past each other, formed a large misalignment in the arm, and it hurt a great deal. Holding the arm as best I could to cushion it against bumps I slowly walked the several blocks home. My mother was working at the Sweet Shop so I laid down on a bed to wait. After a while the pain was increasing so I went to the neighbors up the hill, told them I had hurt my arm and asked if they could call my mother. It was obvious to them that the arm was broken, so they called her immediately. She came home and they took me to Dr. Zemke. He laid me down on the examining table, put a metal device over my face with ether in it, and told me to blow the smell away. When I woke up my arm was in a cast and I felt sick from the ether. The cast was left in place about two weeks, and all my friends at school autographed it for me.

7. Summer

Summers when I was a kid (before I started working) seemed to last forever. I could not wait until school got out. The three-month vacation seemed like an eternity, and starting school in the fall seemed so remote that it would never happen. (Now summer seems like 10 weekends). In the summers I would always go barefoot. It certainly saved on shoes and over the summer my feet would usually grow one or two sizes. One problem was that I was not very observant and would often step on nails or glass and cut my feet. At one time it seemed that I was stepping on a nail about once a week, generally in the heel. It is a wonder that I did not get a serious infection or get tetanus, as there were no shots for it at that time.

In the summer my hair would bleach to white and I would get a very deep dark tan. No one worried about too much exposure to the sun; no one had ever heard of skin cancer. Everyone tried to get as much sun as possible as early as possible because it was seen as a badge of good health. Many of my friends (and me as well) would get a sunburn as soon as spring came, and would show up in school peeling skin in large sheets. One friend named "Buzz" spelled his name in tape on his back, so that after he got a tan he could remove the tape and expose his name on his back.

My favorite game in the summer was softball. There were always a bunch of kids in Ward's Park, and we would often start a game of "workup". In this game there were two batters. As long as one of them was ready to bat, they could stay up. However, if on of them was put out or if they were stranded on the bases, then that person would go into the field, and everyone would "move up" one so that a new person got to bat. We also played football, but not as much.

Not everyone knows that it gets very hot in Minnesota. In the summer the temperature can get above 100 degrees for days at a time. When this happens, the asphalt roads get very soft and you have to be careful where you walk. If you go bare-footed in the summer as I did you can burn your feet on asphalt or concrete.

Decoration Day (now called Memorial Day) was a major event. The purpose was to honor the people who had died in the defense of the country and to decorate their graves in remembrance of their sacrifice. In the 1940s the war and the dead were very much on the minds of the people as most families had someone in the service. There was a large parade led by the Veterans of Foreign Wars, and then many people visited the cemeteries. People commonly visited cemeteries in those days and my family was no exception. My paternal grandparents and great grandparents along with many relatives were all buried in the Lake Belt cemetery near Ceylon. My father and I visited there often, perhaps once a month. Although he said little about it at the time, I now believe that he was thinking about his life with his parents and grandparents. While we were there we took care of the landscaping and made sure everything was all right, but everything was always all right.

An even bigger event was the Fourth of July parade. This was a time of great patriotism, and many families displayed the American flag. Many groups participated in the parade, and the parade was very large even though the town was small. When I was young I would listen for the sound of the marching band, and then run uptown to watch the parade. The flag would come first, and all of the men would remove their hats and held them over their hearts. The band would come next, lead by the drum majorettes twirling batons. After the band came the beautiful floats, people in cars and on horseback, and veterans, plus more marching bands. The parade always ended at Sylvania Park. People followed the parade there to attend the ceremony and concert in the band shell. Later, I marched in it as part of the marching band.

Perhaps the most enjoyable parts of the fourth of July were the cap guns and the fire works. I always bought a cap gun and several rolls of caps, and went all over town shooting it off. After the gun broke (as it always did) we would put the caps on the sidewalk and set them off with a stone. We also had some small firecrackers and skyrockets that we would shoot. Later, fireworks became illegal because of the many accidents and injuries.

7.1. Sylvania Park

One my favorite places in town was Sylvania Park. It is a grassy park of a few acres on the shore of Lake Sisseton. It had a nice swimming beach popular with teenagers, a band shell, and a war memorial in the form of a cannon. The cannon was from the Civil War and had been placed in

the park in about 1900. The cannon was accompanied by a stack of about 40 cannon balls, each the size of a bowling ball. I liked to climb up on top of the stack of cannon balls and look out over the swimming beach and the lake towards the Court House.

One of the highlights of the week during the summer was the band concert played every week in the band shell in Sylvania Park as shown in this picture. I could hear the band start to play across the lake at home, and then I would run over to the park to hear the rest of the concert. They looked very impressive. The band members were local town's people that played a band instrument, along with some of the better members of the high school marching band. Much later I also played in the band concerts and had even more fun.

Figure 12 Concert at Sylvania Park

In the winter, we would skate on the lake, playing hockey, seeing how fast or how far we could go, doing figures, or just fooling around. There was a warming house for skaters at Sylvania Park: it was warmed by building campfires in it. Unfortunately one of the fires got out of control and it burned down. One time I skated all the way across Lake Sisseton. It seemed like the end of the world at that time. Now it looks like about half a mile.

7.2. Polio Epidemics

Summer also brought the polio epidemic each year through the 1940s. Polio had always been around on a sporadic basis, but the incidence had been low. During the 1940s it reached epidemic status, and peaked in 1952 with 57,600 cases nationwide. The enjoyment of swimming was a problem in the 1940s because it was thought that swimming would make one susceptible to polio. It was a very scary time and much worse than the AIDS problem. There was no way to protect against the disease, earlier called Infantile Paralysis because it often struck children under the age of 16. People were struck by polio without warning and could be totally paralyzed or dead in a matter of days. Many public events nation-wide were canceled in the summer of 1946 (when I was 12) because of the polio epidemic. My mother tried to keep me home as much as possible, because it was thought that one could catch polio from others in casual contact such as going to the movies (probably correct) or by going swimming. Of course I did not understand the concern and did not like staying home on bright summer days when the lake was only a few feet away and inviting me to cool off. There was no warning, no prevention, and no cure. Many of my classmates were victims. The epidemic came and went throughout high school.

Some of the victims of polio recovered with little lasting effects, while others were left totally and permanently paralyzed. The worst cases were when the breathing became affected and the children slowly suffocated to death. There was no treatment or cure for polio. The doctors could do nothing, and the nurses could only wipe the sweat from the brow and the bubbles from the lips of the children as they slowly suffocated, turned blue, and died. Fortunately, by the 1940s the "iron lung" had been developed to provide respiration for the patient in these circumstances (invented at Harvard in about 1930 and first used at Children's Hospital in Boston).

Minneapolis was involved in a unique way in the polio epidemics. A nurse from Australia named Elizabeth Kenny had worked with polio cases in Queensland, Australia. When she found that the doctors had no treatment, she tried various procedures to relieve the suffering. It seemed to her that applying hot pads during the acute phase of the disease relieved the pain, and physical therapy during recovery helped restore function to the affected limbs. This was contrary to the conventional medical approach, where no treatment was used during the acute phase, and total immobilization for many months was used during the recovery phase. Doctors uniformly dismissed her treatment approach as meaningless. She gradually accumulated a large following, however, based on achieving unlikely recoveries. She acquired the name "Sister Kenny" even though she was not a nun and came to America in 1940 at age 60 to continue and enlarge her work in treating polio. She immediately undertook an aggressive attack on the then-current treatment of prolonged bed rest and extensive use of braces for the affected limbs. In doing so she alienated most of the medical profession and turned them against her. One of the few medical organizations to support her work was the Mayo Clinic in Rochester, Minnesota. They recommended that she go to Minneapolis where there were a large number of polio cases to continue her work there. She achieved a number of important recoveries for patients who had been given up as hopeless by physicians. Over time she gained status and fame as a benefactor of humanity second only to Eleanor Roosevelt. Up to this point she had been supported through the University of Minnesota hospital system. In late 1942 she started the Kenny Institute for the treatment of polio victims. Her organization started the use of Easter seals and the March of Dimes to finance the Institute and its treatment of victims. In June 1943 she was invited to lunch with President Roosevelt (a polio victim). A part of Abbott Northwestern Hospital in Minneapolis is dedicated to her.

In the late 1940s, a young medical researcher named Jonas Salk set himself the task of finding a vaccine for polio. He worked 16 hours a day, six days a week until finally he announced the discovery on March 28, 1953. To demonstrate his confidence he inoculated himself, his wife and his three children. Congress passed a law providing free and universal distribution of the vaccine and within a year the incidence of polio dropped by 80 percent. The epidemic was over and I had survived it.

7.3. Swimming

There were many advantages to living on the shore of a lake. Lakes are very beautiful. From the time I was five or six I would spend most summer days swimming. It was great recreation and kept one cool in addition. I would swim for 2-3 hours every afternoon, and sometimes in the morning if there were other kids there. It was a good place to meet one's friends. Sometimes we would swim at night also. We did not actually "swim" much, but instead did funny dives, held our breaths under water, explored the bottom, and generally played in the water. I would float on my back for long periods of time, relaxing and enjoying the feeling of the coolness of the water. Other times I would float face down and motionless, completely relaxed just below the surface, coming up occasionally for air. Perhaps because I spent so much time in the water as a child I

have always felt very comfortable in the water. Water is a friendly, supporting, relaxing, environment for me. I never understood how anyone could drown in a lake.

In the early days of swimming, I would swim at Ward's Park because it was only a few hundred feet from the house. The swimming beach was usually crowded with kids all trying to get cooled off as I was. Many or most of the kids were my friends. The water was not over my head until we were out in the lake quite a distance. Later, as a teenager, I went to Sylvania Park a few blocks away to swim. Sylvania was where the "big kids" went to swim because the water was much deeper. The beach had a large wooden pier that was perhaps six feet above the water with a diving board on the end. I remember clearly the first time I got up enough nerve to dive from the high board—from a height of six feet. It was a triumph of courage over fear. There was a large bathhouse near the edge of the beach. One side was for boys and the other side was for girls. We could check out wire baskets to put our clothes in while we were swimming. The lifeguard ran the bathhouse, and it was a favorite place to "hang out" and meet friends.

One consequence of living by a lake is that I learned to like the smell of a lake at a very early age, and leaned to associate it with very pleasant things. A lake is a living thing and has a very specific smell. Today whenever I smell a lake, memories of my childhood come flooding back to me.

Years later, I still enjoyed swimming although we never lived on a lake after I left Fairmont to go to college. In about 1965, my son Mark and I took a scuba diving class together. It was fun, and something that we could do together, father and son. Since then I have tried to get scuba diving every year or two, but I have not always been able to do it.

8. Fall

People began preparing for winter in the late summer and fall. The fall of the year brought harvest and food preservation for the long winter that was coming. My dad always bought 400-500 pounds of potatoes, to be stored in the basement to carry us through the winter as a staple food. We were taught to always eat the potato skins so that nothing would be wasted and because they have many vitamins (I still eat them). My mother always bought large amounts of food for canning, and then spent many, many hours long into the night doing the canning. She would generally can 50-60 quarts each of tomatoes, peas, corn, chicken, and other vegetables. The canning process was to put the food into jars, and then load the jars into a big pressure cooker. The pressure cooker then was put on the stove and heat applied to bring it up to the right temperature. The pressure valve of the pressure cooker was a weight on a pressure relief valve, and when the pressure (and therefore temperature) were high enough, the steam would start to escape from the pressure valve making a big noise. After the proper cooking time, the cooker would be cooled down, unloaded, and the process started over again. I remember that she often worked into the small hours of the morning so that we would be able to eat well until the new vegetables came in the spring. Our neighbors the Nightingales also dried apples to eat during the wintertime. They sliced the apples into wedges and then strung them on strings and hung them in the attic to dry. Although they did not look very good they were delicious!

Fall brought cool crisp nights and football season. Early in the season there was a "pep rally" in the high school where the cheerleaders would lead the student body in all of the cheers and songs. Before the game there would be a huge bonfire in a vacant field where we would sing more songs. The football field was 6-8 blocks from home, and I remember walking there many times full of excitement in the crisp and cool night air. When I got to the football field the stands would be packed. The band was dressed in the school colors of red and white, and they would be playing the school song "Anchors Aweigh". The game would always be exciting win or lose.

The high point for me was always the half time show put on by the band. Later I was in the band and it was even more exciting.

Thanksgiving was a major holiday for us. The centerpiece was always a large turkey with stuffing. My mother had been working several days before, gathering food and beginning the preparation. All food was prepared from very basic ingredients, just as had been done on the farm. The turkey required plucking of feathers, bread crumbs had to be crushed and mixed with spices for the stuffing, pie crusts had to be made, the pulp from pumpkins and to scooped out to make the pie filling, then put in the pie crust shells. She also made candied yams, mashed potatoes and gravy, candied cranberries, and often mincemeat pies. She made the gravy from the turkey drippings and giblets, stirring it constantly to prevent lumps. We often had Jell-O, made in individual molds so that each person had a personal Jell-O salad. My dad would carve the turkey. The quantities and varieties of food were enormous. In the early days we invited the local relatives. Later, my brothers, myself, and our families all would attend for a total of 16 people or so. When the food was brought into the dining room we would all pass it around the table, each helping ourselves. In 30 minutes, all of the food would be gone and everyone would be "stuffed". We would then sit around talking for a couple of hours, and then perhaps have a second piece of pumpkin pie for another dessert.

9. Winter

Figure 13 Winter in Fairmont at train station

Everyone knows that it gets cold in Minnesota, the home of "Frostbite Falls". I remember one time in the mid 1970s when the temperature did not get above ten degrees below zero for two weeks. The temperature will often remain below zero for a couple of weeks in January and will remain below freezing for three months. The average daily high temperature in this part of Minnesota is 20 degrees in January and at night the temperature is usually below zero. Occasionally the temperature drops to 30 degrees below zero or lower. A typical winter scene is shown in this picture, probably taken in about 1940 at the Northwestern railroad station. The coldest temperature ever recorded in Minnesota was at the city of Tower at 60 degrees below zero in 1991.

Cold clearly shapes the personality in Minnesota. Let's face it; Minnesota is cold in the wintertime. The cold strongly encourages one to plan ahead, and in the fall to store up food, get the car tuned up, get the house fixed, or anything else that might have to be done during the winter. It also seems to encourage activism, and Minnesota always is on the forefront of political

thought and social activism. Minnesota has always had one of the highest levels of education in the country, perhaps another symptom of planning ahead.

It seemed that when I was young I had colds all winter long, although I suppose that I really did not. Certainly there were weeks at school when it seemed that my nose ran all of the time. I clearly remember my mother rubbing "Vicks Vapo-rub" on my chest at night to relieve the congestion and covering it with a cloth pinned to my pajamas. The fumes from the medication certainly cleared out my nose but I am sure it provided no more than symptomatic relief.

I remember carrying news papers in the wintertime. On Sundays I had to pick up the papers before sunrise even when it was 20 degrees or more below zero. I could feel the cold air in my lungs every time I breathed; I could see my breath every time I exhaled and the hair froze in my nose every time I inhaled. The snow crunched under my feet as I walked. Although I dressed as warmly as I could (knowing what was coming), as I walked along my paper route I would get very cold and would look for a house with an enclosed porch where I could stand for a few minutes and warm up a little. I would then deliver more papers. When the cold got too bad I would look for another porch. In the years that I delivered papers I got to know very well what it meant to be cold (and where all of the porches were).

I can remember walking home at night from Boy Scout activities in the wintertime. The temperature often was below zero. The winter night sky was completely black and the stars were brilliant points of light. The first constellation that I recognized was Orion, and that is still my favorite winter constellation. The sensory experience was close to a Zen revelation in the feeling of closeness and unity with the universe

Snow is a very interesting substance that can take many different forms. Because we got a lot of it and it stayed so long, I became very familiar with the various properties of snow. It was usually light and fluffy as it fell, because the temperature was substantially below freezing (not like in the east where the snow is usually wet and heavy as it falls, like cold concrete). After a fresh snowfall we liked to lie on the ground and move our arms up and down to make an "angel" in the snow. After snow stayed on the ground for a few days it would become more compact, and would get harder and harder the longer it stayed. If the temperature was zero or below, the snow "creaked" as it was walked on. Sometimes a crust would form that was strong enough to walk on. At night, the moonlight would reflect from the crust making it glow and look almost warm.

Sometimes we would get a lot of snow in Fairmont. Because the snow did not melt all winter, the snow could get quite deep. Each year the city put up snow fences in Ward's Park to keep the snow off the streets as much as possible. The snow fences made big drifts that were ideal for making snow forts. We would dig tunnels into the drifts and make them quite large with two or three rooms. After school we would go down into the park and play in the snow forts. Usually within a couple of months or so warm weather would come, and one day when we went to the snow fort we would find the roof sagging and the snow melting. We would then know that the winter was coming to an end.

We also had milkmen, in our case from the Bob Bird Dairy. Because most people did not have cars, a milkman brought fresh milk and other food products to each home early every morning. The milk came in (recyclable) one-quart glass bottles. A family left an empty bottle on the front step for every quart of milk that was wanted the next morning. One could also get cream, cottage cheese, and other products. The milk at that time was not pasteurized and therefore tasted much better than it does today. It also was not homogenized, and therefore the cream always separated from the milk and floated on top of the bottle. Usually we simply mixed the cream back into the milk, but sometimes we separated it off and used it as cream for coffee or cooking. In the

wintertime the milk and cream would freeze and the cream would be pushed up out of the bottle like a white chimney.

Because of the cold one had to dress warmly. I always wore one of those "Russian" type fur hats with the earflaps that would tie under the chin. In the middle of winter it was difficult to keep the ears from getting cold, and the earflaps did a good job. In looking back at my pictures of that time, I also see that I wore "war surplus" clothes quite a bit of the time as did many other people, and my jackets and pants were often war surplus. When the war was over the armed forces disposed of a tremendous amount of excess war material for pennies a pound, including clothes, camping equipment, sophisticated radio equipment, and almost everything else that could be imagined.

Another of our favorite winter sports was tobogganing. We would often go at the Interlaken Golf Club at Amber Lake. It had some gentle hills that were adequate for sliding. There would be a bunch of us, often from the Methodist Youth Fellowship group. We would pile onto the toboggan to see how many kids we could get on it, and then slide down the hill mostly out of control. The person in front would try to steer, but really had no control over it. At the bottom we might run into a snow bank, and then we would fall all over each other. Later, when we were older we went sliding on more aggressive hills to get more of a thrill out of going down faster. One time when I was a senior in high school (1952) Mort Mondale, Shirley Edwards, Barbara, and I went sliding on a hill in Blue Earth 17 miles east of Fairmont. The hill was steep and we had a lot of fun even though it was only about 10 degrees. We also pushed each other down in the snow and threw snow at each other. We got so cold that I could not talk properly because my face was so cold. However we all thought it was great fun. Fortunately the Mondale Dodge had a good heater so we were able to get warm in the car on the way home.

Perhaps the most memorable winter in Minnesota for me was the Armistice Day Blizzard of 1940. The fall that year had been mild, and two days before the storm farmers were picking strawberries and raspberries. Then, on November 11 the storm struck without warning. The weather was balmy that morning, and it began to rain. My mother was working at the Sweet Shop that day. The weather had turned very cold and the rain turned to blowing snow. I remember that school was closed in mid-morning, and I walked over to where she was and we both walked home. The storm continued that afternoon and night. About 27 inches of snow fell. The wind was blowing more than 60 miles per hour and piled up drifts in town more than 12 feet high. Fairmont and all other nearby towns were totally paralyzed. Because the previous day had been quite warm, many hunters were stranded in the hunting grounds. In all, 20 people died in the storm including some farmers who froze to death in their own yards getting firewood for the family.

More recently, in January 1975 Minneapolis got 18 inches of snow. The temperature dropped 75 degrees when the storm hit. The 80 mile per hour winds piled the snow into drifts 20 feet high. The streets did not all get plowed for 11 days. About 35 Minnesotans died from freezing or exposure. After three days, the roads where we lived had not yet been plowed. I had to travel to the airport so I called a cab and walked a mile to Highway 13 (which had been plowed) to get the cab.

In 1991 in the famous "Halloween blizzard" Minneapolis got 28 inches of snow and Duluth got 37 inches.

In the late wintertime, at the end of March or early April, some people would get "cabin fever". They would get irritable or short-tempered from being confined indoors too long. If two or more people got cabin fever in the same house (or cabin) there could be real problems, but normally the condition was recognized for what it was and confrontations were avoided.

A memorable "event" was a time when the whole family was caught in a snowstorm. We had all gone to Minneapolis, probably in April of 1951, to go to the Shriner circus. I remember that we had the 1950 Dodge at that time. We got out of the circus about 4:00 P.M. and got into the car. Heavy wet snow was already falling at a rather rapid rate. There was little or no weather forecasting, so we did not know what to expect. By the time we got to Mankato there was a great deal of snow on the roads and we were seriously considering staying over night there. However my dad wanted to keep going. The snow came down harder and harder and the wind was blowing very strongly. Soon we were in a "white out" and could not see the road. The only way we could stay on the road was to stay mid way between the fence posts that lined the ditches. By the time we were south of Lake Crystal large snowdrifts were building up on the road. We could not drive very fast, and several times the drifts stopped us. Each farm had a grove of trees to block the wind, and the grove would often cause large snowdrifts across the road. In each case my dad was able to back up and take a run at the drift and after a few tries was able to make it through even though the snow on the road was getting deep enough so that even driving on the level ground was difficult. We finally made it home without getting permanently stuck. We were very lucky.

10. Spring

Spring comes to Minnesota like a bolt of lightening, with the average temperature increasing about one degree per day during March and April. Whereas the winter temperature in Minneapolis is perhaps 20-25 degrees colder than Boston, the temperature crosses over in mid May and Minneapolis becomes warmer than Boston. The ice generally goes out of Minnesota lakes about the middle of April, forecasting the arrival of warm weather; about three weeks after the Spring Solstice and about three weeks after spring "should" come. However, people do not recover from the "winter mentality" until about the first of June. Snow does not melt in the shaded areas until about the first of June.

Spring is the time for thunderstorms. A thunderstorm in Minnesota can be an awesome thing. The weather is usually hot, humid, and still with the temperature in the 90s. In the late afternoon thunderheads build up to a tremendous height and the sky turns black. Suddenly the temperature drops. The wind comes up and the rain begins. Soon the rain is coming down in buckets but is blowing sideways. Sometimes, hail the size of golf balls will fall, turning the ground instantly white and stripping leaves from all vegetation. People wonder if it will turn into a tornado. Rushing water turns the street into a river. Then, it is over and the sun comes out.

Spring is also the season for tornadoes in Minnesota. Tornadoes come fairly often but usually do not cause damage. When they do touch down, however, they cause tremendous damage. A tornado touched down on June 30, 1933 and caused heavy damage on many farms in Martin County. About three years later on April 30, 1936 another tornado traveled through northern Iowa and southern Minnesota for about 100 miles. It destroyed more than 1000 buildings in Estherville IA, southern Fairmont, and East Chain. One of the places destroyed was Hand's Park, located a few miles south of Fairmont. Every building was flattened. Hand's Park was one of the first private amusement parks in Minnesota. It had been started in 1893 with a very nice beach on South Silver Lake, a 60 foot "toboggan slide" into the water, a baseball diamond, and a dance hall. At its peak around 1921, up to 10,000 people would come to the park with the baseball games attracting up to 3000 of the people. Lawrence Welk, Fats Waller, Guy Lombardo, Duke Ellington, and other famous bands played there. Up to 6000 people turned out for special events. After the tornado the park was rebuilt, but it never regained its former vitality.

I remember once standing in the Lake Belt cemetery in the spring when I was five or six and seeing three tornadoes hanging down from the same cloud. I did not know exactly what they were and felt no fear. Later, when I knew what they were I did worry. They came every spring, but only rarely caused damage. When they did cause damage, however, they would devastate an area. The Minnesota River Valley, which our Burnsville house overlooked, seemed to be a favorite path for tornadoes. One night in the mid-1970s about 20 tornadoes were tracked going through the river valley only a mile or two from our house. Fortunately they did not touch down. A few years later a tornado touched down in Fridley Minnesota, a northern suburb of St. Paul, and destroyed hundreds of houses.

11. Small Town Life in Fairmont

In those days, Fairmont was a very busy commercial center for the surrounding countryside. Every Saturday night the farmers would come to town for shopping and entertainment. The business district was very centralized and is about four blocks by four blocks. The streets were so full of cars that there were no parking places and there were so many people it was difficult to walk on the sidewalks. We would often go up town and park in front of the Sweet Shop to watch the people go by. (Now, much of the business has moved to a mall on the edge of town, and there are very few people shopping in the center of town.)

Overall, people were not concerned with "personal fulfillment"; they were concerned with survival. A favorite parable in that part of the country illustrates these attitudes.

A farmer had a cow that fell into the well. The farmer was bemoaning his fate and told his neighbor about his bad luck. The neighbor said: "Your cow did not fall into the well because of bad luck: your cow fell into the well because you are an idiot and did not put a fence around the well."

While this attitude may sound unsympathetic and even mean-spirited, it simply reflected the nature of the times. People were at the mercy of nature, nature was extremely unforgiving, and there was no "safety net" welfare program to fall back on. Therefore people had to be extremely careful about what they did.

Another attitude that was prevalent was to look down on people that talked a lot. They were said to have the "gift of gab". Actions were much more valued than talk, especially talk that was devoid of content. When people "visited", there could be silences of minutes in length. These Midwesterners were comfortable with silence. Much later I found that in the commercial/industrial world the "gift of gab" is highly valued, and that people that talk a lot can often dominate situations even when the talk is content-free.

These attitudes were generally shared by in that part of the country and were typical of the small town and farm set of values. There was ample evidence that those who were diligent and worked hard would prosper, and those who were lazy or talked rather than working would fall on hard times.

The family unit was the basic building block of society. Essentially all families had two parents; single parent families were almost unknown. I can remember only a couple among everyone that I knew. The father worked outside of the home, and was responsible for providing for the family. This was almost a sacred responsibility. The father was the head of the household and his authority was never questioned. Women usually used the name of the husband; for example Mrs. John Doe rather than Jane Doe. I presume that the reason for this was that married women had much higher status than single women did. It was unheard of for a woman to keep her maiden name or use a hyphenated name after marriage. Nearly all mothers stayed home to raise

the children and take care of the house. All meals were eaten at home as a family group; they were an important element in family communications and in building family values, cohesiveness, and consensus. There were fairly strict rules at mealtime. All meals were eaten at the dinner table. Everyone had to come to the table when the meal was ready. No one could start eating until everyone was seated. The food was placed on the table, and each serving dish was passed around to everyone. Children were to be quiet unless spoken to, and children were required to remain at the table until everyone was done eating or until they were excused. The big meal of the day (dinner) was eaten at noon. At noon, the children came home from school for lunch and the men also came home. Because the town was very compact, one could get home in ten minutes or so from any part of town.

For breakfast I usually had dry breakfast food or hot cereal. My favorite dry cereals were Pep (wheat flakes), Kix corn flakes, and Puffed Wheat or Puffed Rice (shot from guns!). I often sent in for the prizes listed on the box such as plastic airplanes and ships (even after I was in college). The typical hot cereals were Cream Of Wheat and Quakers Oat Meal, both of which were certainly healthy but somewhat bland. The noon and evening standard meals were meat, potatoes, and gravy. The meat was mostly beef and pork, as they were raised on the farm and therefore were readily available. We also had liver quite a bit, and I remember eating Spanish rice often. Chicken was something of a treat. My favorite part of the chicken was the leg but I did not like chicken skin so my mother always removed it for me. I would then wrap the end of the chicken leg in a paper napkin so that I would not get my fingers greasy. I loved mashed potatoes with chicken gravy and chocolate milk. Everyone ate many eggs each week. I did not like egg yolk until I learned to soak it up with bread. The whole emphasis was on good nutrition, and no one ever dreamed that things like saturated fat and cholesterol might be bad for you.

Walking home from grade school was always fun. There were many interesting sights on the three-block trip home. At noon when I walked home for lunch I was always in a hurry and so did not take time to enjoy the trip, but at 3:10 when I got out of school in the afternoon I always took my time. The first major location was the Standard gas station across from the school. It was a lively place with lots going on. Next was the Ford garage. Of special interest was the trash bin out in back, which often had scrap clutch plates that made good "Frisbees". The most prized finds were ball bearings that could be used when playing marbles. From there I would stop at the Nicholas Theater, where I would have to see what movies were playing and what movies were coming. Next was the Post Office where I would always check the geologic survey brass marker in front to see what the elevation was. It was 1187.012 feet, established in 1931, very close to 1200 feet which is the average altitude of the state (the high and low altitudes in Minnesota are 2301 feet and 602 feet respectively. Minneapolis is near the low point of the state).

On Saturday mornings, I would often be at home listening to the radio. My favorite program was called "Let's Pretend", which had dramatizations of fairy tales and fantasy.

One income was adequate to raise and support a family in a socially acceptable manner. Very few of the women worked outside of the home after marriage, and outside work was generally disapproved of. Women who did work were paid less than men doing the same work (such as teaching) because it was assumed that the responsibility for supporting the family rested with the man, and anything the wife earned was for luxuries. During the depression when people had to be laid off, women were the first to go because their support was the responsibility of their husbands or fathers. Therefore no one would be hurt if a woman were let go.

In a small town like Fairmont, everyone knew everything about everyone else. When you walked along the sidewalk you always greeted everyone that you met, because you knew them, knew about them, or should have known them. There was no way to tell a lie or to deceive people

because it would be quickly found out. As a result, there was very strong social pressure to "do the right thing". Children in particular were under the close scrutiny of aunts, uncles, cousins, townspeople, friends, and acquaintances. Although they were not actually watching for people to break the rules, it was very obvious when some one had, and there was considerable unspoken censure when rules were not observed. Another unspoken rule was that you should keep your troubles to yourself. Everyone had troubles, and yours were probably not as bad as others were, so there was no need to talk about them. The net result of all of this was a very cohesive, connected, integrated society with understated gentility which believed deeply that one had to work hard to survive.

Family sizes had been large in the late 1800s, with ten or eleven children not uncommon. My great grandfather Charles and his wife Lucretia had 12 children. Children on the farm were a great asset; they were a source of much needed labor, and later support in old age. Family size started to drop nation-wide around 1900, although there was little or no technology to help in family planning. People accepted the fact that they should not have children that they could not afford. During the depression in the 1930s many families were very small, with no children or perhaps one child. When prosperity returned in the 1940s the perceived ideal family size increased again to three or four. When concerns arose in the 1960s about over population of the world, the desired family size fell again.

There were very clear, but unspoken, rules and every one knew what they were. The rule was that one got an education, a job, married, and a family in that order. The consequence for breaking the rules was social ostracism, often self-imposed. As a result, there were no drugs, little alcoholism, little or no crime, and essentially no latch key children. Pre-marital sex was absolutely taboo. Teenage or out-of-wedlock pregnancy was almost unheard of and in the rare cases when it did happen it was never spoken of or admitted. The girl simply "visited a relative" in another city for a time and then returned without the child and the matter was never discussed although everyone knew what had happened.

Divorce was rare and there were powerful forces supporting a marriage. Expectations for marriages were lower than today, because people were interested in survival and not expecting happiness and self-fulfillment. Survival was perceived to be much more difficult without a spouse. Life was difficult, and these difficulties must have generated many marital arguments, but the perceived importance of the internal marital problems was seen as small compared to the external problems like getting enough food to eat. There were many support groups for the marriage including the church, the extended family, and the community. I can remember only a couple of cases of divorce among all of my friends and acquaintances all during school.

This small town culture could get to be a burden, and sometimes the anonymity of the big city was welcomed.

One of the unspoken but rarely broken rules was that you could not refuse to help someone in need. Because there were no government "safety nets", people in need were in serious trouble. Because of the perversity of nature, anyone could quickly find them selves in need, so as a result everyone helped. This also came from the sense of unity of the community where everyone helped.

In addition to no crime, there was no gambling. There had been punchboards and slot machines in northern Minnesota in the late 1930s, but early in the 1940s all forms of gambling were outlawed, I believe under Governor Youngdahl. The thinking was that gambling was evil, wasteful of money by people who needed it the most, and contrary to the belief that prosperity came only through hard work and not luck.

There was a somewhat seamier side to life in Fairmont, however, as evidenced by the "pool hall". These were places where men went to drink beer and play billiards, probably gambling in the process. They corresponded somewhat to European pubs, but were much lower class. Wasting time was equated with laziness and was seen as a nearly mortal sin, as were drinking beer and to a much lesser extent playing billiards. There were two pool halls in Fairmont, both on First Street and about 2-3 blocks apart. One was Peglau's pool hall, and I always tried to see in as I walked by, but I never could see anything of interest. Although I did not know it, Maud Hart Lovelace had lived over Peglau's for a time while writing her book "Gentlemen From England" about Martin County. Later, Carrie Nation, a strong advocate of temperance, had gone to Peglau's pool hall with her usual tactics of breaking the mirrors, and tried to stop the drinking. A couple of large German beer drinkers escorted her to the door.

A major event was the annual Martin County Fair, held usually in August at the fairgrounds, which were at the location where the mall is now at the corner of highways 15 and 16. The fairgrounds had been purchased in 1869 and were on the edge of town at that time. There was a racetrack for harness racing and a grandstand that held 5000 people. In the evenings there would be a variety show in front of the grandstand. My dad usually had the contract to provide the sound system for the show. I usually went with him to operate the system, and got to watch the show. There were the usual exhibits of livestock and machinery, but the big attractions for me were the

- harness racing
- grandstand show
- the carnival

I would usually take all of the money that I had to go on rides or play the games of chance. The rides were wonderful, including usually a Ferris wheel, a "tilt-a-whirl", bumper cars, and airplanes that hung from chains. I soon found out that the games of chance were rigged against the player so that I always lost. That was an important lesson. The sideshows looked very interesting, but I did not usually think that they were worth the money and did not go in.

Some time in the late 1940s the town council decided that they needed to provide something for the teenagers to keep them out of mischief. They converted one of the buildings in the center of town to a "Youth Center". (The Youth Center building had been the original location of the power generator for the town.) There was a large central area for dancing, and a snack bar with pop, ice cream, and other refreshments. The Youth Center became very popular and was packed on Friday and Saturday nights. It was the place to meet people, watch girls, get something to eat, and generally hang out. It clearly accomplished its intended purpose.

The biggest and most important store in town was Montgomery Wards. They had a very well supplied three-story store in the north part of town with an excellent selection of merchandise. Wards also had a very active catalogue desk. Many people shopped from the catalogue, especially the farmers, and placed the order by phone, mail, or going to the catalogue desk in the store. Then, three days later they would go to the store to pick up the merchandise at the catalogue counter. Catalogue shopping had a great impact on quality of life. The stores in a small town like Fairmont could only maintain a small inventory of merchandise. But the catalogue made available an enormous range of products to everyone. The Sears catalogue was even better than the Wards one and more widely read. The Sears catalogue was the single most important source of consumer information about products, features, and prices, and everything was always compared to Sears, which was considered the standard of product quality. When ever a new Sears catalogue would arrive by mail, everyone including me would sit down and read it from cover to cover. Later, we would always pick out Christmas presents by reading the

Sears catalogue, even though we might buy them elsewhere. The Sears catalogue was the most widely read "book" during this time except for the Bible. Later when I lived in Minneapolis after college we would often go to the large Wards store in the "Midway" district of St. Paul or the Sears store on Lake Street. Although these were very complete department stores, quite often we would find something that we liked better in the catalogue. We could place an order at the catalogue desk and pick up the merchandise at the counter in 30 minutes.

Another important store in Fairmont was the Bob Wallace department store, (which everyone called "Bob's) especially for clothing. As a kid I was fascinated by the way they send money from the sales floor to the office in the balcony. They had a cable transport system for transactions so that the money and orders would be handled only at a central point. The clerk would put the sales slip and the money in a small carrier that was then put on the cable. The clerk would then pull a cord and propel the carrier to the office on the balcony. There, the order would be recorded, a receipt would be generated, and change made. These items would be put back in the carrier and sent back to the clerk.

The Minnesota territorial centennial in 1949 was an occasion of great celebration. Many towns had "Pioneer Days" celebrations and many of the men grew beards for the celebration. The Fairmont band marched and played at most of the small towns nearby as part of their celebrations. That same year several of us organized a "German band" and we appeared in a number of parades and other events playing from our repertoire of polkas and other German songs. I also played in a smaller pep band at the basketball games.

11.1. Religion

Outside of school, the church was the center of social activity. We belonged to the Fairmont Methodist Church, shown in this picture below. Both sets of grandparents had been Methodists going back several generations. I started going to Sunday School and church at the Fairmont Methodist Church about the age of five or six, and continued on through high school. Most of my best friends went there or to the Congregational Church two blocks away.

A major social activity at the church was the "pot luck dinner". Here, every family would bring food enough for themselves and an extra dish, and then everyone would partake of all of the food in buffet style. It was a great excuse for a social event and greatly enjoyed by all.

John Wesley started Methodism in England in the late 1730s. He was a clergyman in the Church of England. He had attracted a following in England in holding religious meetings and in doing charitable work on a methodical schedule. A major turning point came in his life in 1738 when he felt his heart "strangely warmed" when he discovered that inner peace comes not through personal efforts but that salvation is free to all men, not just the selected

Figure 14 Fairmont Methodist Church

few. He found that he could not work within the framework of the Church of England so he formed a separate society. Methodism came to America in a serious way in 1770s, with Francis Asbury as the first bishop. Liquor and drunkenness had been a very serious problem in England in the 1700s, so the Methodist Church had taken the position that members should practice total abstinence from the consumption of all forms of alcohol. Outside of a few colonies formed for religious freedom such as Providence Rhode Island, there was little interest in religion in early America. Nevertheless, the early Methodist Church had great evangelistic fervor and grew very rapidly in America, primarily through its use of circuit riders to bring religion to the frontier. Many Protestant Americans found a resonance with the Methodist doctrine of methodical schedules and personal discipline, rejecting liquor in all forms, cigarettes, dancing, card playing, working on Sunday, and (by some) even movies. This doctrine fit very well with the current attitudes of the time (especially during the depression) that the only way to get ahead or even survive in the hostile world was to work very hard, have great personal discipline in working towards your goals, and not waste anything (and it was true). If you were having fun you were probably committing a sin of some kind. From a theological standpoint, Methodists believe that salvation from sin is God's special gift of "amazing grace", unmerited and unearned. Salvation is offered to anyone who will accept it. They believe that every person has worth and dignity as an individual, is meant to be free and responsible, and the best judge of his own well being. They believe that each person is responsible for his own spiritual life, and can have a personal, individual, intimate, and direct connection to God without needing any intermediary.

The late 1890s were a time of great religious interest, with large camp meetings in tents (mostly Methodists) attended by thousands lasting for days and with high rates of church attendance. In Minnesota, a favorite location for camp meetings was at Red Rock in (what is now) South St. Paul in the 1860s through the 1880s. At one camp meeting in Red Rock in 1883, 10,000 people arrived in a single day for the camp meeting. This high level of interest declined slowly after that but was still at a high level in the 1930s and 1940s especially in small towns and rural areas.

My earliest Champine ancestor, Louis, belonged to the Methodist church in DeKalb, New York in the 1820s at a time when Methodism was rapidly becoming very popular. The first Methodist mission in Minnesota was established in 1837 at Chief Little Crow's Sioux village of Kaposia, now South St. Paul, eight miles down stream from Fort Snelling. (His son, who was also Chief Little Crow, would later lead the bloody Sioux uprising of 1862 described later). The Methodist Church in Minnesota was organized in Red Wing in 1856. The early Minnesota church had German Methodists, Swedish Methodists, and Norwegian-Danish Methodists. By 1865, Methodism had nearly 2 million members in America and Canada, and nearly 30,000 preachers. For more information on the history of the Methodist Church in Minnesota, see the book "Forever Beginning" by T. Otto Nall.

The Methodist Church was very active in improving the greater social welfare, and established 118 colleges and 229 hospitals. My family and I were to benefit greatly from these investments. In addition to church itself, my son Mark was born at the Methodist hospital in St. Louis Park, and I taught at Hamline University, a Methodist college. (Hamline University had been established in Red Wing in 1854 as a Methodist college when Minnesota was still a territory. Hamline was the first college in Minnesota. It was moved to St. Paul in 1880 and I would teach physics there 80 years later as an Adjunct Professor.) The Methodist Lakeview retirement home in Fairmont provided employment for my mother when she needed it, and later it provided high quality care in her last weeks when she could no longer take care of herself. My son received his master's degree from Boston University, a Methodist college. The longest-term benefit of all was the Methodist church camp ("Family Camp") on Lake Koronis in Paynesville Minnesota where we had time to be a family one week a year for 35 years (so far).

In Fairmont, the Methodists have a large church building on the edge of the business district. The congregation was organized in 1880 and the present building was constructed as a Methodist Episcopal Church in 1928. I remember going to Sunday School in my earliest memories, learning the Bible stories and Bible songs. Many of my early friends were those kids in Sunday School with me. At that time religion was very important, and there was a deep social schism between the Protestants and the Catholics. The Catholics were a foreign and closed society to Protestants. The Catholic parishioners accepted considerable control from the Church regarding such matters as not eating meat on Fridays. Many Catholic children were educated by nuns in the Catholic parochial school through eighth grade. When they changed to public school in ninth grade they were viewed as being very "different" by the public school students.

Regardless of which religion people followed, church holidays were very important. Christmas was a major event. There was always a pageant with Mary, Joseph, and the three Wise Men reciting the Christmas story. Palm Sunday and Easter were also major events. On Palm Sunday, the Sunday School children dressed in white choir robes and walked down the aisle in the sanctuary with palm leaves and sang songs for the congregation. On Easter Sunday, sunrise services were very well attended.

In my pre-teens, I decided to read the entire Bible to find out what was there. I got through Genesis very well but got bogged down in going through the “begets”. After that I read selected parts but never did read the entire Bible from cover to cover. About this time I also started to wonder:

- where did God come from?
- what was there before God created the universe?
- what came before time started?
- what is outside of the universe
- where did the women that Cain and Able married come from?
- why are people so different from animals; why can’t animals talk?
- what is the purpose of human life; why are people here?
- if God is all-powerful and all-loving, why is there so much suffering?

I still wonder.

Some people believe that one can find God through science. As I studied science it became obvious to me, as it had to many before me, that there is a wonderful order in the universe and that the physical universe can be explained by a few simple laws. I was astonished at the accuracy with which differential equations can describe the physical world. Some people interpret this order as evidence of a "master designer". It also became obvious to me that the world and people are wonderfully matched to each other. The fact that the average temperature of the world is between the freezing and boiling points of water, that water expands when it freezes, and that water has low viscosity are but a few of the amazing characteristics that make the world a hospitable place for humans. If the mass of the proton had been slightly different, we would not have wonderful rainbows, sunsets, or waterfalls. If the earth had been one percent closer to the sun or one percent farther from it, we would not have rainfall or snow. To me, the great beauty of the earth with its mountains, lakes, rivers, forests, and plains where it is undisturbed by humans, is beyond description.

The Methodist Youth Fellowship at the church in Fairmont was very active, and played an important role in the socialization that teenagers need. We had many picnics, parties, and other get togethers and I made many good friends there including Shirley Edwards, Jack Murray, Bob Clark, Conrad Due, Mort Mondale, and Charles Bower.

11.2. Ethnicity and Immigration

Religion was about the only differentiator in an otherwise almost completely homogeneous racial society in Fairmont. There were no recent immigrants; almost everyone was born in America, although in some cases they were first generation Americans. Although the town was racial homogeneous, ethnic background was an important part of a person's identity. If you asked a person "what are you?", they would understand that you were asking about their ethnic background and would respond with "Swedish", or "German", or whatever. There was no stigma attached to an ethnic background; they were all about equal by that time. Ethnic humor was considered socially acceptable in those days. No one seemed to take offense, and each ethnic group could dish it out as well as they could take it. Example:

Question: What are the best five years of a Norwegian's/Swede's/German's/Iowan's life?

Answer: The time spent in first grade.

One of my favorite comic strips in the Sunday paper was the Katzenjammer Kids. They were Hans and Fritz, only slightly disguised brats of German heritage that spoke English with a very heavy German accent. For example: Hans said "Ya sure, dey can talk better dan der Captain und der Inspector put to gedder". Their mother always seemed to be shouting "Himmel" at her sons' antics. Then there was the "Dinglehoffer", a kindly German-American and his dog "Adolph". The readers of German extraction laughed at this comic strip as much as anyone and no one seemed to take offence.

My own ethnic French Canadian roots had been lost by my generation. There had been some discrimination against the French in St. Paul, who lived in a section of town called "Frog Town" after the French ("Frogs") who lived there.

There had been very strong and pervasive discrimination against French Canadians in New England. In the late 1800s Canada was a country of political and social unrest with little to offer its inhabitants. French Canadian peasants, derisively called "Canucks", had flooded into many of the mill towns in Massachusetts and Rhode Island in great numbers starting in 1860. The motivation was a combination of small crop yields and subsistence farming in Canada, and job opportunities created by the booming mill economy and need for unskilled labor in the exploding textile industry in New England. Between 1860 and 1900, one-fourth of the total population of Quebec Province moved to New England. By 1900, one-half of the workers in the New England textile industry were French Canadian.

In Fairmont, there were no people of other races (with the exception of migrant farm workers that lived in housing on the farms and were not a part of society). There were very few very rich or very poor people in town.

In spite of the diverse ethnic background of many people being first or second generation Americans (or perhaps because of it), there was a strong sense of community. There was great unity to the social structure; everyone belonged to the social structure and had a well-defined place in it. The fabric of this unified society was stitched together in many ways through a network of clubs, societies, and other organizations. There were men's clubs, women's clubs, sewing circles, couples clubs, church clubs, school clubs, Masons, Order of the Eastern Star, Job's Daughters, Boy Scouts, Girl Scouts, and many more. In fact the town operated almost as a

large, loosely-knit club. The town was just recovering from the depression of the 1930s, and no one had much money. Everyone shared the same values and attitudes, namely that if one was hard working and diligent that one would prosper and succeed. Perhaps because of the homogeneous nature of the population, the town was so safe that people did not bother to lock their houses, their cars, or to take measures to prevent theft. There was not any theft that I knew of. There was essentially no vandalism, except for the occasional outhouse that was turned over on Halloween.

This integration of the social structure stands in marked contrast to the social disintegration that happened in the 1990s, where factions formed of every possible kind; old vs. young, rich vs. poor, women against men, one race against another, etc.

Minnesota in the early 1940s was slowly losing its ethnic roots. There had been great waves of immigrants in the late 1800s from northern Europe. The immigrants were young, mostly in their twenties or even in their teens. They were full of energy and motivation to build a good life for themselves in this new land. About equal numbers of Germans, Swedes, and Norwegians had come to Minnesota attracted by almost unlimited amounts of free land that could be obtained by "homesteading", and by the offers of cheap or free transportation by the railroads. (The Homestead Act enabled settlers to acquire 160 acres of government land at little or no cost if they would live on it for five years and make some improvements). About one-fourth of all Swedes left Sweden (1.2 million people out of a total population of 5 million) between 1846 and the first World War in 1917, with the peak emigration being in 1888. The peak years of emigration were years of crop failure in Sweden. Large Swedish populations grew up in Illinois, Minnesota, and elsewhere. In some cases essentially entire towns left to come to America. Many of these emigrants came to Minnesota. The population of Minnesota exploded. The net immigration to Minnesota was:

- 6,000 by 1850
- 172,000 by 1860
- 440,000 by 1870 (my ancestors were part of this in the 1860s in Plainview and Lake Belt township)
- 781,000 by 1880
- 1,310,000 by 1890
- 1,751,000 by 1900

Minneapolis was a magnet for many Swedes, and remains today the foremost repository of Swedish-American culture as represented in the Swedish-American Institute. Newspapers, churches, and organizations among the Swedes started from the common language and also made it easier for the individual to adapt to the new country. They became loyal citizens of the USA and in many cases quickly abandoned the "old country" language and culture in favor of the American language and culture even in the first generation. The "old country" culture and language were often seen as inferior to the American counterparts. One element of the culture that carried over was the drinking of coffee. Coffee drinking was very popular among the Scandinavians in the 1940s, and people often drank five or more cups per day. A "true" Scandinavian would drink coffee while holding a sugar cube in the teeth, straining the coffee through the sugar.

The center of Swedish culture was Minneapolis. There had been a large Swedish ghetto near what is now Seven Corners by the University. The Swedes had a reputation for being dumb, ("dumbswede" was considered by some to be one word) because they were among the last of the

immigrants and often could not speak English well. St. Cloud was populated by about half German Catholics and half Swedes. My father-in-law Harold Nelson was born in a Swedish ghetto in St. Cloud called "Swede Hollow" and could not speak English until he went to school at age 5.

The immigrants to Minnesota held on to their ethnic background with great tenacity. In the early 1940s there were still native language Swedish and Norwegian church services and radio broadcasts. One of the popular broadcasters in the Fairmont area was Mrs. John Larson who started each broadcast with "Gud Dag, Gud Dag". She sang songs and told stories in Swedish.

Many communities were almost totally German in culture even in the late 1940s. For example, in Mayer, Minnesota, German was still the language of most business in the late 1940s. The dominant grade school in the town was not the public school but the German Lutheran parochial school where classes were taught in German.

Approximately the same story was true of Norway and Norwegians.

One of the reasons for the great influx of immigrants was the effort by the railroads to attract immigrant settlers to create a market for railroads. The railroads had carried on an aggressive campaign of advertising the benefits of living in Minnesota. In addition to being able to get 160 free acres of some of the most fertile land in the world through homesteading (when the average farm in Sweden was seven acres of rocks), the railroads promised a land of unlimited resources, unlimited wildlife, and a very healthy environment. Unfortunately, many of the immigrants knew little or nothing about farming. Farming requires a substantial amount of knowledge and work, and the new immigrants often could not (or would not) raise enough on the farm to sustain themselves. They also inflicted very serious damage on the land through bad farming practices, causing very serious erosion. When the settlers first came to Minnesota, the steamboats could travel up the Minnesota River to the town of Carver. Within a few years after settlement, the river was so silted up from terrible erosion caused by bad farming practices that the river was no longer navigable that far by steamboats.

The Minnesota climate was advertised by the railroads as being able to cure many diseases including tuberculosis, which was a very common and usually fatal disease for which there was no prevention and no cure. Tuberculosis was a highly contagious killer; in earlier times it had caused one out of every four deaths. It was a disease where the victim slowly wasted away over a period of perhaps ten years. Because tuberculosis is extremely contagious (spread by coughing or sneezing), the patients were usually isolated in one of the many tuberculosis sanitariums. The chances of a cure were small to none. Tuberculosis continued to be a very serious disease into the early 1900s, and even in the 1940s all school children were tested for tuberculosis.

Every ethnic group acquired a stereotype reputation, and the Germans had the reputation of being very industrious, quiet, and running very clean and neat farms. They also brought with them a very rich culture and a strong sense of the value of education. They organized German culture clubs and had a keen interest in literature and music. The center of German culture was New Ulm Minnesota. The Turner Society, a group of socialistic freethinkers who had come to America to escape the social upheavals in Germany, founded new Ulm in 1858. They tried to develop a Utopian socialist community and were hostile to religion in any form. The opposition to religion came from the identification of religion as an agency of oppression as it had been in Germany. The Germans in Minnesota culture seemed to be much more visible than the Scandinavians, perhaps because of the popularity of the polka music and the German bands. Today New Ulm still has a wonderful German-style post office building and retains a German flavor.

In the late 1940s there were 35-40 German and polka bands operating out of New Ulm. Every town had a dance hall and the bands were in great demand. The original band and one of the most popular was the "Six Fat Dutchman" led by "Whoopee John Wilfahrt". They performed on WCCO radio starting in 1924 and continuing into the 1960s. Although they called themselves "Dutchman" they were really German (Deutsche).

All of the northern Europeans strongly believed in the value of education, and Minnesota schools have always been among the top in the country.

Figure 15 Homer Northway in 1900

12. Life on the Northway Farm

My maternal grandparents, Homer and Allena Northway, lived on a farm near Triumph, Minnesota about 12 miles northwest of Fairmont. The 160-acre farm was two miles east and one mile south of Triumph. The house is located on top of a small hill, and the fields sloped gently downward in all directions from the house. There were many large cottonwood trees on the west side of the house, planted for shade. The farmers often planted cottonwood trees because they grew fast. These were immense, friendly, giants. I remember how their leaves would shimmer and shake in the slightest breeze.

The Northway ancestors were New Englanders from Litchfield, CT who had come west via Onandaga County near Syracuse NY to Blackhawk Co, Iowa. They settled in Reinbeck, IA and started farming there. The Vittums (my grandmother's people) were also easterners who had lived in large numbers near Sandwich, New Hampshire. They had such large families and the population was so sparse that they had intermarried extensively, to the extent that they had become the most numerous family in the area. It was quite common there for a woman to marry and not have to change her last name. The Vittums had also moved west to Blackhawk Co. Iowa and had lived near the Northways.

Both my grandfather and grandmother had graduated from Cornell College in Mount Vernon Iowa, but they never mentioned it to me and I found out by accident much later. Cornell College is an anomaly in the Midwest; with Romanesque brick arches in the midst of the fertile fields of Iowa. As the college history states "Cornell, town and college, is a bit of New England transplanted and flourishing among the cornfields of Iowa; not the later New England of manufacture and dense traffic, of teeming cities and a varied population of foreign origin, but the older, simpler, rural New England, still marked with the stamp set upon their new world by the Pilgrims of the Mayflower and the Puritans of Salem". The New England roots of Cornell are deep. Most of its founders were from New England and the college itself is modeled after Mt. Holyoke in Massachusetts. Homer Northway and Allena Vittum married in 1900, immediately after graduation from college. The pictures here show Allena and Homer at the time of their wedding.

They set up their household on a farm west of Sherburn, Minnesota. All four children that lived were born to

them here including my mother Genevieve, uncles Harold and Merlyn, and Aunt Ruth. Later, because Homer was having some health problems with his heart and could not do the heavy farm work, they moved to Alpha, Minnesota where he opened a farm implement store in 1920. In about 1926 when his health had improved, Homer found out from the bank in Reinbeck that they had foreclosed on a farm near Triumph, Minnesota, so he bought the farm from the bank and started farming.

The town of Triumph Minnesota had been founded in the late 1880s when the Chicago and Northwestern railroad came through. In the 1930s when our story opens it had a population of about 500. A slightly smaller sister town, Monterey, had been founded a few hundred feet to the west on the Milwaukee and St. Louis railroad. It always seemed strange to have two different towns that nearly touched with a combined population of less than 1000 out in the middle of the prairie. Later they joined and took the name of Trimont. Life in Triumph in the 1920s and 1930s is described in considerable detail in the book "Beginning in Triumph" by Edith Johnson Mucke. Her father owned and operated the Alfred S. Johnson General Merchandise store. I went in that store many times with my grandfather Northway. Alfred and his wife Bessie Nelson had both immigrated from Sweden to Minneapolis and from there to Triumph. As was common in those days the family lived over the store. The store prospered and the book makes it clear that living in Triumph was a good life, although without some of the cultural opportunities of Minneapolis.

Figure 16 Allena Vittum Northway in 1900

My grandfather usually wore bib overalls and had a large pocket watch that he carried in the watch pocket in the bib. Each time he would take it out to check the time, I would ask him to open the back so that I could see the works. My grandmother taught piano lessons in addition to helping run the farm.

The 12 miles from home in Fairmont to the farm through the open farmland seemed a very great distance, and the roads were quite bad. One time I remember taking the train from Fairmont to Fox Lake (10 miles) with my mother, and my grandfather picked us up at the train station to take us to the farm for a visit. Fairmont had two different train lines; the Northwestern; and the Chicago, Milwaukee, and St. Paul lines. In the 1920s and 1930s trains were an important means of passenger transportation. During this time there were 30 trains a day going through Fairmont, and the train station was always busy. About 20-50 people would take the train on any given day. The trains used steam engines, which were enormous, fire-breathing, smoke-belching machines that held quite a fascination for me. The train engineer, the only kind of engineer that I knew before college, stood high in a cab in the back of the engine. The engineer seemed to have the best job in the world. I liked to go to the train station just to watch the engines and other activity. Sometimes I would put a penny on the train track so that a train would run over it and squash it flat.

I spent considerable time at the Northway farm during my pre-teens. The farm did not have electricity when I first remember it. Light was provided in the house by two kinds of kerosene lamps: the wick lamp and the mantle lamp. The wick lamp was much less expensive and less trouble, but they generated soot and gave only a little, yellow light. They were quite rugged and wind-resistant, but required careful handling to not tip them over. The chimneys required frequent cleaning to remove soot, and the wicks needed to be trimmed periodically. There were several glass wick lamps in the house, some permanently mounted on the walls and some that we carried. The mantle lamps were “high tech”. The kerosene tank was pumped up to force the fuel through a small nozzle into a vaporizing chamber. The fuel vapor then went to a pair of “mantles”, which were very fragile carbonized fabric bags. The burning fuel heated the mantles

to a high temperature and they gave off a brilliant blue-white light along with considerable heat. All of this open flame was very dangerous, and farm fires were not rare in spite of precautions.

Each evening as darkness fell, my grandmother would light the lamp in the room in which we were sitting. Much of the room remained dark, but near the lamp there was enough light for us to read or play board games by.

We carried kerosene lanterns outside at night to light the way to the barn or wherever we were going. Again, the danger of fire was very real

Each bedroom was equipped with a "slop pail" for use late at night or when it was too cold to go outside to the "outhouse". The farm had an outhouse near the chicken coop. It was a "two holer", so that one could bring a friend I guess. In the spirit of using everything, there was never any store-bought toilet paper. Instead, the old Sears catalogue was used. It had the added advantage of providing reading material. Sometimes we used peach wrappers; they were much softer than the Sears catalogue.

Women who were homemakers (nearly all of them) carried enormous burdens of work and responsibility. Homemaking at that time consisted of a multitude of backbreaking tasks. Women raised and taught the children (usually many), baked bread, made soap, washed clothing on a washboard, sewed the family wardrobe, knitted mittens, socks, and scarves, planted and harvested the garden, preserved freshly butchered meat without refrigeration, cleaned the house, nursed the sick, and ran the household. Cooking was done on a large cook stove using corncobs for fuel. This stove provided warm water from a reservoir on its side, and also helped to heat the house. My grandmother did a great deal of cooking and baking as did all of the farm wives, because all food was made from the basic ingredients such as flour, sugar, fruits, and vegetables. She was constantly making large numbers of pies, cakes, cookies, and all of the bread and rolls eaten by the family. She always let me help when I was there. There was a large pantry immediately off the kitchen, which was stocked with everything that was needed for cooking. Therefore it was not necessary to go to town very often; they went something like once a week. My grandmother had no thermometer for the stove, and measured the temperature of the oven by holding her hand into it. If the oven was not quite warm enough, she put more corncobs in the fire. Nevertheless she was able to cook things very well including all of the bread, cakes, cookies, and pies.

The smell of fresh-baked bread was wonderful. When it first came out of the oven we would put fresh butter on it and eat it while it was still warm. After that we sliced bread from the loaf as we used it to help keep it fresh. She also made a lot of pies, and I helped by rolling the dough with a rolling pin to make the crust. We always baked some small pieces of pie dough with sugar and cinnamon on them for me to eat. We never had candy so this was a special treat.

The cookie jar was very special to me, as I loved cookies. My grandmother made mostly oatmeal and raisin cookies. I would usually eat six or eight cookies at a time, but the cookie jar was never empty.

The cook stove had a reservoir on the side to heat water. Some hot water was needed to wash dishes, but not much other hot water was needed as people took baths at most once a week. We used a round galvanized metal tub about three feet in diameter for a bathtub. Clothes were washed in a wooden tub with an agitator that was moved by hand. One of my jobs was putting the clothes through the manual wringer after they were washed and rinsed. My grandmother made soap using fat and lye. The lye was obtained by boiling wood ashes in water, and then the fat was boiled in the same water. I remember the brown bars of homemade soap sitting out on newspapers to cure for a month or so. The homemade soap was used for laundry.

Of course with all of the grain, food, and manure around there were a tremendous number of flies. They were everywhere including in the house. My grandparents made extensive use of fly swatters and put up many of the "sticky strips" around the house, and they caught large numbers of flies, but there were always more.

There was also much mud in the spring. We wore boots everywhere and had to scrape our boots on the mandatory mud scrapers mounted permanently outside of the doors.

The main heat for the house was provided by a large pot bellied stove set up in the living room every winter and fueled by coal. Each fall my grandfather would go to town with a wagon and get a load of coal to last the winter. With no electricity to run a blower, the heat had to be carried by convection, so there were vents in the floor of the upstairs rooms to let heat in. At night I would get out of bed and listen at the vent in my room to hear what the grownups were saying downstairs.

There was a storeroom in the upstairs of the house that held all manner of interesting things. One of the most interesting was a stereopticon—a device that showed pictures in true stereo. The pictures were pieces of cardboard about the size of a postcard, and each had two pictures on it—the left view and the right view. My grandparents had a few hundred stereo pictures, mostly taken around the turn of the century, and I would spend hours looking at them to learn about the world. I saw stereo pictures of amazing places that I had never heard of, such as Niagara Falls, New York City, Africa, France, and India. They were very exotic and wonderful, and I wondered if I would ever see them. Little did I dream that I would see many of them in my lifetime.

Successful farming requires considerable discipline, knowledge, and in those days an enormous amount of backbreaking manual labor. Many things had to be done every day or twice a day, especially if there are animals on the farm. These routine activities are called "chores", and on the Northway farm there were morning chores and evening chores, such as milking the cows, carrying water to the chickens, cleaning out the barn, separating the cream from the milk, etc. In between chores, other tasks could be done. The idea of doing chores carried over into all areas of society. Spring and fall there were highly important seasonal jobs like planting and harvesting that had to be done on a high priority basis, but the chores still had to be done. Keep in mind that there was not a single electric motor (no electricity) and only one gasoline engine (the tractor). Everything was done by hand except what the tractor or horses did.

There was never any running water or indoor plumbing on the farm, and all water in the house and for the animals had to be pumped by hand and carried in a bucket from the well. I liked to pump water from the well, and would often jump up on the pump handle and let my weight carry it down. In the kitchen, a water dipper hung by the water pail, and every one used the same dipper to take a drink.

The whole concept of a farm at that time was that it should be as self-sufficient as possible and all of the farms were highly integrated. People tried to grow or otherwise produce everything that they needed, and to buy as little as possible. This meant that the farmers raised relatively small amount of many things. They typically raised oats, corn, alfalfa, and had some pasture as crops. They also raised several kinds of livestock, including horses, cows (for milk), pigs (for pork), and chickens (for meat and eggs). The livestock meant that there was a great deal of hard physical labor for their care and feeding, generally twice a day. Each element of the farm helped other elements of the farm. For example, the manure from the livestock was used as fertilizer for the fields. This solved two problems; it provided for the disposal of the manure, and fertilized the fields with out the use of chemical fertilizer.

Today (1996) in this age of specialization much has changed. Large "production farms" raise huge amounts of only two crops (corn and soybeans) and no livestock. This means that they must purchase large amounts of chemical fertilizer. Farms with 10 million chickens are now common generating 5 million eggs per day. Cattle are raised on huge feed lots, fed with purchased grain and hay. This creates an enormous manure disposal problem and often results in serious pollution.

Because each farm in the 1930s tried to be as self-sufficient as possible, money was not as important to them as it is now. As with the other farms around, the Northways had some cows, some pigs, some chickens; and raised corn, alfalfa, and oats for their animals. Therefore they had lots of eggs, chicken, pork, milk, butter, cheese, and beef. Chickens in good health would lay one egg each day.

Chickens were very common. Every farm had a flock, and even some people had them in town. (Today, most children have never seen a live chicken except possibly in a zoo). The chickens ran free and were everywhere underfoot. Now they would be called "free range" chickens. Chickens by nature are flighty and neurotic creatures. One of my jobs was to gather the eggs every day, and we ate a lot of eggs. Any time one of us would enter the hen house the chickens would go into an uproar, scattering feathers and dust everywhere. When we needed a chicken for dinner we would go out with a wire hook and catch one by the leg. We would then lay its neck on a chopping block and chop its head off with an ax. It would usually run around for a minute or so without a head until it finally fell over dead. We would then drain the blood out, scald it in hot water to loosen the feathers, and then pluck it to make it ready for cooking. All of this could be done in a few minutes. I loved chicken and chicken gravy. The heart and gizzard were my favorite parts, along with the drumstick.

Twice a year they checked the chickens to see which ones were not laying eggs; those were killed and frozen. They also butchered some pigs each fall and had the meat frozen at the local freezer plant. We generally ate large amounts of meat, chicken, pork, or beef. My grandmother made gravy with every meal to use up the grease and fat that cooked out of the meat.

Another job of mine was to get the mail. Some days there was no mail, and on some days there were one or two letters. There was no junk mail, and each of the letters was very important. Because telephones were used rather rarely, personal letters were a very popular form of communication. My grandmother, mother, and my mother's sister Ruth wrote letters to each other once each week without fail as long as they lived. It was really the only way to stay in touch in the 1930s, and later they continued the practice out of habit.

My grandmother had a large garden and she raised nearly all of the fruits and vegetables that they needed for the entire year. Farm families bought almost no food at stores, and raised almost all of their own food. There was no processed food available at the grocery stores, so even the town people prepared all meals from basic ingredients. We ate large amounts of garden vegetables such as radishes, onions, carrots, tomatoes, potatoes, rhubarb, strawberries, and corn. We put large amounts of salt on all of these, and each person had not only a personal salt dish as part of the table setting but also a cloth napkin in a napkin ring. We especially ate a lot of tomatoes in season. The children put sugar on the tomatoes to soften the acid taste. Adults used salt on tomatoes. My grandfather always finished each noon and evening meal with bread and gravy, and I often did also. In addition to vegetables we also had meat and potatoes. The meat was usually pork or beef, and sometimes chicken which was something of a treat. There was no cooling or refrigeration of any kind on the farm. Fruits and vegetables were kept in the basement where it was cool. Even though there was no refrigeration, I do not know of a single case where someone got sick from spoiled food. The farm wives knew exactly what the limits were.

My grandfather had a locker for meat at the creamery in town where there was a freezer. Once a week or so he would get meat from the locker when he was at the creamery to drop off his cream that he sold to them. I remember the huge door to the locker, and when he opened it a blast of frigid air would roll out. Each locker was a wire basket with a lock on it. I would walk in with him while he got the meat but could only stay a minute or two before I got too cold.

Everything that was bought or produced was used, and there was little or no waste or garbage. For example, the kitchen scraps were fed to the pigs, and all animal manure was used as fertilizer. Another example was road-kill, when a car hit a chicken, killed it, and left it in the road. If my grandparents saw a dead chicken in the road, they would stop the car, pick it up, and if it was still warm (and therefore a fresh kill) take it home to eat. They did not cut the vegetables for (noon) dinner on Sunday until after church so that they could let them grow longer. Flour sacks were made into clothes. Things like nails were never thrown away. They would always be straightened and used again, no matter how bad they were. I got very good at straightening nails even before I was ten years old.

Behind the chicken house there was a path to the "south forty" field. The path was lined with morning glory flowers that smelled wonderful and were very pretty.

The church was the center of all social life, and every Sunday at 11:00 we would go to the Methodist Church in Triumph to attend the service. The preacher usually delivered fire and brimstone sermons with a great deal of emotion telling the people how they would go to hell if they did not lead virtuous lives. At the services I learned about the order of large numbers trying to turn the hymnal to the correct page for the next song which was shown in the Bulletin and matching the page number with the number in the bulletin.

Although the farmers were quite isolated, they had an active social life. Social activities included quilting bees, corn husking, spelling bees, weddings, and funerals. My grandmother belonged to a church sewing circle, and my grandfather was also active in the church. They belonged to a Farmers Club and to the Grange. I would often go with them when these groups met for social events and to exchange farming information. In spite of the large amount of manual labor the farm women had to do, they liked to crochet bedspreads, and make quilts, rag rugs, and other practical things. Many were very elegant with extremely high quality. The meetings would always include a potluck supper to enjoy the fruits of their farms.

My grandfather Northway always said grace before every meal, asking for Christ's blessing of the food and giving thanks for the goodness of life. Everyone had to bow his or her head and remain silent during the prayer.

The first floor of the farmhouse had a kitchen with a large pantry, a living room, a dining room, and a parlor. In the parlor was a piano and a piano stool that would spin. One of my favorite pass times was to lie on the piano stool and spin around. There was a telephone in the living room. It was a large wooden box hanging on the wall. It connected to a party line, and ringing was done by turning a crank. Each house had a specific number of long and short rings. Every telephone on the party line would ring, and since everyone knew everyone's rings, people would listen in to find out what was going on.

The second floor had three bedrooms and a storage room. There was no heat upstairs except for what leaked up from the ground floor through some vents. In addition to providing heat, the vents let me hear what the grownups were saying downstairs, so even in the summer I would open the vents so that I could hear. In the winter the upstairs was so cold that there would be frost on the inside of the windows creating wonderful leafy "fern-like" patterns (no storm windows). I would often study the patterns for long periods of time. The beds would be very cold. On the coldest

nights my grandmother would heat a large slab of soapstone on the cook stove, wrap it in a towel or newspaper, and put it in the bed where my feet would be. I would still have to start out curled up into a ball to try to stay warm, and then gradually unfold as my body heat warmed the bed. On the coldest nights I never warmed up.

In the spring, there would be mud everywhere. An important piece of equipment that every house had was a boot scraper. When one came in the house from outside, we would scrape as much of the mud as we could off of the boots before going in the house.

Although my grandfather had a tractor, he used horses quite a bit, as did all of the nearby farmers. The tractor was a Farmall with immense iron wheels with lugs on them, probably built in the early 1920s when he started farming. It had a hand crank, and I often got to help my grandfather start the tractor. It was like starting an airplane. The first step was to move the ignition lever to "start". This turned on the ignition and set the timing to a retarded position. The next step was to set the throttle to low. Then the slack was taken up on the crank with the crank in a horizontal position. Finally the crank was pushed sharply down in a single stroke with all of one's weight on the crank. When this was done correctly the tractor would fire on the first or second try and then the ignition had to be moved immediately to "run" with correct spark advance. If it was done wrong the crank could kick back and break your arm.

Tractors took expensive fuel and would not move on voice command, so horses were used instead where possible. His horses were named Prince and Bell. They were large plow horses, and I learned to ride them at an early age, bareback of course. Their backs were so wide that I had trouble staying on. Horses were always used for light work such as pulling the hay wagons, rakes, corn wagons, and the manure spreader.

The technology in these farm implements was quite interesting. All of the implements were designed to be pulled by a pair of horses. Horses wore a large collar that they could push on to pull the load comfortably. The horse collar had straps extending back to the wiffel tree immediately behind the horses' legs. The tree was attached to the crosspiece bolted to the tongue. The tongue extended forward and was supported by a crosspiece attached to the two horse collars. The horses wore bridles, each with a bit that went in the horses' mouth for control. Reins extended from the bit back to the driver, so that by pulling on the reins he could control the horses. The horses were trained that pulling on the left reins meant that both horses should turn left, pulling right meant to turn right, and pulling on both (and saying "whoa") meant to stop. To start the driver shook the reins and said "gitte up". The horses knew exactly what to do, and often did the right thing with out any direction if they felt like it. Sometimes they did not feel like it and could be rather stubborn.

The hay rakes were about 20 feet wide and had a series of tines that raked the dried hay on the ground into long rolls so it could be harvested onto the wagons. A lever could then be moved, and the wheels would be engaged to the tines and lift the tines so that the roll of hay would be left in the field. The tines would then drop down and the next roll would be started.

The manure spreader was even more interesting. The spreader was a large box with iron wheels and a seat in the front for the operator to ride on. The entire bottom of the manure spreader was a moving track, which could be engaged and driven by the wheels. When we got to the desired spot in the field, the moving track would be engaged and the floor of the manure spreader would start to move backward. In the back two shafts with tines on them would start spinning to throw the manure out the back evenly on the field. I liked to hold on the back of the seat of the manure spreader and walk on the track as it moved backward. As the manure hit the spinning tines in back it flew all over. It was quite spectacular.

Every farm had its own shop to make and repair things. It was common to make many things that were needed. Also, during planting and harvesting time every minute was precious, and when equipment broke down it needed to be repaired very quickly to avoid losing precious time. My grandfather Northway had a typical shop. It was housed in a small building between the house and the chicken shed. It was very well equipped with hand tools. My grandfather had a saying "a place for everything and everything in its place". Every tool had its place, and when he was done using a tool it went right back into its proper place so that it would be quickly available when required. One of my favorite projects was to make a horseshoe nail ring. Because there were horses on the farm, there had to be horseshoe nails. The horseshoe nails had a special head that made them useful in making a ring.

I remember picking field corn by hand. Corn picking would begin in late September, and farmers would try to get it in the crib by Thanksgiving. It was always a race to get the corn picked, late enough to be dry enough to not rot in storage, and early enough to beat the snow. We used a special glove for picking corn. It had two thumbs, so that when the palm wore out on one side we could turn it over and use the other thumb. We then would strap on our hand a leather strap with a hook on it so that we could slice open the husks. We snapped the ear off the stalk, tore the husk open with the hook, broke the husk off at the base, and tossed the ear into the horse-drawn wagon. The wagon had a "bang board" that we threw the corn against so that it would fall into the wagon. When the picker had picked forward to the front of the wagon, a command was given to the horses so that they would move forward exactly one wagon length.

On any farm, the barn was the center of activity. One of my jobs on the farm was to bring in the dozen or so cows to the barn for milking every night. Normally they would come when I called them, but sometimes I needed to go to the pasture and get them. If one of the horses were nearby, I would lead it to a fence, climb up on the fence and then jump on the horse. Because the horses were plow horses, they were very large and had very broad backs. Since I was riding them without saddle or bridle, it was hard to stay on and hard to steer them. If I began to slide off, I would grab a handful of skin and pull myself back on. The horse seemed not to notice. When the cows got to the barn they knew exactly what they were supposed to do—walk into the barn in single file, turn into the stalls, stick their heads into the correct stanchions, and begin to eat the hay and grain that my grandfather had put into the feed trough for them. Sometimes they got some silage, which smelled awful. The whole barn was a wonderful mixture of smells, including hay, dust, silage, manure, grain, and milk. We would then walk through them and close the stanchions on their heads.

The cows were milked by hand, of course, and the milker sat on a one-legged stool holding the milk pail between the knees. The milker usually rested his forehead against the cow's side as though establishing psychic communication. Sometimes the cows would kick unexpectedly, and if the milker was not careful, he would get knocked into the manure gutter and the milk pail would go flying. Fortunately this never happened to me but it did to my older cousins. The cats would always gather around and we would squirt them in the mouth with a stream of milk. They loved it. We also filled a dish with milk for them. When the milking was done, we shoveled the manure (of which there was a large amount) into a wheelbarrow. We pushed the wheelbarrow out the door of the barn and onto the pile in the middle of the barnyard. In the winter, the pile of manure would grow very large; when spring came we loaded the manure into the manure spreader and distributed it across the fields, as it was an excellent (and only available) fertilizer.

After milking we took the milk to the separator. My job was to turn the crank that spun the separator. It took all of my strength to turn the crank as it spun the separator very rapidly to work correctly. We poured the fresh whole milk into a tank in the top, and from there it was fed into the rapidly rotating cylinder. The rotation separated the cream from the milk, with cream going

out one spout to a small can and the skim milk out another spout into a large can. We would each take a cup and catch some milk as it came out of the separator, usually mixing about half cream with half skim milk and then drinking it ceremoniously. When the separating was done we had to wash the entire mechanism in soap and water and let it dry. The skim milk was not considered fit for human consumption and was fed to the pigs. The next morning the cream was taken to the creamery in town and sold as a cash crop. The creamery made the cream into butter and cheese. It smelled wonderful.

I remember clearly the wiring of the farm in about 1939--it was winter and during a snowstorm. My dad did the wiring. The Rural Electrification Association (REA) project was in full swing at that time. He did quite a bit of work as an electrician wiring farms in that program, and the Northway farm was one of them.

One spring during the (Second World) war, at my mother's suggestion I purchased 50 chicks for $5 from the local hatchery and took them to the farm to raise. They arrived in a box, and we put them in a section of the barn that was walled off from the rest. We put in a heater to keep them warm. When we let them out of the box they ran around to the heater to get warm, constantly peeping. I took care of them (probably not very well knowing kids of that age) and when the 25 chicks that survived got big enough we sold them to the local butcher. I used the money to buy a defense bond. My $5 investment had grown to $18, but of course I did not pay for the feed, etc.

We made many of our own toys in those days. One of my favorite toys on the farm was to stick a large chicken feather into the end of a corncob. When it was thrown in the air it would spin down like a helicopter. Another favorite pass time was to get the bottle caps out of the pop machine at the local gas station. I would then build buildings and forts out of them. I also liked to take a handkerchief and tie the four corners to a small washer with string. I would then throw it up in the air and watch it come down as a parachute. We made sling shots out of wooden branches and rubber bands made from old inner tubes and I got quite good at shooting it. We got quite good at hitting targets with them. Another toy we made was to cut a circle of cardboard, to thread string through, and then make it spin by pulling on the string. We made squirt "guns" out of old bamboo-fishing poles. We cut a small section of the pole that would fit inside a larger section. We then wrapped the end of the small section in string to make a plunger. We then drilled a small hole in the end of the larger section to complete the squirt gun. Perhaps the most interesting toy was the willow whistle. We cut a section of a willow branch. We loosened the bark by tapping on it. We then slid the bark off the wood, cut the air passages, and then slid the bark back on the wood.

Another pastime that we (myself and on occasion my cousins) developed on the farm was to push a grain trailer up a small hill in the barnyard by walking on the wheels, and then jump in and ride the (unsteered) trailer down hill until it stopped. Unfortunately sometimes the trailer ran into buildings because it was not steered, but I don't think we did too much damage. The most fun thing of all was to climb on the machinery such as the tractor, rake, plow, or hay rack. And of course it was always fun to go in the chicken house and look at the chickens. The most fun thing of all was to climb on things, especially the windmill and the barns. I am sure that this gave my grandparents some considerable concern.

A very popular game of the time was horseshoes. Every farm had horses and therefore had horseshoes. Only men played horseshoes, and many practiced enough so that they got very good. All "real men" were good at horseshoes.

The first crop to be harvested in the spring was the pea crop. The peas were cut with a mower and taken to a central location on the farm where they were put through a sheller, that separated the peas from the vines and pods. I would often get some fresh pea pods from the wagons, pop

them open, and eat the peas directly from the pods. The taste was wonderful, and I still like raw peas.

One of the biggest events of the farming year was threshing, which usually started around August 1. A typical threshing machine used in the early 1930s is shown in this picture. Threshing was a time of considerable concern, because prior to threshing the crop was always vulnerable to loss. Once the crop was in the granary the farmer could relax somewhat because a major source of income would be safe. Prior to threshing, the farmer would have cut the grain, tied it into bundles, and "shocked" the bundles (stood them on end) so that they would dry. Few farmers could afford the very great expense of buying a threshing machine, so someone would buy one and then thresh for himself as well as for the neighbors. The farmers formed a group, and would go as a team to do the threshing for all of the farmers in turn who belonged to the group. Each farm usually took a couple of days. The threshing machine was very large and was pulled onto the site with a tractor at the place where they wanted the straw pile. It was driven by a tractor power takeoff (PTO) with a long belt, perhaps 30 feet long. The threshing crew was usually about a dozen men, bundle haulers, bundle loaders, grain haulers, and a man to operate the elevator to lift the grain into the granary. The grain was brought to the machine on hayracks pulled by horses. The farmers would then pitch the grain from the hayrack onto the conveyer belt that pulled the grain into the thresher. The machine would beat the grain off of the stalks, send the grain out one chute, and blow the straw out a large pipe onto the haystack. The horses required considerable care: hay twice a day, and oats and water three times a day. Threshing was a dusty and dirty job, and everyone got covered with dirt. Of course flies were everywhere so the horses had to wear nose baskets so that they would not breathe the flies. The threshers needed a lot of water, and there was always a large can of water nearby with a metal dipper for drinking. Everyone drank from the same dipper: sanitation was not much of a concern on the farm.

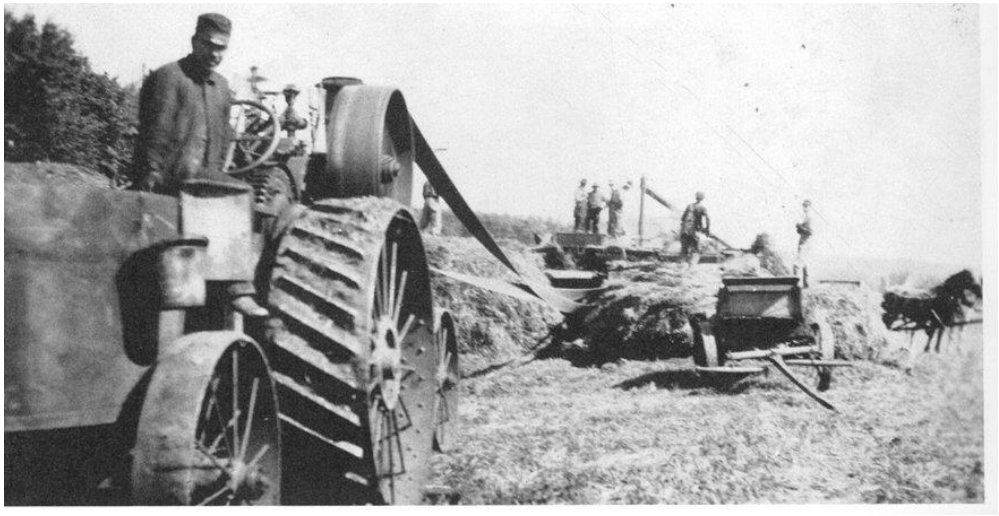


Figure 17 Threshing

The farm wives and daughters had the task of feeding the threshers. They had to provide a noon dinner, a mid-morning lunch, and a mid-afternoon lunch. They would get together at the farm to be harvested that day and begin cooking early in the morning. The noon dinners were as large and elaborate as a Thanksgiving dinner. The men had very large appetites, and a typical noon meal (called dinner) would include sweet corn, chicken, mashed potatoes with chicken gravy, salad, potatoes, pickles, bread, apple pie, and coffee, all in large amounts. Almost none of the food was bought at a store; almost all food was raised on the farm except coffee, sugar, salt, etc. I would typically eat six

ears of corn along with the other things, and most of the threshers would eat much more than that. The food was prepared on the kitchen range burning corncobs and without air conditioning. If the temperature was 90 degrees outside, it would be well over 100 degrees in the kitchen. (Some material in this section taken from the newsletter of the Martin County Historical Society, Spring 1998).

My Northway grandparents were very strict Methodists, and were absolutely opposed to sinful practices such as dancing, playing cards, or working on Sunday. Drinking alcohol and smoking were very serious sins. My grandmother discouraged me from reading the newspaper, saying that it was "filled with police news" of war, violence, and crime (of course in the 1930s it was). The belief was that the world was filled with evil, and that the way to happiness was to live life according to Christian values and stay away from the world with its wickedness.

My grandparents listened to radio station WHO (frequency 1040) in Des Moines, Iowa to get the farm reports. I also liked to listened to that station because they had a male singing group called the "Song Fellows" that sang close harmony in barber shop style.

A major event in those days was seeing an airplane fly over. It happened only once or twice a year. I remember reading a magazine on the farm and seeing an article that predicted that some day one could fly to Europe for $50. It seemed impossible that I would ever go to Europe, and even more impossible that it could be done for $50. Fifty years later I travel to Europe two or three times a year, sometimes for a one hour conference. The cost is about $25 in 1940 dollars.

The barn was the focal point for most of the farm activities. It was of modest size by modern standards, probably 40 feet square and two stories. There were about 12 cow stanchions in the southeast corner with a feeding trough in from of them and a manure gutter behind them. There were two horse stalls in the southwest corner with a feed trough in from of them. The north side was storage for grain and other feed, and the second story was for hay storage.

One of my favorite places to play was the silo. It was attached to the northeast corner of the barn. It was a dark, mysterious, and aromatic place. We could climb up inside the silo on a set of iron bar steps. Every fall it would be filled up to the top with chopped corn stalks. Over the winter it would ferment and become feed for the cattle. There was a tube along side of the silo itself to allow a person to climb up to the top of the chopped corn. In use, my grandfather and I would climb up to the top of the chopped corn and use a pitchfork to shovel it over to drop down the climbing tube and then use a wheelbarrow to carry it over to the feed bins. That was always great fun. My cousins and I would also climb up there for the fun of climbing and fool around on the top of the silage. Sometimes my cousins and I would climb up there and pretend we were hiding (of course there was no one to hide from). Sometimes we would drop things down the climbing tube just to see them hit at the bottom.

In the fall of the year, the farm had to be "winterized" because once the cold weather arrived it was very difficult to work outside. All of the equipment was fully repaired, lubricated, and put in first class working order. We smeared grease on the plowshares, drained the gas out of the tractor and squirted a little oil in each cylinder, and got everything parked securely in the machine shed ready for winter.

In the mid-1940s the Northways retired to a house in Sherburn, about 15 miles west of Fairmont. I liked to visit there often and often stayed over night. One time in the summer when I was about 14 I decided to ride my bike to Sherburn to stay for a couple of days. My mother did not think that was a good idea but let me do it anyway. Except for the first mile and last half-mile the entire trip was out in the farm country. The sun was hot and the air was still, and I took my time in riding along. The ride took about three hours and being alone was quite enjoyable. I stayed for

a couple of days and then rode back. It was probably dangerous even then but it never occurred to me. Homer and Allena lived out their retirement years in Sherburn. In 1950, they celebrated their 50th wedding anniversary in the Triumph Methodist Church, where I had attended church services with them so many times and where they still had many friends. It was a great event, with perhaps 150 guests.

I always enjoyed visiting Sherburn. The town had been established in 1879 for two reasons: it was a crossing point for the stage coach that ran east and west from Fairmont to Jackson with the stage coach that ran north and south from St. James to Estherville, and it was a water supply station for the steam trains (the locomotives could only go 15 miles between water fills). One of my favorite places to visit in Sherburn was Seifert's drugstore. The key attraction was the soda fountain. They made their own ice cream and made great malts and (ice cream) sodas. They kept the ice cream in a large barn cooled with ice harvested from Fox Lake in the wintertime and insulated with sawdust.

13. The Champine line

The Champine line as we know it started with Louis Champine, my great great-grandfather. Family folklore has it that he was blond and blue eyed. The first reliable information we hear about him is in upstate New York in DeKalb, near a large French colony and near the St. Lawrence River. Here he married Hannah Hewlett and moved to Bowmanville, Canada about 30 miles east of Toronto on the lake. Here he prospered and had six children. That area of Canada fell on hard times, however, and he and his entire extended family moved to Sheboygan, Wisconsin in about 1860. They stayed there a couple of years, and then all moved to Plainview, Minnesota, presumably to purchase some of the very cheap but extremely fertile land that had opened up.

After living in Plainview for five years, Louis's son Charles Samuel Champine (my great-grandfather) left Plainview at age 37 with his wife Lucretia and their children to find new land to farm. We know that the family traveled in a covered wagon pulled by two span of horses. The six children ranged in age from George (my grandfather) who was 13 years old to Winnefred who was one year old. The most popular size of wagons at that time had a box of four feet by ten feet, and we can probably assume that was the size of his wagon. Riding in the wagon was extremely rough and bumpy, so most people preferred to walk.

The distance from Plainview to Lake Belt is about 160 miles, so the trip must have taken about 11 days at 15 miles per day. He must have traveled through a sea of grass that was characteristic of that region at that time: grass that was eight feet high. There were few if any trees, and the travelers could see a great distance. Perhaps a good description of his trip is provided by Ole Rolvaag in his novel "Giants in the Earth". Here he describes a trip of a wagon train as it moved across southern Minnesota just south of Tracy on its way to Canton, South Dakota in the 1870s, a few years after Charles made his trip. The only "roads" were buffalo trails. As a wagon made its way through the eight-foot high grass it would leave a trail like the wake of a boat; as soon as the wagon passed, the grass would close behind it again without a trace. Rolvaag described the situation as follows.

"Tish-ah! said the grass . . . "tish-ah, tish-ah! . . . Never had it said anything else – never would it say anything else. It bent resiliently under the trampling feet; it did not break, but it complained aloud every time – for nothing like this had ever happened to it before… "tish-ah, tish-ah" it cried, and rose up in surprise to look at this rough, hard thing that had crushed it to the ground so rudely, and then moved on."

Martin County had been organized in 1857 when it had a population of 52. The total population of Martin County when Charles arrived was only a few hundred. (For an excellent description of travel in a covered wagon across the Minnesota prairie at that time, see "Little House on the Prairie" by Laura Ingalls Wilder. She traveled across the Minnesota prairie in the mid-1870s as a pre-teen. My grandfather made the trip in a covered wagon with his father Charles Samuel in a few years earlier 1869.)

I am quite sure that Charles knew where he was going because he traveled directly from Plainview to Martin County with his family. On the way to finding land he stopped at the farm of the Livingston family on the shore of South Silver Lake six miles south of Fairmont to inquire about the availability of land for homesteading. The Livingston family provided what information they had, and invited the migrant family to stay overnight in their yard near their log cabin. That same log cabin has been preserved and restored, and now is on display in Lincoln Park in Fairmont. The cabin is 16 feet square and has an overhead loft for sleeping. Charles Samuel arrived in Lake Belt Township, Martin County with his family in 1869. He located land for his homestead two miles east and two miles south of (what is now) Ceylon, about one mile from the border with Iowa. A land office had been opened in Chatfield, Minnesota and the Homestead Act made applicable in Martin County in 1864 allowed settlers to purchase 160 acres of land from the government for $1.25 per acre if they would live on it for five years. Charles Samuel Champine probably purchased his homestead from the Chatfield office.

Soon after they arrived, Charles Samuel took the box of the covered wagon off of the running gear and left his family to live in the box while he took the running gear to Mankato to get some lumber. My great-grandmother Lucretia had to look after the family of seven living in the wagon box in the middle of a trackless prairie with no one around for miles for the several days that Charles Samuel was gone.

Mankato is about 70 miles from the farm, so Charles was probably gone about ten days to two weeks. There were no roads or bridges. When the wagon came to a stream, the lumber usually had to be unloaded, the stream forded, and the lumber reloaded. Lucretia and the children were alone on the prairie for with no shelter but the box of the farm wagon, and with no one around for miles except for Indians. I am amazed at the courage of Charles and especially Lucretia in coming to this new land. I wonder what she thought about during those long nights alone on the prairie, what her fears were for herself and her children, and what her comforts and hopes were. We will never know and can only guess because she left no written record.

In the trackless prairie there was nothing to build with; no lumber, no stones, and no soil suitable for adobe. Therefore the first permanent pioneer homes were sod houses built into a shallow ravine. They used strips of the prairie grass usually 12 inches wide and 3-4 inches thick. Charles Samuel used the lumber to build a sod house in a small ravine where the family lived for a few years. We do not know what his sod house was like, but typically they were about 20 feet by 35 feet. (A real sod house can be seen at Sanborn, Minnesota. It is the McCone 1880 Sod House and is open for inspection. Interestingly, it is only 20 miles east of the sod house that Laura Ingalls Wilder lived in.)

Settlers brought simple tools: a walking plow, a scythe, an axe, a spade or shovel, and a hoe. In addition to farming, the pioneers were trappers and hunters to feed the family. Fortunately, there was abundant game in the area including pheasants, rabbits, fish, ducks, grouse, prairie chickens, geese, and quail. There were also wild strawberries, gooseberries, grapes, plums, and crab apple trees.

Beds were built as wooden frames with ropes stretched across the frames. Corn husks or hay were stuffed in a fabric bag for a mattress. The roofs of sod houses often leaked in the rain, so

the babies were put in the bureau drawers to stay dry. Light at night was provided by a saucer of grease with a piece of twisted cloth for a wick. They gave little light and smelled bad, but they were better than nothing. There was no glass for windows on the frontier prairie, so pioneers used brown paper soaked in grease for windows to let in some light. There were often Indians wandering in the area, and they would sometimes come up to the sod houses and would poke their fingers through the paper windows to see what was going on inside.

One of the first things the settlers had to do was plant the garden for food. They generally planted cabbage, squash, beans, pumpkins, potatoes, carrots, and lettuce. Food was initially cooked over an open fire, and then later on a sheet metal cook stove. Most settlers used twisted grass or buffalo chips for fuel, and we can assume that this family did as well. To get water, they had to dig a well by hand (very dangerous) and line it with stones. They also had to build a stable for the horses, a hog barn, a chicken house, and had to plant a grove of trees. The settlers generally built a root cellar on the north side of the house where it would stay cool. The large amount of work required them to work from sunrise to sunset. After a few years Charles and Lucretia were able to build a "real" house with more lumber.

Figure 18 Lucretia and Charles Samuel Champine

One concern of the pioneers was for the education of their children. Initially, schooling was done in the home by the mothers. In 1849 the Minnesota Territorial legislature passed a law for the establishment and maintenance of common schools. Every township containing not less than five families constituted a school district. These schools were supported by private subscriptions of the local parents with school age children rather than by taxes. These schools were usually small, one room, white buildings measuring 12 by 24 feet. Each school had a tower and a bell, with a rope hanging down to ring the bell. Children walked up to two miles to get to school. School furniture was home made. Each school had a cloakroom in the front and a coal shed in the back. There was also a potbellied stove. The teacher had a desk, a set of maps, a globe, and pictures of George Washington and Abraham Lincoln. There was a water pail, a single water dipper from which all would drink, a wash basin for washing hands, and a coal pail. Winters were difficult because it was hard to keep the schools warm: sometimes ink in the desks would freeze. A strip on land around the school was plowed to serve as a firebreak, as prairie fires were frequent and fast moving.

Desks were nailed to the floor so students could not move them around. Because paper was very expensive, subjects were taught by recitation and rote except for arithmetic and handwriting. The students brought a lunch for noon, consisting usually of home-made bread, sometimes soaked with home-made sorghum or syrup, home-made butter or lard, jelly, a hard boiled egg, and an apple. Sometimes the lunches would freeze in school during the winter. Teachers needed only a seventh grade education, so some of the students were often as old or older than the teacher. Each school day started with pledging allegiance to the flag, reading a passage from the Bible, and saying the Lord's Prayer. Each student was tutored individually, and students usually graduated at age 11-15. To graduate, the student had to pass the State Board Examination, which was quite difficult. Country schools were used in Martin County until 1970. The one room rural school house from District 110 was moved to the Martin County Fair Grounds where it is open to the public during the fair.

Shortly after Charles Samuel Champine and his family established their homestead, a school was built on the north side of his farm near where the sod house had been. There were many Champines in the school (about half of the students) and it was built on Champine land, so it was called the "Champine" school.

The school year was different then. As described by Jeanette Cardwell Champine in the Ceylon Herald newspaper of June 2, 1949 she said that the school year consisted of two three-month sessions each year: one in the fall immediately after the crops were harvested and one in the summer immediately after the crops were planted, in both cases between crops when farm work was at a minimum. Children were an important source of farm labor at that time. Like most others of her generation, she went to school from age seven to age 13, and after that became a full time worker on a nearby farm.

There were no churches in the early days, so religious services were held in various homes each Sunday.

Many of the people in Martin County in the 1920s and 1930s had arrived as pioneers or were children of pioneers. Charles Samuel Champine and his wife Lucretia, shown in this picture taken in the 1910s, are typical of the Minnesota pioneers. This common heritage created a strong bond among them, based on the common experience of arriving on the bare prairie and transforming it into a civilized society. This common bond is exemplified by the obituary for my great-grandfather Charles Samuel as follows, printed in the Ceylon paper at this death in 1919. I find it very moving.

> "Gramp" is dead. The words flew over our little village on Saturday morning as on the wings of the wind. Wherever it touched it left sorrow, and the expressions of sympathy for the bereaved wife and children were many and from the heart.
>
> "Gramp" as he was lovingly known; "Gramp" to all, both young and old had been a familiar figure on our streets and in our village life for the past ten years or more, making his short journeys from his home down town after his mail or other daily wants, stopping a short while to pass the time of day with one and all; he had become one of our accepted necessities, and to think that no more will his cheery voice be heard, that no more will his familiar countenance be seen among us, can not fail to remind each one that life is but a passing shadow and that to each and every one must come the final hour when it will be said " he is gone".
>
> "Death came silently. In the stillness of the night the grim reaper entered the home and touched lightly the aged brow and the eyes which were closed in sleep and the soul of our

friend passed into that eternal rest from which none return. His aged wife was first to discover that he had gone away when she went to call him in the early morning.

"Charles Samuel Champine was born May 12, 1832 in Ontario, Canada of French-American parentage. He lived in the land of his birth through his boyhood and young manhood days, receiving the rugged training, which fitted him for the pioneer life into which he entered in later years.

"On June 4, 1869 he arrived in Lake Belt Township, Martin County, and took up a homestead on what was then virgin prairie. With tireless energy and unbounded confidence in his own ability and in the land of his adoption he carved out a home from the soil meeting many discouragements, many trials, many disappointments, but winning out in the end.

About ten years ago, after forty years residence in Lake Belt, he and his faithful helpmate moved to this village to spend their declining years in peace and quietness, resting from years of toil which had been necessary to develop the smiling, fruitful land of which we are so proud today.

Twelve children were born to call him father and ten of them are living to mourn his passing.

Yes, "Gramp" is gone! Another name is stricken from the every lessening roll of our old settlers, and a solitary woman in the sunset of life and a lonely home is left to attest how sadly they will miss him. It must be so; these tender human ties cannot be severed without a pang. Yet in death there is no cause for grief. His life work was done and well done. He had passed, by fifteen years, his golden wedding day and wearied with life's duties and cares, weary of suffering and waiting, he lay down to rest.

How much this community owes him and such as he. It is impossible to estimate, though it would be a grateful task to trace his influence through some of the more direct channels, to hold him up in these degenerate days, in his various characters of husband and father, of neighbor and friend, to speak of the sons and daughters he has reared to perpetuate his name and emulate his virtues. But it comes not within the scope of this brief article to do so. Suffice to say he lived as he thought; rightly. Not for him our tears; rather let us crown his grave with garlands; few of us will live as long or as well, and fewer yet will the Angel of Death greet with such a loving touch."

My grandfather George was born in November 15, 1856 in Sheboygan, Wisconsin, oldest son of Charles Samuel and Lucretia. He arrived in Lake Belt Township, Minnesota, in 1869 at the age of 13 with the rest of the family. On March 15, 1885 at the age of 29, he married Nellie Bassett, nine years his junior. The picture at the right shows George about the time of his marriage. With Nellie he moved onto the 160-acre farm immediately south of the family homestead that he had bought two years earlier. His father-in-law Ashley Bassett built a new house on the farm for the newly-married couple. There they would build their life and raise their family of five children.

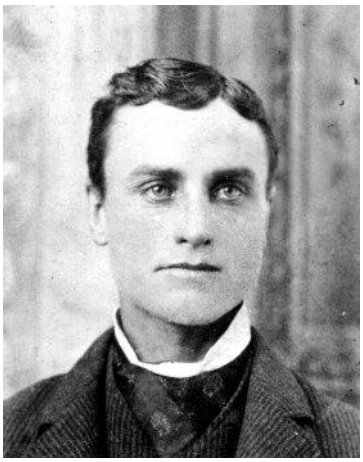


Figure 19 George W. Champine

Nellie was the daughter of pioneer Ashley Bassett. She was born in Wilton, Minnesota (near Waseca) and arrived in Tenhassen Township, Martin County at the age of three months in October 1865 with the family, four years before the Champines arrived. The Bassett farm was in Martin County

in section 34 of Tenhassen Township. Also in the pioneer party were her grandfather William O. Bassett (Civil War veteran) and Uncle Jerome Bassett who settled on adjacent land. Before her marriage, Nellie was a popular schoolteacher in the Tenhassen School in Martin County,

Minnesota. Although I am sure she did not know it, we found out later that she was a descendant of William Bassett, the Pilgrim who arrived in Plymouth MA in 1631 just after the first Thanksgiving.

This picture shows George Champine on the farm in about 1915, with Nellie, Lloyd, and Floyd on the porch. George is driving a wagon, and the windmill that pumped water is in the background.

Much of the farmland in that area is low and flat, so drainage is often poor. Most of George's farm was on a low rise and was well drained, but the part on the west side of the farm was quite low. There was normally a lake in the low area, but it would dry up in dry years. The state dug a series of drainage ditches to make the land suitable for farming on a continuing basis. The initial ditches were dug in about 1905 with horses, and the later ones were dug with an enormous floating steam dredge. George farmed there until he retired in 1925 at the age of 69, except for three years when they lived in Sherburn, Minnesota (1914-1917) so that their twin boys Lloyd and Floyd (my dad) could attend high school.

My earliest memories of my Champine grandparents were when they were retired and living in Ceylon. At that time George was about 85 but was still vigorous. Every day he walked the four miles each way to the farm and back to make sure everything was being done properly. I always

Figure 20 George W. Farm in about 1920

liked to visit there because they lived across the street from a playground where I could go to play. My grandmother Nellie often gave me milk and cookies, and taught me how to work jigsaw puzzles.

My grandfather George Champine had been a good businessman, and had purchased a number of farms in the Ceylon, Minnesota area over the years. Many people failed in farming, either because they did not have the capacity for the very hard work involved or the expertise to succeed. I suspect that my grandfather bought up these failed farms, hopefully at a low price. Later he bought the original 160-acre farm homesteaded by his father Charles Samuel Champine and several other farms. Beans were in big demand by the British Navy at that time. They had very high protein content and could be easily stored for long periods of time. One dollar of seed would yield beans worth $25 if they could be brought to the train. The railroad came through in 1878 opening up eastern markets for farm products for the first time. The value of land went

from $1.25 per acre in 1869 to $20 per acre in 1878. I suspect that those years were good ones to be in farming.

Soon after, my dad acquired the farm in 1940, he purchased an additional 80 acres nearby at a price of $100 per acre. The price of land had gone up because of wartime inflation. Many people thought that the price was outlandish and far above what the land was really worth. He never lived on the farm, but instead rented it on a cost and profit sharing basis. The following picture is from the air and was taken in the 1960s. By that time the large barn and wind mill had been taken down.

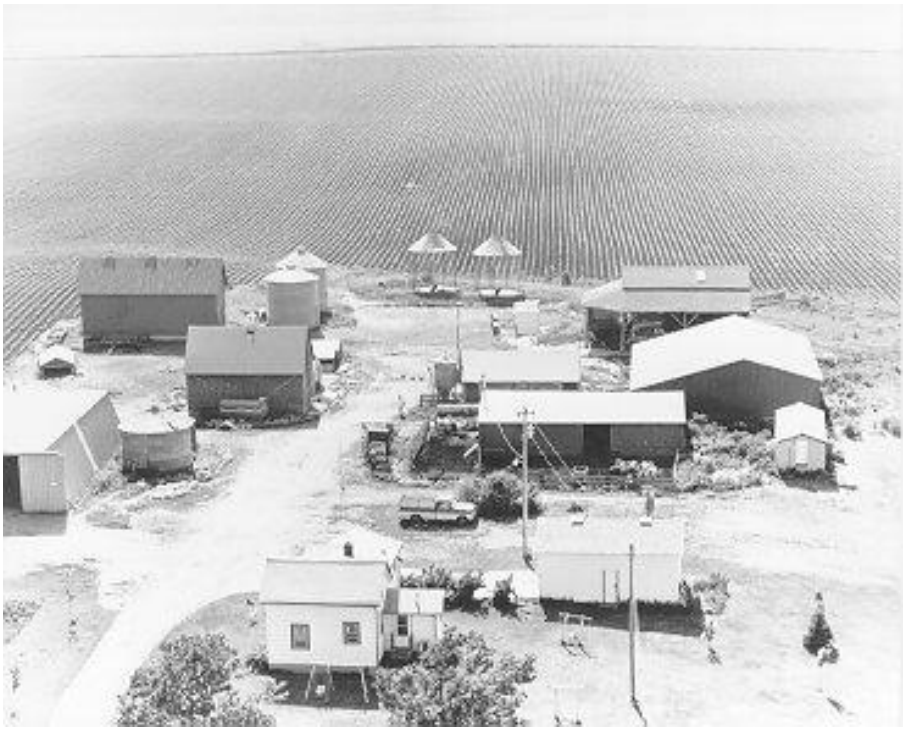


Figure 21 George W. Champine farm about 1960

My dad spent considerable time on the farm improving and repairing things. I often went with him. One summer we spent considerable time cutting down an old grove of trees with an early model of chain saw, and planting a new one. Other times we would paint buildings, repair sheds, fix the driveway, and inspect the crops. On the way down to the farm we would often stop at the Lake Belt Cemetery, which was two miles west of Ceylon and three miles before we reached the farm. My dad would stop to take care of the graves of his parents George and Nellie. I did not realize it but the graves of my great grandparents Charles Samuel and Lucretia Champine were in the same cemetery along with a number of other Champine relatives. Later, my father and mother were buried in the same family plot with his father and mother. Somehow that small cemetery in the country in the middle of the plains always seems very peaceful and comforting.

On the way home from the farm we would stop in the pool hall in Ceylon for some refreshments. We would each have a bottle of pop ("soda" in the east). I would always have Nesbitts orange, my favorite. This would be a special treat because I had less than one bottle of pop in a month. Pop was expensive at 5 cents a bottle. (Now I have one almost every day.)

Another farm where I spent considerable time was the Luedtke farm a few miles or so outside of town. My parents were very good friends of Walt and Thora Luedtke, and I was very good friends with their kids: Bob, Laura Jean, Dolly, and Ann. We visited back and forth a lot as families, and often I would ride my bike out to their farm to visit them.

This picture shows a picture taken at my birthday party in May 1939 when I was five years old. In the picture from the left are Nellie Blanck (later Nellie Oanes), Thora Luedtke, Gladys Mulso, Elsie Ledebur, and Genevieve. Thora and Elsie was some of the best friends of Genevieve.

They were sisters and had been born in Sweden. Thora was born Thora Benson in Smaland Sweden on 1909. Elsie was born Elsie Benson in Dalsland Sweden in 1906. They came to America in 1916 as did many Scandanavians during this time. The little girl in the picture is Ann Luedtke, now Ann Wood.

14. Movies

In the 1930s and 1940s, 65 percent of Americans went to the movies at least once a week. Movies were an important source of entertainment and information about the outside world and had a major impact on people's attitudes and opinions. While once a week may seem like a lot, it was like being able all of a sudden to be able to watch TV for two hours a week. I was typical of this interest in movies. One of the highlights of each week was going to the Saturday afternoon movie matinee. I almost always went to the movies at least twice a week and sometimes three times. I would go to see any movie. The cost of a movie for a child was five cents for the Saturday matinee and 12 cents during the week (including excise tax). There were two movie theaters in town, the Nicholas (which showed high-class movies) and the Strand (later the Lake) that showed "B" movies and the Saturday afternoon matinees. The Nicholas Theater had originally opened in 1902 as the Fairmont opera house, and was later converted to movies. For more information on the Fairmont opera house, see "And The Curtain Rises" by Thomas Arneson published by the Martin County Historical Society in 1988. The Strand Theater had

Figure 22 George's birthday party 1939

opened in 1915 as the movie industry picked up momentum. Usually the Saturday matinee was a cowboy movie.

I usually went to see "B" movies and westerns, as they were the most understandable to a child. Movies that I liked especially well were Gulliver's Travels, Wizard of Oz, Laurel and Hardy, the Three Stooges, Blondie and Dagwood, and all of the Disney animation films including Snow White, Fantasia, etc. I really liked the animated movies, but was lucky to see one per year. (Now my grandchildren see several per day). One movie that I remember in particular was "American

in Paris" with Gene Kelly. I was awestruck by the music and dancing, and must have seen it six or seven times. I still like to watch it on TV and listen to the music.

My favorite cowboy heroes were Gene Autry, Roy Rogers, Tom Mix, and Hopalong Cassidy. The stories always followed the same formula with the good guys winning over the bad guys, but we loved them anyway. Many times every seat in the theater was filled, especially when they showed Laurel and Hardy, the Three Stooges, or Dagwood and Blondie. When one of those movies started, there was so much cheering that the sound of the movie was drowned out. The serial features such as Cat Woman and Buck Rogers were also very popular. Many of us would never miss an episode. Each episode ended in a "cliff hanger" situation where the hero or heroine was in grave danger. The next week they would escape from the danger in a trivial way and get into another serious problem. However, we kids never tired of them and tried never to miss an episode.

Thomas Edison invented practical movies in his lab in East Orange, NJ in 1896. Once out of the experimental stage the movie industry centered on New York where it could draw on the legitimate theater for notable actors and actresses. Most movies were shot out of doors, and the winter weather was a serious limitation in New York. By 1910 some East Coast movie companies were looking at Hollywood CA as a better location. Almost overnight this sleepy little suburb of Los Angeles was transformed into the film capital of the world, and showcases for some of the countries greatest, most glamorous, and most notorious talent. Land was cheap, and a variety of mountains, deserts, waterfront, and urban locations were nearby. By 1916 New York and New Jersey had been abandoned as movie locations. By the mid 1920s people were attending the movies in unprecedented numbers and movie making became the county's fifth largest industry. The first color movie had been made in 1922 using a three-film system, although color was not common until after 1949 when the Technicolor invented the one-film system. The first sound movie was the "Jazz Singer" with Al Jolson made in 1927. It used a giant phonograph record attached to the movie reel with a cable. Synchronization was problematic, and the needle of the phonograph could jump grooves if there was vibration.

Movies improved rapidly, and 1939 was a wonderful year for movies. "Gone With the Wind", "Wizard of Oz", "Snow White" (the first full-length animation film), and "Pinocchio" all came out in 1939. When "Wizard of Oz" opened in New York City, 15,000 people lined up to see it, with the line to get in stretching for seven blocks. When "Gone With the Wind" opened in Atlanta the mayor declared a three-day holiday that included costume balls and parades. These movies still have their same high quality, strong attraction, and look as fresh and appealing as when they were first released. The popular movies dealt with idealism and the best of America. Daily life was so difficult that people wanted entertainment that portrayed what they wanted life to be, not what it was.

The "Wizard of Oz" starred 16-year old Judy Garland (the part had been intended for Shirley Temple, but she was not available). Judy had been born Frances Gumm in Grand Rapids, Minnesota in 1922. My mother-in-law Donna Graham Nelson who also lived in Grand Rapids had been a baby sitter for young Judy when she was performing on stage there. Although small in stature at 4 feet 11 inches, Judy went on to become a giant in movies, but she paid a high personal price for her fame.

Edison's first movie was a "western" called "The Great Train Robbery". It had the standard plot that was followed by every western after that. Westerns immediately became very popular, and the early ones were made with real cowboys and real Indians playing themselves. The first western with sound came out in 1930, four years before I was born. Gene Autry was the most famous of the cowboy actors. He had been born in Texas in 1907, and had learned to ride and

sing at an early age. He became an expert horseman and could actually play the guitar. He made his first movie in 1934, a western, which took six days to shoot (typical in those days). He always played himself in movies and usually did his own stunts with his horse Champion. He became so popular that by the late 1940s he was getting 80,000 fan letters a month. His theme song was "Back in the Saddle Again, and his sidekick was Smiley Burnett. The western was the new version of the morality play that had been popular during the Middle Ages, but with new technology. Interestingly, the women in his movies were usually strong and independent. Overall he wrote about 700 songs, many of which were excellent. During the war he enlisted in the Air Force and flew transport flights in the Pacific.

15. Working

My first job was making boxes in the Sweet Shop at about age seven. My job was to take the flat stock of bakery boxes of various sizes and form them into finished boxes so that the sales people would not have to do it during the busy times. I did this Friday afternoons and Saturday mornings for a "salary" of 35 cents per week. That amounted to about 6-7 cents per hour. I watched the local businessmen come in for their morning coffee on Saturday, exchanging the local gossip. A high point would be when the owner Gus Boosalis would make a chocolate malt for me to drink while I was working. The flat stock for the boxes was stored in the basement where they made the candy. There were usually large amounts of home made candy sitting around in the basement, so I occasionally "augmented" my salary by taking a piece or two of candy when I went to get the boxes.

I thought that 35 cents a week was good money. Every second week I would use the money to buy a "Dave Dawson" hardcover book (at 49 cents). This was a series of books about an American flier and his English buddy Freddy Farmer and their adventures in the war. I thought that the stories were wonderful and I read them avidly. I still have the books and read them occasionally, but they seem a little dated now.

At age nine I applied for and got a paper route with the Minneapolis Star Journal. There were three papers delivered in town; the Star Journal (evening) and Tribune (morning) from Minneapolis, and the Sentinel published locally. My route was in the south part of town around Lake Sisseton and nearby neighborhoods, including Lake Park Blvd., Linden Avenue, Woodland Avenue, and Sisseton Drive. My route included many of the upper middle class people in town. This paper was delivered every evening and on Sunday morning. The cost was 25 cents for six issues of the daily and 12 cents for the Sunday paper, for a total of 37 cents that I collected every Saturday. This provided an income of about $4.00 per week. After taking the money to the bank to be exchanged for bills, I would go to the Woolworth dime store next door to the bank that had an ice cream bar. I would get a chocolate ice cream soda, which cost 15 cents (two scoops of ice cream). I still like chocolate ice cream sodas.

One thing I really disliked (because I was very shy, I assume) was soliciting new orders subscriptions for the paper. The paper company would periodically offer prizes for new subscriptions such as a trip to Minneapolis to see the Minnesota Gophers play football or to take a helicopter ride. Each prize required three new subscriptions, and even though I really did not like to do it I went out to get the subscriptions. Sometimes my parents would learn of people who wanted the paper any way and would tell me about it so that I could get the new subscriptions from them. In spite of not liking it, I got a few helicopter rides and went to see the Gophers once.

After carrying papers for about four years, I took a job in Gunther's grocery store, stocking shelves and sacking groceries. This job paid 50 cents per hour. I worked only Saturdays, from

11:00 to 7:00 without a break and then would go home and have supper. One of my principle jobs was to "candle" eggs. Farmers could bring cases of eggs to the grocery store and get paid for them at market prices. We would candle them, make sure they were clean, put them in one dozen cartons, and resell them to customers. Candling is a process of examining each egg under a light to make sure that they are not hatching, have obvious blood vessels, or some other defect. I would candle enough eggs during the week to last through the weekend so that we could handle the large crowds that came in on Saturday, our biggest day. Another job that I had was sacking candy. My job was to take candy from large bulk sacks and put it in small sacks with labels and price tags. That was a nice job, and I could listen to the radio as I worked and have a bottle of pop once a day or so.

A job that I did not like was sorting pop bottles. Pop came in bottles that could be recycled, but they had to be segregated by manufacturer and put back in 24-bottle cases. During the week the staff would stack the bottles chaotically in the basement, and then when I came in on Saturday it was a huge mess. It could take me all day to sort the bottles and put them in the right cases. It was an awful job, but it was a job.

During this time I also set pins at a local bowling alley. At that time bowling pins were set by hand instead of by machine. This was very hard and somewhat dangerous work that lasted late into the night. Each person set pins for two alleys.

School during this time was not always exciting. Good penmanship was thought to be very important, so we spent hours practicing penmanship using the Pitman method. We "wrote" long lines of circles, vertical lines, and other fragments of letters under the assumption that so much practice would help penmanship. Perhaps it did. We wrote with steel pen tips in a wooden holder. These had to be dipped in inkwells that were in every desk. One of the lucky students got the job of filling the inkwells every day. The ink pen was a difficult instrument to write with because the pen tine would catch in the paper and tear it. The ink also had a tendency to smear and run unless one was very careful. The ballpoint pen would not be invented for several years. When the ballpoint pens first came out they cost $15 each (equal to 100 ice cream sodas) and had very poor writing quality.

16. World War II

I remember clearly the date of December 7, 1941 when the Japanese bombed Pearl Harbor. The adults were very excited about something on the radio. President Roosevelt was talking about "a day that will live in infamy". My dad told me that I would never forget that day. I never have.

Most of the American Pacific fleet was in Pearl Harbor, sitting ducks for the Japanese attack. The airplanes were all clustered together in the middle of the airfield to avoid sabotage, but perfect targets for an aerial attack.

The Japanese attacked the ships and airplanes with great success.

As one example, a bomb hit the forward magazine of the battleship Arizona and caused it to explode. The great ship leapt from the water and its decks exploded open. Body parts and corpses were blown into the air and landed on nearby ships and houses on Ford Island. Men burning like torches jumped into the water and sizzled. There was burning oil everywhere. About 1000 men died.

When the last wave of Japanese bombers and torpedo airplanes had flown away at 9:30 A.M., they left 19 warships sunk including five battleships, and 190 airplanes destroyed. About 3000 military personnel were killed.

The United States declared war on the Empire of Japan the next day.

Looking back on the war, the events are so astonishing that if they were presented as fiction they would seem to be beyond belief; yet they actually occurred.

During the 1930s the United States had allowed the armed service to fall to a very low level of readiness because of a reaction to World War I ("the war to end all wars") and the depression. The army had fallen to a level of 175,000 men, and ranked 16th in the world immediately behind Romania. In the meantime, Japan had been waging war in China and Korea, and the Wehrmacht government in Germany had put millions of soldiers in uniform in defiance of the agreement of surrender after World War I. By 1944 the United States had put 12 million soldiers in uniform, was building 100,000 airplanes a year, and had built half of the ships in the world.

Soon after war was declared, an enormous government bureaucracy was established to draft young men to be soldiers and to put the country on rationing. About 5000 draft boards were established to induct 16 million young men into the armed services. Thousands of young men rushed into marriage to try to obtain a deferment, but to no avail. Nearly all factories were converted to building material for the war, and shortages of almost everything developed. Prices were fixed at pre-war levels on most products in order to prevent inflation. The Office of Price Administration (OPA) was established to limit demand at the established prices and one had to have "rationing stamps" in order to buy those items that were rationed. These items included gasoline, coffee, cars, sugar, tires, shoes, and meat. The amount of goods available under rationing was very limited; for example each person was allowed eight ounces of sugar per week and enough coffee for one cup per day. Each car was allocated three gallons of gas per week. A nation-wide speed limit of 35 miles per hour was established. Of course a black market flourished, and anything could be purchased with sufficient cash.

The government put on periodic campaigns to sell "savings bonds". These had the dual benefit of taking money out of circulation to hold down inflation and borrowing hard money to finance the war that could be paid back later in soft (inflated) money. Because interest rates had been low for years, expectations were low and a bond that cost $18.75 paid back only $25 after ten years. Even school children were encouraged to buy savings bonds. Every Monday the teacher sold savings stamps for 5 cents, 10 cents, or 25 cents. These stamps were put in books, and when enough books were accumulated they were exchanged for a savings bond. I liked the stamps because they had a picture of the Minuteman statue at the Old North Bridge in Concord, MA. I never thought that I would see it, but after I moved east 35 years later and lived near Concord I saw and appreciated the statue many times. Each time I remembered the savings stamps that I had purchased so many years earlier.

There were also periodic scrap paper drives and scrap metal drives all over the country for the war effort including Fairmont. All metal that was not being used was donated to the scrap drive as a patriotic duty; this even included the Civil War cannon and cannon balls on display in Sylvania Park. These scrap drives were highly successful. In 1944 alone 7 million tons of scrap paper and 18 million tons of scrap metal were collected nation-wide.

Because many foods were in short supply, everyone was encouraged to plant a "victory garden" to grow as much of their own food as possible and to reduce the load on the national transportation system as much as possible. During the war forty percent of the vegetables consumed in America were raised in victory gardens. Most people in Fairmont did in fact plant victory gardens. A large plot of land east of town was set aside for people, and a local farmer did the plowing for the entire plot with a tractor. The plot was subdivided, and anyone who wanted a garden was given an allocation of land. Of course everyone knew how to garden because of the rural environment.

The war effort impacted all aspects of life to a great extent. In the summer when we wanted to take a trip, the roads even in Minnesota were clogged with large military convoys moving from one army camp to another. We also had a number of air raid drills at night, where everyone had to turn out all of the lights and "prepare" for an air raid. The entire town was organized into areas, and every area had an air raid warden appointed. Of course the enemy did not have airplanes that could get within 1000 miles of Fairmont, and there was nothing worth bombing there, but the population was ready anyway. The war was exciting for a seven-year-old. There were a lot of articles published about the American war effort. I was especially interested in the warplanes, and learned to recognize most of them in pictures. One of the best airplanes developed for the war was the P-51 Mustang, built for the U.S. by North American Aviation to a British design and specifications. It could fly at altitudes up to 41,000 feet at speeds up to 440 miles per hour and had a range of 2400 miles. This was an amazing accomplishment for an airplane with a piston engine.

In the spring of 1939 Germany invaded and captured Czechoslovakia and in the fall invaded and captured Poland. In 1940 the Germans had invaded the neighboring countries of Holland, Austria, Belgium, Norway, Denmark, Netherlands, Luxembourg, and later France, often without firing a single bullet. President Roosevelt spent most of 1940 and 1941 trying to involve America in the war with Germany to protect Eastern big business interests in Europe. Yet America was in an isolationism mood and wanted nothing to do with yet another European war.

In Germany, Hitler was enormously popular. In his earlier years as Chancellor he had corrected the large unemployment problem, greatly improved public services such as the trains, and returned economic prosperity to Germany. His invasion of the neighboring countries was very popular. The persecution of the Jews was also very popular even though they made up slightly less than one percent of the population.

16.1. The Air War in Europe

The Germans began massive and unmerciful bombing of all of the major cities in England in 1940. The Germans had excellent airplanes, with engines built by BMW and Daimler Benz (builder of the Mercedes automobile). With airports in France, the Germans could have fighter escorts for these massive bombing raids against England only 30 miles away across the English Channel. The Royal Air Force (RAF) put up a great defense but was unable to stop the German raids even though an entire generation of young British pilots was killed in the process. The only thing preventing the invasion of Britain was radar, which had been invented only shortly before and which had been deployed in a massive effort to defend Britain.

Of particular note was the bombing of Coventry in 1940. By early 1940 a group of several thousand British scientists had broken the German secret code (see "The Ultra Secret" by F.W. Winterbotham for more details) and knew of the planned bombing of Coventry. However, if the British put up a massive defense the Germans would know that the code was broken, so Winston Churchill made the decision to provide only a token defense of Coventry. The city was nearly destroyed, including the famous Coventry Cathedral that burned to the ground. The Germans would receive much worse bombing and destruction five years later. After the war a new cathedral was built next to the burned out one, which was left as a memorial to the foolishness of war. I visited the cathedral in the summer of 1994. I was strongly moved by the sight of the burned out cathedral and the needless destruction that it symbolized. The new cathedral next to it is magnificent.

Starting in early 1942, America began building a massive air force in England. It created the Eighth Air Force, whose mission was strategic bombing of Germany. The Eighth Air Force grew

to become the largest air force ever developed. It operated entirely from within the United Kingdom from 100 airfields that it built. At peak strength, the Eighth and Ninth Air Forces had 400,000 men and 11,500 aircraft. While the Royal Air Force bombed during the night, the Eighth Air Force used B-17s and B-24s to bomb during the day, facing massive German fighter attacks and ground-based anti-aircraft fire (flak). The flights required extreme endurance, with high altitude flights in unheated and unpressurized cabins, deafening noise from piston engines, constant vibration, and temperatures about 40 degrees below zero. The P-47 fighter was used to escort the bombers on the flights to Europe, but it did not have sufficient range to protect the bombers all the way to the targets. Luftwaffe fighters would wait for the bombers just beyond the range of the P-47s, and when they turned back the German Air Force would move in for the kill. The American losses were massive. On some missions, 25 percent or more of the airplanes were shot down. The chances of an aircraft crew member living to complete a 25-mission tour of duty was about 30 percent.

Later, the P-51s was put into service, which could escort the bombers all of the way to the target, and losses were cut significantly. Nevertheless, 26,000 American flyers were killed and 21,000 were shot down and became prisoners of war. The average bomber was in service 147 days before being shot down or scrapped because of too much damage. Over 6500 B-17s and B-24s were lost, as were over 3300 fighters.

Towards the end of the war, the Allies gave up on trying to bomb specific targets and began to carry out "carpet bombing" of cities, trying to destroy civilian morale.

The Allied bombing campaign of Germany targeted most of the large cities, causing massive destruction and loss of life. An example is Dresden, bombed on February 13 and 14, 1945. Dresden was a 700-year-old city called the “Florence on the Elbe” because of its great beauty. The bombing started so many fires that they fed on each other and created winds that caused a massive “fire storm” that burned the entire city. About 35,000-40,000 people died on the night of the bombing and the city was totally destroyed. The same thing happened in Frankfurt.

(In the 1970s I visited Frankfurt. I was astonished to find that there was absolutely no sign of war, and the city appeared to be very old. There is, however, a large hill just outside of the city. When I asked what it was, I was told that it was the rubble from the bombing, and that the city had been rebuilt to be exactly as it had been before the war.)

There were some who thought that Germany could be defeated by air power. They were wrong. At the end of the war, German war production was still increasing. It would take a land invasion to defeat Germany.

Over 30,000 Allied aircrew members were killed in action. The world had never seen air combat like this, and never would again. The story of the Eighth Air Force and the air battle of Europe is preserved in the Eighth Air Force museum in Savannah, GA. It is an amazing place!

The German bombing of England continued with the V-1 guided ramjet missiles and the V-2 guided ballistic missiles. Werner Von Braun was probably the leading rocket scientist in the world at that time. He had been born in Germany in 1912. He had started experimenting with rockets as a teenager. At the age of 20 he was made part of the German rocket design team. Two years later he was the leader of the team and decided to move the effort to a remote location in northern Germany called Peenemunde. When World War II started they had finished designing and testing the V-1, a 27-foot subsonic ramjet (airbreathing) powered airplane. Many thousands of the V-1s were launched against London. The guidance system was extremely primitive, however, and they impacted all over southern England, causing enormous damage to the civilian population.

Von Braun and his team went on to design and test the V-2, a true rocket. The first version was successfully tested on October 3, 1942 and had a range of 120 miles. Thus was born the world's first successful ballistic missile. The production of the V-2 increased steadily during the war and wreaked an enormous amount of damage and terror in London. The V-2 caused a huge explosion on impact because of its large payload. It arrived without warning because it traveled faster than sound. It could not be intercepted with anti-aircraft guns or fighter airplanes; there was no defense.

During the last six months of the war Germany launched 3745 V-2s at London with increasing success and by the end of the war they were building 900 V-2s a month, mostly with slave labor from the concentration camps. With the Russians approaching Peenemunde, the base was closed on March 27, 1945. During the last days before the fall of Germany, the Americans had offered the German missile scientists asylum in America if they would help the American missile design effort. They were living in the part of Germany being conquered by Russia, so the Americans had to sneak them out. The team including Werner Von Braun slipped out of the base and reached Bavaria and the American forces. The German team was eventually taken to Huntsville, Alabama and directed to put America in the rocket business. The German scientists quickly adapted to Huntsville and they built large homes on one of the hills in town. They brought a substantial amount of culture and education to Huntsville in keeping with the northern European tradition.

The Americans were far behind the Germans and Russians in rocketry, but the German team changed that quickly. On October 4, 1957 the Russians launched Sputnik, launching the space age. It weighed 184 pounds. On January 29, 1958 the German team under Von Braun launched the first American satellite.

Years later around 1967 I got involved in the proposal of the development of a weapon system computer for the Army Missile Command in Huntsville. We wrote a proposal and went to Huntsville, Alabama to discuss it with the Army. One evening while we were there the company sponsored a cocktail party. Werner Von Braun came to the party and I had a chance to talk to him for a while. He was about 55 years old but he looked like someone 20 years younger with very smooth skin. I remember that he was witty, articulate, intelligent, cultured, and thoroughly charming.

16.2. Henry Kaiser and the Liberty Ship

By late 1942 the German fleet of about 200 subs had sunk 1600 Allied ships with enormous loss of life. In those cases where there were survivors, the Germans were very careful to pick up the survivors and to treat them well in accordance with the Geneva Conventions even if it put the German ship at risk. Also in 1942 a dozen German subs were attacking ships near major American East Coast cities, sinking a million tons of shipping in a few months. American aid to England came to a standstill, and without massive American aid, England was defenseless as it was cut off from all other sources of supply. At one point England had food for only a couple of weeks. If England ran out of food and fuel Germany could invade almost unopposed.

The American answer was the Liberty ship and Henry Kaiser. The Liberty ship was a simple, almost primitive, ship design optimized to be built in large numbers. Henry Kaiser was a 60-year old unknown American industrialist looking for a new career. He acquired ship yards in California and Oregon, and within three months his yards were building a Liberty ship every 40 days, an astonishingly short time. He later was able to reduce the time to build a ship to 17 days and then to seven days. He was able to defeat the Germans by out-producing them, building a total of 6000 ships. (Later he tried to go into the automobile manufacturing business in

competition with General Motors and Chrysler. Although he beat the Germans he could not compete with GM and Chrysler and he failed in this business).

16.3. War and the Home Front in Fairmont

The war was a popular topic for the movies. There were probably a couple of war movies a month or more. When the Germans were represented as speaking German in the movies, they always spoke English (without subtitles) with a German accent. Many of my friends thought that the German language was English with a German accent. When we played "war" the kids playing the Germans always copied the movies and spoke English with a German accent.

In about 1943 my dad went to Charles City Iowa for a two-year electrical contracting job. A tractor factory there was being converted to defense work, and our friend Charles Draper of Mankato had won the contract for the electrical work. He in turn subcontracted much of it to my dad. I remember that it seemed liked he was gone forever. I wrote him a number of letters and life seemed to be incomplete without him around.

In later 1942 and early 1943, tens of thousands of German prisoners of war (POWs) were being captured in North Africa and elsewhere. They were flooding into England, but soon exhausted all resources there. The British government asked the Americans if they would take the POWs. America agreed after some hesitation, and eventually built 666 camps in 44 states to house 500,000 POWs, mostly German. The Germans had been convinced through Nazi propaganda that most of America had been bombed into ruins, and they were quite surprised to find out that nothing had been damaged.

In order to try to obtain good treatment of American POWs in the hands of the Germans, the German POWs in America were treated extremely well, to the discomfort and even outrage of American citizens. These German soldiers that had been recently killing American soldiers had to be given their national foods such as pig's knuckles, wurst, and black bread. The officers could not be required to work (although many volunteered to) and the enlisted men had to be paid the prevailing wages of the area. The Germans were very interested in cultural activities, and organized groups for learning sculpture, musical instruments, and studying great books. With approval from the German government, the POWs were allowed to take correspondence courses from 103 American schools and receive full credit from the German university system. Some POWs called their camps "der goldener kafig", or the golden cage. Less than one percent tried to escape and there was only one organized attempt to do so. After the war, between 1948 and 1960, 360,000 Germans immigrated to American, many of them ex-POWs.

Although most of the POW camps were in the south, Fairmont also housed about 600 prisoners. They were housed on the fairgrounds in the 4-H hall and in barracks built on the east edge of town. They were well educated, highly skilled, and very cooperative. I remember seeing them in their uniforms with "POW" in large letters on the back. They worked on the farms and in the canning factory, replacing the many men that were serving in the armed forces. I remember being vaguely afraid of them, although they looked just like everyone else in Fairmont except for their uniforms.

The invasion of Europe started June 6, 1944. As a ten-year-old I did not really understand the significance of the event, or the massive scale of the operation. It was the largest organized effort ever undertaken in the history of the world, and it was under the command of a former farm boy from Kansas named Dwight Eisenhower. About 3.5 million soldiers had been training in England for up to two years. The invasion, called "Operation Overlord", involved the use of 7000 ships to ferry 250,000 soldiers, and 50,000 tanks, trucks, and other vehicles across the

English Channel to Normandy beach. There were also 18,000 paratroops dropped behind enemy lines. About 100,000 soldiers were killed on both sides during the first few days of the invasion along with countless numbers of civilians.

I remember following the progress of the Allied army in the newspapers as it moved through Europe. I was glad that we seemed to be winning. In fact, many people were hoping that the war would be over by Christmas. All of a sudden the Germans launched a massive counterattack on December 16, 1944 in what came to be called the Battle of the Bulge. They had secretly massed 250,000 troops and 1000 tanks near the front, and suddenly attacked the American four divisions of 83,000 troops in the Ardennes near Bastogne in Belgium. The Germans surrounded Bastogne and a large number of Americans in it, and used a terrific artillery barrage to flatten the town. Hitler sent all available troops into the battle. There was a week of snow and then the temperature dropped below zero. It turned out to be one of the worst winters in European history. About 15,000 American soldiers went to the hospital with frozen feet. Gen. George Patton rescued Bastogne the day after Christmas. The wounded were patched up and sent immediately back to the battle. The fatally wounded died where they fell, froze, and were collected like cordwood. The ground was frozen so that foxholes could not be dug and no one could be buried. All of the villages in the battle area were completely flattened to the earth. Ultimately the Americans put 500,000 men into the battle, mostly 18-22 year old new recruits just out of high school (battles are always fought by 18-22 year old men). By the time the battle was over in late January 1945 the Americans had lost 16,000 soldiers killed and 60,000 wounded or captured, and the Germans perhaps twice as many. These numbers seem large except by comparison with the 25 million Russians that were killed in the war. I mention these figures because of the huge numbers of people involved. It seems impossible now.

I remember in the invasion of Italy at Anzio, and later the battle of Monte Casino in particular. The Germans and Italians had dug in at a monastery called Monte Casino high up on a mountain. The Allied forces did not want to destroy the monastery but in the end had to bomb it into total destruction. The battle raged for a month before the Allies final won in the end. About 30 years later, in the early 1970s, I was doing some sightseeing south of Rome, and by accident I came across the town of Anzio and the enormous cemetery of American soldiers there. All of the head stones are white and lined up in perfect military precision. The sight of the cemetery made a lasting impression on me, and brought home forcefully the ultimate sacrifice paid by these brave Americans scarcely out of their teen years in most cases.

The war in Europe ended in May 8, 1945, just about a year after the invasion of Europe. The Germans had invented ballistic missiles long before anyone else and were systematically destroying London. They invented the jet airplane before the British (although the British had invented the jet engine in 1930), and were well along to building the atomic bomb. If the war had lasted another year the outcome might have been very different.

16.4. The War In the Pacific

Japan had been waging a war of territorial acquisition in Asia since 1931 when they invaded Manchuria. They subsequently continued the war in China. In 1937 they invaded Shanghai and inflicted civilian and military causalities in the hundreds of thousands. There were widespread descriptions of the atrocities committed by the Japanese during and after the invasion of Guam, Wake Island, and Hong Kong (December 1941), Singapore, (February 1942), Dutch East Indies (March 1942), Philippines (May 1942), Indochina, and others. These included the slaughter of 200,000 innocent civilians in Nanjing even though the retreating Chinese army put up no

resistance. There were reports by eyewitnesses that when the Japanese army captured a hospital they would immediately bayonet all of the patients including the ones on the operating table.

The Japanese enslaved large numbers of Korean teenage girls as "comfort women" prostitutes for the Japanese army. They used innocent civilians in inhumane experiments in biological and chemical warfare. The subjects used in these experiments were called "logs" as a cover. Japanese Unit 751 in China routinely infected innocent civilians with cholera, typhus, plague, and other diseases to develop biological warfare weapons. Experiments on the limits of human endurance under torture conditions were carried out, and a number of subjects were frozen and then thawed out to test the limits. Unit 751 also dissected live human subjects without anesthesia. Estimates of the number of Chinese killed in this war range up to 30 million.

(Japan denied all of this until 1995. On August 15 on the 50th anniversary of the end of World War II, Prime Minister Tomiichi Murayama finally admitted to these things based on "irrefutable facts of history" and apologized to the world on national television for Japan's conduct during the war.)

Japan had been buying large amounts of American oil and steel to support its war machine in Asia. In 1940 America stopped shipments of these materials because of opposition to the Japanese conquests. In order to bring America under control and restart the shipments of oil and steel, the Japanese under the command of Admiral Yamamoto developed a plan for "Operation Z", a sneak attack on Pearl Harbor. They believed that this daring attack would cripple and destroy the American will to fight and thereby win a quick and favorable settlement. The Japanese carried out the plan for "Operation Z" on the morning of December 7, 1941. They were wrong about the resulting effect. The surprise attack galvanized the American people as nothing else could have, and resulted in the greatest united effort ever undertaken in the history of the world.

Later, some people (including some Americans) charged that America started the war with Japan by cutting off the supplies of oil and steel, thus forcing Japan to defend itself by attacking Pearl Harbor.

The same day that Japan attacked Pearl Harbor they also attacked the American base in Luzon in the Philippines. The American military command in the Philippines knew of the attack on Pearl Harbor, but they never believed that Japan would attack the Philippines. They were wrong. The Japanese Zeros caught most of the American airplanes on the ground at Clark Field near Manila parked wingtip to wingtip and destroyed most of them. The Japanese immediately invaded the Philippines. General Douglas MacArthur, commander of the American forces, quickly retreated to the peninsula of Battan, which was better suited for defense. The American and Philippine forces fought valiantly for four months until their food and ammunition ran out. In the end they were fighting on 1000 calories a day and with equipment from World War I. They were told that supplies were on the way, but they never arrived. In the end the forces in the Philippines were abandoned and sacrificed to pursue the war in Europe. General MacArthur was ordered to leave the Philippines in March 1942, and the remaining forces surrendered April 9, 1942. Most of the men had lost 40 pounds of weight and suffered from malaria and dysentery.

The Japanese forces marched the Filipino-American troops 65 miles north. The prisoners were in no condition to walk, but the Japanese prodded they along anyway. If a man could not keep pace, he was shot, bayoneted, or beheaded. In one typical case, an American soldier fell by the side of the road in a malaria seizure. A Japanese tank came down the road, and swerved to the side to run over the soldier. In the end more than 600 Americans and 10,000 Filipinos died during the week-long march which because known as the "Bataan Death March".

The Death March was only the beginning of the long ordeal. In the prison camp the soldiers endured three years of constant beatings, torture, beheadings starvation, and disease. If someone tried to escape, that person and ten others were required to dig their own graves, and then they were shot in the back of the heads and toppled into the graves. There were countless cases of gratuitous and meaningless torture.

The above abstract description of the Battan Death March is made more real by the eye-witness description of a Minnesota boy, Philip Brain, who lived through it. The following are his words as recorded in the magazine "Minnesota" published by the University of Minnesota Alumni Association March-April 2002. Philip was the son of Philip Brain Sr. who was the University of Minnesota's tennis coach and official photographer for the Gopher football team. Philip Jr. graduated from the U of M in 1939 with a B. A. in Physical Education.

Philip joined the army in April, 1941 and was sent to Clark Field in the Philippines near Manila. The following are his words.

"At 12:25 P.M. on December 8 – which because of the time difference was December 7 in Hawaii – the Japanese wiped out all the aircraft at Clark Field. We retreated to Bataan and were soon ordered to cut our rations to two meals of rice a day. One month later, our rations were cut to one meal of rice each day. We were sick and starving and resorted to eating anything that moved, including monkeys and lizards.

"On the morning of April 9, 1942, I was awakened by the jab of a Japanese soldier's rifle butt and told to fall in line with the other captured soldiers. During the five-day Death March to San Fernando, men who were too sick or tired to keep up, or who tried to break rank to get water from the wells that we passed, were shot or bayoneted and left where they fell. When we reached San Fernando, we were packed into small, steel boxcars. The heat was unbearable, and many men died.

"Eight hours later, those of us still living climbed out and began a march to Camp O'Donnell, which consisted of a few buildings, no latrines, and just one water faucet. About 55,000 prisoners would eventually reach Camp O'Donnell. More than 1,600 men died during our first two weeks the; more than 4,000 died during the first two months. During the day we had two jobs: digging latrines and burning the dead.

"Many of the men I helped to bury were my friends, and I began to build a shell around myself. I shut our all emotions. I didn't want to get too close to other prisoners, because I knew they would probably die.

"Prisoners were organized in groups of 50, and when an American prisoner escaped during a guerilla attack, the Japanese commander gave an order to shoot all prisoners who remained in the group.

"Eventually, 500 of us were sent by prison ship to the island of Mindanao, where we worked on a farm in a penal colony deep in the jungle. I got malaria and ended up in the hospital. After working in the rice fields at Mindanao for 20 months, I was put on a prison ship and sent back to the island of Luzon. If I had a choice, I would have taken three death marches to one prison ship trip. The Japanese crowded us into the cargo hold of a small freighter, where the temperature reached 120 degrees and many men died. We would pass their bodies up to the deck, and the Japanese would throw them overboard. We reached Japan in September 1944 and were sent to work in the copper mines on the northern end of Honshu.

"On August 15, 1945, when we lined up to march to the mine, we noticed that we had new guards: kids with no weapons. They said, "No mine today", so we went back to the barracks..

We didn't know what to think. Later that day they told us that the war was over and that America had surrendered.

"We left camp September 13 and boarded the hospital ship "Hope" in Sendai. I weighted 68 pounds when I got on the ship (down from a normal weight of 170 pounds).

Today, the primary legacy of the American war in the Philippines is the American Cemetery in Manila where 17,000 American soldiers lie buried beneath mango trees and bougainvillea.

It is difficult to adequately describe the intense hatred of the Japanese that was present in America in the 1940s. This hatred came from the above reports of atrocities inflicted on civilians and prisoners, as well as their wartime behavior, including the surprise sneak attack at Pearl Harbor, the Battan death march in the Philippines, and the barbaric treatment of prisoners of war with seven times the death rate experienced in Europe. It continued later with the kamikaze (suicide) attacks against American ships, where a Japanese airplane loaded with high explosives would deliberately crash into a ship. These kamikaze attacks damaged or sunk 115 American ships, and caused a large number of deaths and serious injuries. The stories in the newspapers said that the Japanese willingness to do this was based on the low regard for human life and the honor to die for the Emperor and for the greater glory of Japan. Much of this hatred was directed at Emperor Hirohito and Prime Minister Tojo. The newspapers promoted this hatred through the widespread use of caricatures.

If anything, the British hated the Japanese even more than the Americans. British citizens had taken the brunt of the Japanese capture of their Far East colonies including Hong Kong and Singapore and had seen the atrocities first hand. Of the 42,000 British taken prisoners, 12,000 died of starvation, disease and torture. The Japanese used British and Dutch war prisoners to build the 260 mile "Death Railroad" across Thailand which included the famous "bridge over the River Kwai". Of the 61,000 Allied war prisoners used in building the bridge, 16,000 died as did 100,000 Asian prisoners out of 300,000.

Whereas the Germans usually treated prisoners of war according to the Geneva Convention, the Japanese felt no such obligation. On a number of occasions, the Japanese navy picked up American survivors of battles at sea. After interrogation, the Japanese would fasten heavy weights to the ankles of the prisoners and throw them overboard.

The Japanese under Admiral Yamamoto decided to capture Midway Island on June 3, 1942. They had the dual objectives of finally destroying the American navy, and of using Midway as a base from which to bomb Hawaii. They committed essentially the entire Japanese navy of 160 warships including four mammoth aircraft carriers. The Americans had 76 ships. However, 30 days earlier the Americans had broken the Japanese secret code and could anticipate their tactics and location. The Battle of Midway was one of the largest and most important of the war. American naval air power inflicted irreparable damage on the Japanese fleet and decimated the Japanese naval air squadrons. The Japanese navy never won a major battle after this defeat, and the Americans never lost one.

The war in the Pacific continued after the invasion of Europe as a war of attrition, with very bloody battles in the Mariana Islands, Iwo Jima, Guadalcanal, the Philippines, and Okinawa. For example, in February 1945 the Americans were flying daily bombing raids on Tokyo and other large Japanese cities from Saipan and Tinian islands. Iwo Jima was in the flight path about half way, and Japanese fighter planes were shooting down the bombers. The Japanese had a high performance fighter airplane called the "Zero" built by Mitsubishi (who later built the "Colt" automobile for the Chrysler Corp.) that was taking a heavy toll in American casualties. The Zero had high performance because it had no armor (human life had no value). It therefore was very

fast and maneuverable, in contrast to the American airplanes that placed a high value on the life of the pilot and therefore had extensive (but heavy) armor.

The decision was made to take Iwo Jima to stop the Japanese fighters and to provide an emergency airfield for the American bombers. The island is five miles long by 2.5 miles wide. The Japanese had made the island into a fortress, with 650 concrete pillbox bunkers and other fortifications. The pre-invasion bombardment by warships did little damage. About 60,000 Marines invaded on February 19. In the five-week battle, 23,000 Marines were killed or wounded. From time to time the Japanese would attack the American lines in a "banzai" charge where the Japanese soldiers would mount a suicide charge (often pointless) against the American lines without regard for loss of life. The Japanese displayed a willingness to fight to the death. In the end the Americans had to go from bunker to bunker with flamethrowers to defeat the Japanese who never surrendered, even to the very end. Of the 22,000 Japanese soldiers, only 1000 survived.

In April 1945, the three-month battle of Okinawa began. The Japanese mounted a large number of kamikaze attacks on the American forces both at sea and on land. In the end, about 7,800 Japanese aircraft were destroyed along with most of the Japanese navy. In the last hours before the final defeat, most of Japanese generals committed hara-kiri (ceremonial suicide). The battle resulted in the deaths of 12,000 Americans and 100,000 Japanese soldiers.

With the war in Europe over, planning began in earnest for the invasion of Japan. The movement of about one million soldiers from Europe to the Pacific was begun. The plan was to invade the southern tip of Kyushu, the southern-most island in Japan, with about 600,000 soldiers, about twice the size of the invasion of France. The Japanese also built up their forces and planned to have an army of two million soldiers to meet the invading Americans on the beach. It was assumed that the Japanese would continue the same suicidal tactics that they had used so extensively in Okinawa and Iwo Jima. The date of the invasion was set for November 1, 1945. Meanwhile, the bombing of Japan continued, with about 300,000 civilians killed during the summer of 1945 and most of the larger cities reduced to ashes. Hiroshima had been spared, however.

America won the war in Europe and had brought Japan to its knees by overwhelming its enemies with its industrial output. By the end of the war, America had built 300,000 airplanes, 2.5 million trucks, 87,000 ships, and 6 million tons of bombs.

16.5. The Advent of the Nuclear Age

German research in physics in the 1930s showed that an atomic bomb could be built to exploit a chain reaction to achieve large explosive power. The atomic bomb that resulted from this research would have an enormous impact on the world and would also have a very strong influence on my future. The activity and publicity surrounding the atomic bomb influenced me to become a physics major in college. My first job and the first ten years of my professional career were spent working on the anti-ballistic missile defense system made necessary by the atomic bomb and intercontinental ballistic missile delivery systems. Although I did not work as a physicist, I have always been very interested in physics including teaching it at Hamline University as an Adjunct Professor for several years.

In August of 1939 Albert Einstein wrote a letter to President Roosevelt warning him about the German research and development towards an atomic bomb and recommending an all-out U.S. effort to do the same. A year later Roosevelt established a committee to look into the matter and to make recommendations. Another year later in November 1941 the committee reported back

that the bomb was probably feasible. Ten days later the Japanese attacked Pearl Harbor. Another year later (December 1942) Roosevelt authorized the "Manhattan Project" to develop a bomb based on this technology. After wasting three years, the Manhattan Project was an enormous effort using more than 160,000 workers at 37 top secret labs and plants around the country. The physicist J. Robert Oppenheimer was appointed to lead the design effort in a new laboratory created in a remote part of New Mexico called Los Alamos. The work was completed in the utmost secrecy, and three bombs were constructed. The "trinity test", the first test of an atomic explosive device, took place on July 16, 1945 near Alamogordo New Mexico and was a stunning success.

Only three weeks later on August 6, 1945 a B-29 bomber named the "Enola Gay" dropped a uranium atomic bomb on Hiroshima with about 20 kilotons yield, instantly killing 70,000 Japanese and starting the nuclear age. The Russians, who had never declared war against Japan, did so two days later on August 8 and invaded Manchuria. A second atomic bomb (this time plutonium) was dropped on Nagasaki on August 9 killing 40,000. (Later an additional 230,000 died from radiation effects of the two bombs). The Americans carried out a 1000 airplane firebombing attack on Tokyo on August 14, 1945 and on the same day Japan surrendered with the requirement that Emperor Hirohito would remain on the throne. The decision to drop the atomic bombs had been made by President Harry Truman. He wrote later that the atomic bomb had shortened the war by months or years and had saved 500,000 American lives. Winston Churchill later wrote that the bomb saved one million Allied lives.

(Much later, others proposed different reasons for dropping the atomic bombs. These include: ending the war quickly to limit Russian claims in Asia, racism, and providing political justification for the cost of the development of the bombs.)

Fairmont hosted its largest parade ever on August 1, 1946 to celebrate the end of the horrible war and the homecoming of the soldiers and sailors. About 20,000 people crowded into the town of 5,000 for the celebration.

The atomic age was widely believed to provide a panacea for many of America's needs. The power companies forecasted that electricity generated by atomic power would be so cheap that there would be no need to meter it. They were very wrong.

Development work on nuclear weapons continued aggressively and the first thermonuclear device (based on fusion of deuterium) was exploded on November 1, 1952 on Eniwetok atoll in the Pacific. It had a yield of 10 megatons, about 500 times that of the Hiroshima bomb. It dug a crater about 3000 feet deep and produced a fireball three miles in diameter. The Russians detonated their first thermonuclear device nine months later based on information stolen from America.

The war changed America forever in very fundamental ways. Before the war very few people had traveled; during the war 15 million civilians relocated, half of them to different states. The unilateral disarmament and isolationism of the 1930s were rejected as failed policies, and America became the policeman of the world, leading to the "cold war" that lasted 45 years. The enormous national government bureaucracy put in place to run the war became a permanent "big government "fixture. After the war there was tremendous inflation caused by very large national debt to pay for the war. During 1944 alone the cost of living increased 30 percent. I remember the shock that I had when the price of hamburgers doubled (from 5 cents to 10 cents). Inflation has continued to this day. By 1990, money had decreased in value by about a factor of 12. Whereas a bottle of pop or hamburger cost five cents in 1942, they cost 60 cents in 1990. Most other things scaled the same way. Nevertheless, Americans were far more affluent after the war than before.

The GI Bill was established paying for the four-year college education of returning war veterans; eight million returning veterans took advantage of the program. This caused an enormous influx of veterans at colleges starting in 1946. Colleges had to embark on a crash building program immediately, and the surge of veterans was only beginning to subside in the fall of 1952 when I entered college at the University of Minnesota. I had classes in many of the temporary wooden buildings that had been hastily constructed in the late 1940s.

The Marshall Plan was established to rebuild Europe (including Germany) and Japan. Years later I got to know and work with many Japanese and Germans. I found many similarities between the two societies, as they are both highly educated, highly disciplined and have authoritative, regimented societies. I came to admire their personal discipline, high standards of conduct, goal orientation, and organization.

17. A Trip To Minneapolis

I made the trip from Fairmont to Minneapolis (or the return) many times, always going through Mankato. The sequence of towns is forever in my memory. Starting with Fairmont, there is Lewisville, Truman, St. James corner, Madelia, Lake Crystal, and then Mankato. The towns are spaced at about 10-mile intervals, probably because that was the limit of convenient travel with a horse.

Mankato was the nearest "big" town, about 50 miles north with a population of about 35,000. My dad had to go there periodically to get electrical supplies, and I would often go with him. Mankato is interesting because it is located at the "elbow" of the Minnesota River, where the river makes a sharp corner and changes directions from flowing southeast to flowing northeast. South of Mankato about four miles is Minneopa Park where Minneopa Falls is located. This is the only waterfall in southern Minnesota that I know of, and we would usually stop in the park to look at the falls on the way to or from Mankato. The falls are always beautiful, but were especially spectacular in the spring with the large flow of water, with the water falling 40 feet over two falls. Although I did not know it at the time, Minneopa was the site of the last battle between the Sioux and the Chippewas.

At Mankato, the road descended into the Minnesota River Valley and followed the river through St. Peter to Le Sueur. There the road climbed a steep hill up and out of the river valley. In the old days the cars had difficulty getting up the hill and would often over heat or would be forced to take the hill in low gear. In winter the snow would make the roads so slippery that it difficult to climb the hill. Today cars fly up the hill at 65 miles per hour without a thought, and instead look at the big sign of the "Jolly Green Giant" who lives in the Minnesota River Valley. Continuing on to Minneapolis, there is Belle Plain, Jordan, Shakopee, Savage, Burnsville, and Minneapolis.

I have always had fond memories of Minneapolis. When I was young, a trip to Minneapolis was always a very memorable event. One trip, probably in the mid 1940s, was to go to the Radio City theater. That was the heyday of the large movie theater modeled after Radio City in New York. The theater was one block south of Dayton's (at 9tht and La Salle St.) and was built like a palace with a multi-story lobby decorated in the art deco style of the 1930s when it was built. There were a number of live stage acts along with a movie. I remember one stage act, the Ink Spots, which was a popular male black quartet of the 1940s that sang close harmony. Whenever we went to Minneapolis we liked to eat at the Forum, a large cafeteria decorated in art deco style. It was great fun to select what food we wanted, and we probably always took more than we should have. Another favorite place to eat was the Nankin restaurant (still there). We had no ethnic food at all in Fairmont, and it felt very exotic to be in a Chinese restaurant and eating Chinese food.

On another trip to Minneapolis with the Luedtke family made in the early 1940s, we went to Dayton's to do some shopping. Dayton's was the "best" department store and was in the middle of the Minneapolis loop. It had high quality products, an excellent selection, reasonable prices, and excellent service. You could always be confident of quality and price when shopping at Dayton's. We kids spent the entire time riding the escalators from the first floor to the top floor and down again—it was one of the most fun things we had ever done.

In my late high school days we went to the Minneapolis Aquatennial summer sports celebration. I especially liked the parade, which was spectacular. I also liked the synchronized swimming and water ballet. At the end of the summer, the Minnesota state fair was always wonderful. It was huge, with an enormous number of exhibits, every kind of food that can be imagined, the best midway rides I have ever seen, and a great grand stand show.

One of my favorite places to visit in Minneapolis was (and is) Minnehaha Falls. We would approach the falls from the downstream side, looking up at the water falling 54 feet. The falls were especially full in the springtime and very beautiful. We would climb up to the top and look at the statue of Hiawatha holding his bride Minnehaha, made famous in the Longfellow poem "The Song of Hiawatha". Many years later, to celebrate one of the greatest achievements of my life (in my opinion), I decided that the thing I wanted to do most was to visit Minnehaha Falls. The date was May 5, 1975. That morning I had taken my final oral exam for my Ph.D. and had been told that I passed. After six long years of work I had successfully completed the required work and had earned the degree (much to the astonishment of my advisor since I had worked full time all six years I was going to school). My wife Barbara picked me up after the exam and we drove to Minnehaha Park and the falls. She took a picture of me sitting on the bridge at the base of the falls. I look very tired

18. The "ECHO"

The "Echo" was the high school newspaper that had been started in 1928, and was put out twice each month during the school year. The advisor for the Echo was Larry Krause, who taught journalism and world history. I got interested in the Echo in the fall of 1949 when I was a sophomore, and helped out with the mimeographing at the request of the editor Jeff Coult. One of the problems that we had was with the assembly of the paper, in particular the stapling of the pages together. Jeff and I thought about the problem for a long time and then built a foot operated stapling machine that aligned the pages, positioned them properly, and then inserted two staples. This machine greatly speeded the operation. When I was a junior, the co-editors of the paper, Jim Fancher and Betsy Degan, asked me to be in charge of the mimeographing, and we had a team of 2-3 people including Jack Pollei and Jim Johnson to help. We used a mimeograph machine built by the A.B. Dick Company, which was state-of-the-art in 1950. We had to type and draw on "stencils" to create a plate, and then place the plate on the mimeograph drum. The drum was filled with ink and printed through the stencil onto the paper. Sometimes the ink would run out of the machine and make a big mess, but it did the job.

Towards the end of my junior year, Jim and Betsy asked me to be a co-editor the following year along with Patricia (Pat) Maday. I knew that the paper was a lot of work, that it was published every two weeks and every issue was a small crisis due to the volunteer nature of the people working on it. I agreed to do it however, and enjoyed the experience, although it was indeed a tremendous amount of work. The part that I enjoyed the most was writing editorials and feature stories. The part I enjoyed the least was getting people to do the work and in managing the activity. I still feel the same about these kinds of activities. Nevertheless I learned some very

important lessons in working with people and motivating them. The thing that I enjoyed the most, however was writing, and this interest has stayed with me through my entire life.

Staffing was always a problem. I was fortunate to find a very capable girl, Barbara Nelson, who was a junior, to be the feature editor. She was the daughter of one of the industrial arts teachers, Harold Nelson, whom I had had as a teacher for mechanical drawing and later for shop (industrial arts). She was extremely well organized, intelligent, and dependable. I recommended her to be editor the following year and four years later I married her.

As the 1940s came to an end, another important event added substantially to the quality of life in Fairmont: we got a radio station. KSUM started broadcasting in 1949, 1030 on your (AM) radio dial. The communications age had come to Fairmont..

19. 1950s

The 1950s were times of enormous change in America and in Fairmont. All of the latent changes that started in the depression of the 1930s and the war of the 1940s suddenly took effect. There was unprecedented stability and optimism about the future. The enormous consumer demand that had been unfulfilled in the depression of the 1930s and the war of the 1940s generated an era of unprecedented prosperity. Whereas Europe and Asia were still trying to recover from the ravages of World War II, America was the strongest and richest country on earth. It had half of the world's wealth, half of the world's production, two-thirds of the world's machinery, and three percent of the world's population.

Drive-in theaters were becoming popular around the country, and in 1950 the Family Drive-in opened in Fairmont on highway 15. We teenagers enjoyed it very much as it was a great place for dates (entertainment and privacy) and for meeting friends. During the intermission we would meet many of our friends in the refreshment stand and could exchange stories about how many kids were able to sneak in the trunk or under a blanket in the back seat. Later when we had children we would put the kids in their pajamas, make a large tub of popcorn, and head for the drive-in in our station wagon. The kids would fall asleep in the back of the station wagon on blankets and we parents could watch the movie in peace. Later we would drive home and carry them into bed without them waking up.

The start of the 1950s marked the start of the "Oil Age", where petroleum became the primary source of energy for America. America had enormous reserves of oil, and cheap oil became a primary source of prosperity and a high standard of living for Americans. In 1949 coal provided two-thirds of the world's energy; in 1971 oil provided two-thirds of the world's energy.

On June 25, 1950 the Republic of North Korea crossed the 38th parallel and invaded South Korea, well equipped with Russian armaments. Three days later they took Seoul. Following World War II the American army had been steadily reduced in size and by this time had shrunk to less than 600,000 men with very outmoded equipment. Because the American army in South Korea was not prepared for the invasion, the American National Guard had to be called up (including several of my high school classmates) and sent immediately to the front. The National Guard was promised three months of training in Korea before combat. When they got to Korea things were so bad that there was not time for training and they were put into battle in a day or two with no training. In many cases a 17-year-old high school student who had enlisted in the National Guard for a few extra dollars went from the classroom to the battlefield in less than 30 days and many of them were killed in the savage fighting.

19.1. The Canning Factory

When I turned 16 (1950) I left my job at Gunthers Grocery and applied for and got a job at the Fairmont canning factory with the help of my high school science teacher Mr. Shaw. The canning factory was one of the major employers in Fairmont. Because of the seasonal nature of the work it employed large numbers of students and farm wives who could work on a flexible basis. It processed large amounts of corn and peas, and to a much less extent beans and carrots. It initially canned vegetables. In the 1920s it experimented with freezing vegetables, and when it shipped frozen vegetables to a customer in 1929 it was probably the first in the country to do so. It continued to develop frozen food technology and was to ship large amounts of frozen vegetables. One of the major customers was Bird's Eye Frozen Foods, and they had a number of private labels also. The refrigerators used ammonia as the cooling fluid (Freon had not been invented), and periodically it would leak, causing an evacuation of the building. Although ammonia is extremely toxic and dangerous, we were glad to get the break from work. Refrigerated trucks and railroad cars were not generally available in the early days, so the frozen food was shipped cooled with ice harvested from the lakes. One summer there was a very large corn crop in the Fairmont area, and the canning factory processed 15 percent of all sweet corn in America.

My first job paid 62 cents per hour and was gluing shipping boxes on a frozen pea packing line. For the first couple of years I had to work night shifts in order to get work. I would come home at dawn and watch the sunrise over the lake before going to bed. It was beautiful. The upstairs of the house would get very hot in the Minnesota summers, and I can remember waking up bathed in sweat many times. Before long I was asked to get involved in lab work doing time and motion studies, and then subsequently running machines to remove thistles from peas. Later I was involved in the quality control lab testing the quality of the corn and peas. These were jobs that required some level of skill and paid about one dollar per hour.

One of the jobs I did was testing the moisture content of corn samples. The moisture content was used to determine the quality of the corn and determined the rate of pay for the farmers. I sat in a dark room with Jeff Coult, a schoolmate who was 3-4 years older than I was and went through the cycle of squeezing corn juice into a refractometer to measure the sugar content of the corn, cleaning and drying the instrument, recording the results, and then preparing for the next sample. We processed about one sample per minute for 12 hours a day, seven days a week except on the rare occasions when it rained and the corn could not be harvested. Since the work was quite routine, we talked about many other things. Jeff was going to Harvard, majoring in anthropology, and he passed the time telling me about college and about Boston. It never occurred to me that I might actually visit Boston some day or ever visit Harvard.

I continued working at the canning factory through college. Because the work was agricultural and seasonal, there were no limits on how much one could work. We often worked 90 or 100 hours a week and I could earn $1000 in a summer, which was enough to put me through a year of college (when supplemented by working part time during the school year). I also worked with a lot of my friends from high school— Darrell Weinman, Glen Personius, Jim Fancher, and Gene Myers. Unfortunately it did not allow much time for fun.

When it did rain and we got time off, Gene Myers and I would go water skiing with Bob Zemke, but that was rare. Bob had a boat capable of pulling skiers, so it was at this time that I learned to water ski. As soon as I could get up and stay up reasonably well on two skis, I learned to get up and ski on one ski, which I believed to be much more fun. Water skiing was the most fun thing that I knew. The wind in my face, the speed, the mobility, and the freedom were wonderful. Later when I had my own boat I bought a large fiberglass water ski from Sears that had a loud

flowered pattern. I liked the ski because it had a lot of lift and I could pop out of the water on one ski without much trouble. The ski was so unique that it became well known and many people liked to use it for the same reason.

A bunch of us would often take a break from work around 10:00 P.M. and climb up on the roof of the factory to eat a small snack. The view of the heavens from there was always spectacular. I remember vividly one evening when we saw great curtains of faint green light glowing in the heavens. It was a display of the northern lights.

If we got out of work early (like 9:00 P.M.) a bunch of us would get in a car and go to a drive-in. The drive-in was a uniquely American institution and was the forerunner of fast food restaurants. Customers would drive up to the restaurant and park. A "car hop" waitress would come out and take the order, generally hamburgers, hot dogs, chicken-in-the-basket, shrimp-in-the-basket, french fries, (ice cream) sodas, malts (called "shakes" in the east), or root beers. A major attraction for teenage boys in addition to fast food was the cute carhops, and we had much discussion as to which of the carhops were the cutest. We often went to the "A&W" drive-in. Their specialty was root beer. One of my favorite foods was a root beer float, which was a tall soda glass filled with root beer and topped off with a scoop of vanilla ice cream. When the order was ready, the carhop would bring it out on a tray that clipped to the car window. Working so many hours we were chronically fatigued. Sometimes when we went to the drive-in we would get silly and have laughing spells (or maybe we were just silly). The sight of one person laughing would set off everyone else laughing, and the whole process would amplify itself. We also like to go to the Dairy Queen to get soft ice cream.

19.2. Wiring houses

No industry had suffered more than housing during the depression and during World War II. Housing starts fell from one million per year to 100,000 per year. During and after the war the marriage rate and birth rate had increased sharply. As soon as the soldiers started returning from the war the housing situation became a crisis. Some 50,000 people were living in Army Quonset huts. In Chicago, 250 used trolley cars were sold for use as homes. My future wife Barbara and her family were impacted by the housing shortage during this time. They lived in a trailer house, behind a drive-in, on a farm in a spare building, and other similar places because of the shortage.

After the war the government provided easy money for house mortgages, and the house building industry grew rapidly. In 1944 about 110,000 new houses were started; by 1950 1.7 million new houses were started. The housing boom hit Fairmont also, but at a smaller scale. Several contractors started to build "commodity" houses, and my dad did the electrical work for many of them. He needed a helper, so I went along often to help. My jobs were to drill holes, nail up switch boxes, pull wire, and install outlets and switch plates. Everything had to be done by hand as there were no power tools; for example every hole had to be drilled by hand with a brace and bit. To join wires we had to solder them together using a pot of solder heated by a blowtorch. It was interesting to see how houses were put together.

I suppose that he would have liked me to follow him in the electrical business, although he never said it. However, from the time I started high school my interest was in science, and I never had any real interest in being an electrician.

19.3. The Prom

One of the biggest social events of the school year was the junior-senior prom. For weeks before the prom people would keep lists of who had invited whom to go the prom and it was the major

topic of conversation. For my first prom I did not have a girl friend and even though I wanted to go I waited until the last minute to ask a girl. I finally asked Doris Fitz, a girl that I knew from band. For the senior prom the next year, Mort and I double dated. I took Barbara Nelson (my future wife) and Mort took Emma Lou Hand. Mort's girl friend (and future wife) Shirley Edwards had already graduated and therefore could not go. The next day the four of us went to White Water State Park for a picnic. There was a spectacular view from the top of the hill. On the way home the water pump on Mrs. Mondale's old Dodge failed and leaked out all of the coolant. It took some time to find a gas station to get it fixed, but we finally got home.

20. 1951

Some time around 1951 I saw TV for the first time. It had been available since the end of the war in 1945 in the big cities, but there were only a few TV sets in Fairmont. The only way to get a signal was to erect a large antenna on top of a very tall tower, perhaps 40 or 50 feet tall to try to get the signal from Minneapolis. Even at that the signal was very weak, with a lot of "snow", and with a very fuzzy black and white picture. Nevertheless it was a link to the outside world, and therefore it attracted a lot of interest. Within a couple of years the sets got better and one could get a reasonable picture with a "rabbit ears" antenna. In November, 1951 Edward R. Murrow started his new TV program called "See It Now". On screen came a live shot of the Atlantic Ocean, followed by a live shot of the Pacific Ocean. Suddenly, no place on earth, no important event, no notable person was farther away than a TV set. Although we were not to get a TV set for several years, other people in town had them and on important occasions they had "TV parties".

Until TV, we had entertained ourselves by reading, playing cards such as Bridge or Canasta, or playing board games such as Sorry, Chinese checkers, or Monopoly. We also went to concerts at the high school or in Sylvania Park. TV changed all of that and we became a nation of spectators (although well-informed spectators). David Brinkley, Chet Huntley, and John Chancellor brought news of the world to us. A young "attack reporter" named Mike Wallace made a name for himself by interviewing important people and asking them embarrassing questions. The era of the "big band" was coming to an end, but one big band made the transition to TV very successfully: Lawrence Welk. Lawrence had been born in North Dakota in a strongly German community and he had a German accent throughout his life. His TV show was a musical variety show with singers and dancers. We always watched it and still enjoy the re-runs.

In the spring of about 1951, some of my friends and I decided to take a camping trip to Itasca State Park. We were not really sure where it was except that it was in northern Minnesota, but it sounded like an interesting place to visit. We went in two groups: I went with Jim Fancher and Mort Mondale, and the other group was Darrell Weinman, Jim Coult, Colin Searle, and Jim Plorde. We gathered the tents, utensils, and other camping equipment and started off. On the way to Minneapolis we finally took a good look at the map and saw that Itasca was quite far north from Minneapolis. It took most a day to get there, but it was well worth the effort. The Mississippi River is only about 12 feet wide as it flows out of Lake Itasca, and we took quite a few pictures in the area. We also did quite a bit of local exploring. We found some ranger towers that we climbed to get a better view. The last night we took down all of the tents and packed everything in the car so that we could get an early start home the next morning. We slept in our sleeping bags on picnic tables. I woke up in the middle of the night with a raccoon sitting on my chest.

21. 1952; Graduation From High School And Starting College

Graduation day from high school approached, probably the biggest event of my life to that point. I did not have money to have a class picture taken as all of my friends did, so Mort Mondale and I took our own and developed them in our darkrooms. I am afraid they were not of "professional" quality, but they seemed to do the job. We got the announcements of graduation and sent them out, and I bought a class ring. At $18 it was a lot of money but I really wanted to have one.

I graduated from high school in June 1952, ranking fifth in my class of 120. My class was the smallest of all, being composed of "depression babies". It was smaller than the one before it or the one after it. I was coming from an environment that was safe, self-contained, stable, isolated, and without much if any future. The opportunities that I had, if I stayed in Fairmont, were to go into the electrical contracting business with my dad, or perhaps work on the farm. Those options had never interested me. I looked forward to college, perhaps without really knowing why, but perhaps to escape from the lack of opportunity in Fairmont. Most of my friends and classmates also went to college, probably for the same reason. (Minnesota has always had the highest percent of high school graduates that go on to college in the country; 88.6 percent in 1990). My parents had never encouraged me to think about college, and I was unaware of anyone in the family that had ever gone to college. I knew that my parents had no money to assist me financially, but I also thought that I could earn my way through. I worked at the Canning Factory all that summer to earn the $1000 I would need for the coming year in college. During my senior year in high school, every "event" was special because it was the last—the last high school football game, the last high school dance, the last high school baseball game, etc.

The values that I took with me were the small town values that I had been totally immersed in for my entire life. They were essentially the Boy Scout values of hard work, individual responsibility, honesty, truthfulness, and education. It never occurred to me that one should try to manage a large number of people, because I did not know anyone who had managed a large number of people. It never occurred to me to try to make a lot of money. No one I knew had ever made much money and to do so never occurred to me.

These values were to stay with me for the rest of my life. At the time I left for college I did not know what an engineer was or what an engineer did. I did not know what a manager was or did; I had no role models for either of these, and yet I would spend all of my professional life doing this work. The only role models I had were "individual contributors" such as a lone farmer working in a field, a scientist working alone in a laboratory, and a tradesman working alone wiring a house. This is in contrast to managers who create teams and manipulate others who do things. Unfortunately the world in which I spent my professional career was one in which everything is done in teams, and the rewards of the system go to managers rather than to individual contributors.

While people thought it was important to save money, it never occurred to me (or anyone else) to invest money. The banks paid 3 percent interest and seemingly always had, so the compounding of interest did not amount to much, and there were no other ways to invest money that we knew of.

The transition to engineer was made easier in that engineers are very much like farmers and I was very familiar with the farmer role model. The two occupations are similar in that they are both "doers" who accomplish things directly as opposed to "talkers" who accomplish things through others.

I looked forward to starting college at the University of Minnesota in Minneapolis. On Sunday, the day before going off to college, I spent the entire day just walking around Fairmont visiting all of the places that meant so much to me and that I loved so much. In September 1952 I set off for college and the great unknown. I really hated to leave but was excited by the next major adventure in my life. Moving to the big city of Minneapolis was very exciting for a small town boy like me. I had been there only a couple of times in my life before going there for college. As it turned out, the adventures and rewards were far beyond my wildest imagination.

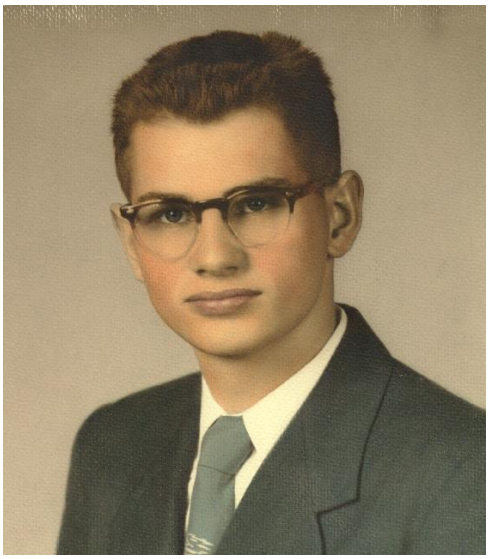
Few of my classmates ever returned to live in Fairmont after college because of the lack of employment opportunities. Like them, I had to find employment elsewhere; in my case in St. Paul.

The settlement of the Minneapolis area had all started with Fort Snelling. Fort Snelling had been established in 1819 at the confluence of the Minnesota River and Mississippi River. The Minnesota River is substantially larger than the Mississippi at the confluence and years later I would live in Burnsville on a high bluff looking out over the vast valley of the Minnesota River a few miles upstream from the confluence. Minneapolis had been founded some years after Fort Snelling as a few huts at the head of navigation of the Mississippi River at St. Anthony Falls.

The University began instruction in 1869 (the same year my ancestors arrived to farm the prairie in Martin County). The University (which everyone called "the U") was the largest and most important college in the state, and I never considered going elsewhere. In 1952 when I started college it had a student population of about 25,000 and tuition was about $60 per quarter. There was still a shortage of housing from the war. Quonset huts were used for married student housing, and several of my friends lived in them. The University straddles the Mississippi River near the east edge of Minneapolis only a mile from the border with St. Paul, and the dorms were immediately adjacent to the river. The Mississippi is only a few hundred feet wide there, but it flows through a deep and scenic gorge.

At the time I was there the campus was only on the east bank 100 feet above the river, with nothing on the west bank except houses. I found the campus to be very beautiful. The design for the campus was done by Cass Gilbert in 1907, who had also designed the state capitol building in Minnesota. It has a wonderful mall starting at Northrop Auditorium and extending south to Coffman Student Memorial Union. Stately buildings in the Greek revival style border the mall, and I especially liked the older buildings such as Pillsbury, Nicholson, the library, and Burton. It seemed strange that the campus would be embedded in the city; I had always envisioned a college as being out in the country.

One of the nice things about being in the city was the proximity to "Dinkytown". Dinkytown is a small shopping area adjacent to the campus that caters to students. I often went to Gray's Campus Drug just to look around, and to Bridgeman's ice cream bar across the street. I also liked to go to the Varsity theater on the rare occasions that I could afford to go to the movies. I came to like to listen to the university radio station KUOM, and listened to it always until we left Minnesota permanently in 1980. One of the things I did when I started college in 1952 was to have a picture taken by a professional photographer, shown here.



The first two quarters at the University of Minnesota were difficult for me. One reason is probably because

Figure 23 George Champine in 1952

I had not had to work very hard during the last two years of high school. The change from a high school of 1000 students to a college of 25,000 was also a major transition. The environment in high school had been very supporting, with a great deal of close guidance and constant reminders of what to do. At the "U" the environment was "sink or swim", with an enormous mindless bureaucracy and little or no personalized help or guidance for the student (it is better now). Another reason was the "weeding out" policy used with freshmen. Like many of the large land grant universities, the "U" had a policy of easy admission, and then rather ruthless "weeding out" during the first year. While this policy is rather controversial even today, it has two major advantages. The easy admission policy is quite egalitarian in that talented people who do not do well in high school for whatever reason get another chance to succeed. The weeding out process avoids unduly burdening the upper classes with students that will not graduate. I remember clearly sitting in an orientation session a few days before class started, and hearing the speaker tell us to look at the persons sitting to the right and to the left. He said that only one of the three of us would graduate. He was right. Many of the people I started class with dropped out after a quarter or two, deciding that college was not for them.

One of the popular weeding out courses was physics. Physics majors (which I became in my second year) took physics based on calculus as a sophomore, in contrast to non-majors who took it as freshmen without calculus. The class met one hour per day for five days a week, with one of the days an hour-long test. We put the answers in blue books and turned them in at the end of the period. The department hired graduate students to grade the tests, and they were returned in bins a couple of days later. The tests were quite effective in weeding out many of the students who lacked the personal discipline to learn the material. Although I found the study of physics quite challenging and the weekly tests quite a burden, I really liked it very much. It answered many of the questions I had always had about the nature of the physical world. I was astonished at the outstanding success of differential equations in representing the physical world.

Two of my physics teachers were Alfred Nier and Edward Ney. Nier had been instrumental in showing that uranium 235 was fissionable and could power an atomic bomb. Later he did much of the pioneering work on the invention of the mass spectrograph. Ney had been a student of Nier in 1940 and subsequently became a physics professor at the U. in 1946. Ney became a leading researcher in astrophysics. He pioneered the use of high altitude balloons to measure cosmic rays. Whereas Nier was a relatively straightforward teacher, Ney was somewhat of a wild man in the classroom and in his research. His lectures were filled with wisecracks and anecdotes from his research. Both of them later became professors emeritus. Later I was one of the test graders hired by the physics department. I got very good at grading physics tests.

I lived in the Pioneer Hall dormitory for the first year (fall of 1952), rooming in the Ireland House with my high school classmate (and distant relative by marriage) Glen Personius. There were no coed dorms at that time. The second year I moved across the street to Centennial Hall, where I lived in an individual room until I got married in March of 1956.

Minneapolis was not a prosperous city in 1952, and looked much different from today. There was no Dudley Riggs Coffee Shop and Theater (he had just graduated with me from Fairmont High), no large Holiday Inn, no supercomputer center (computers were only six years old and the supercomputer had not been invented), and no new and beautiful public library. At that time the wheat and flour milling business had been in decline since the 1930s, and had not been replaced with any new industrial base. The Seven Corners area near the university was a near-slum, and Washington Avenue from Seven Corners to Hennepin Avenue was an unbroken string of dives, mostly cheap bars, flophouses, and pawnshops. There were usually a lot of bums and panhandlers along the street there. I often walked from the dorm to Hennepin Avenue because

that was the center of the theater and entertainment district, and would stay as far away from the bars as I could and still stay on the sidewalk.

In those days there was still a vaudeville theater in Minneapolis on Seventh Street across from the bus depot called the "Alvin". It had fallen on hard times but was famous because it had a strip tease act. Some of us guys in the dorm went a couple of times, but the show was not that worth while. The tallest building in the city by far was the Foshay Tower at 35 stories (it now looks small among the newer and much higher buildings).

First Avenue North also was very different from now. It was a row of run down warehouses; there was no Butler Square with its yuppie shops, and no Target Sports Arena. The Greyhound bus depot was at the corner of Seventh Street and First Avenue North, and served to anchor that end of the street.

Minneapolis still had streetcars and an extensive trolley system in 1952, with 1000 streetcars and 500 miles of track. The Twin City Rapid Transit (TCRT) system, which had started in 1907, provided very efficient public transportation, although the streetcars sometimes blocked traffic momentarily. The streetcars were custom-designed for the Minnesota climate, were heated by coal heaters, and had a large platform on the back. That way passengers could be quickly loaded on the back platform, and the streetcar could be in motion while the passengers found seats. The streetcar carried 48 passengers and weighted 45,000 lbs.

The last Sunday before I had to start class at the university I rode the trolley from Hennepin Avenue to Lake Harriet. The trolley was relatively slow, but I did not care because I had plenty of time. The late September sun was warm and air was crisp with autumn on the way. We finally got to Lake Harriet. I walked around the lake for a while, and then took the trolley back, having enjoyed the afternoon immensely. The next day class started and immediately I was way behind in my class work. Although the TCRT system had a nation-wide reputation for superb maintenance and service, the streetcars were phased in 1954 and replaced by diesel buses. (About 44 years after they were phased out, I stumbled across a Lake Harriet trolley in the Seacoast Transportation Museum in Kennebunkport, Maine. It was in excellent condition; even the cane seats were in good shape, and advertisements from the 1920s were still there. It brought back many pleasant memories.)

After starting college, I worked in the dormitory kitchen because of the convenience. With that money plus what I could earn in the summer I could put myself through college. I earned all of the money that I needed all the way through college except for $50 that I got as a bookstore scholarship. Initially I washed pots and pans at noon, and later poured fruit juice and other beverages at breakfast so that I would have the work out of the way for the day. It was very convenient because the cafeteria was in the same dorm building as my room. I appreciated very much not having to go outside to get to the dining room, especially in the winter and especially for breakfast. Later I did many kinds of odd jobs to earn a little extra money. For a while I read books for a blind student. He listened intently as I read, and he also recorded what I said on his tape recorder. Later I also tutored a football player in physics and was paid by the Athletic Dept. Unfortunately the football player never did learn much physics. I was the one who graded papers for the physics class that he took. I have always wondered if the Athletic Dept. hired me to influence the grades I gave to the football player. If so, they failed to accomplish their objective.

For the first two years, I signed up for the Reserve Officer Training Corps (ROTC) in the Army. I did not want to take time out from college to go into the army, and by joining ROTC I was automatically deferred from being drafted. I could drop out of ROTC any time in the first two years without any further obligation (and be immediately drafted), so I had little to lose except

the class time. I signed up for the ROTC marching band because I could get out of some marching drill.

My roommate Glen Personius was born in Fairmont in the Hunt Hospital, and lived south of town in Silver Lake Township on South Silver Lake. He graduated with me and also decided to attend the U to major in aeronautical engineering. He also signed up for ROTC but he chose the Air Force. He had to agree to go into the Air Force immediately after graduation, but he got a salary and other benefits. He went into the service immediately after graduation and spent 20 years there in a truly impressive career. He was commissioned in the Air Force in 1957. He completed F-86 and B-52 training and served in the Strategic Air Command as a B-52 pilot from 1960-1965. He graduated from Air Force test pilot school in 1966 and worked in flight test at Wright Patterson Air Force Base until June of 1968. He flew the Zero G airplane for astronaut training during that time, and then served in Vietnam, flying over 200 combat missions. After Vietnam, Glen served three years in flight test with the Canadian Forces before returning to school for an MS degree in Aero Mechanical Engineering. He then became director of flight test for the advanced tanker program, went to Air Force headquarters in the Pentagon, and retired from the Air force in 1979. Glen still lives in Silver Lake Township where he grew up. I wonder what Glen (and I) would have thought if someone had told us what his future would be, in our room in the Pioneer dorm in 1952. We could not have believed it.

After two years in ROTC (in 1954) I decided that I did not want to commit to going into the Army, so I dropped out at that time. The Korean truce had been called on July 27, 1953 after 54,000 American soldiers were killed and 100,000 were wounded in action.

21.1. 1954: Changing Majors

By 1954 I decided that I did not want to work as a chemist or chemical engineer as a life's work. College chemistry is very mathematical; in addition chemicals are noxious and dangerous, and I did not relish the thought of spending the rest of my life in a smelly chemical lab. I briefly considered chemical engineering, but decided to change my major to physics. Physics was very much in the news in those days because of the development and use of the atomic bomb only eight years before. In the mid 1950s there were widespread forecasts that atomic power would provide electricity at a cost so low that there would be no need to meter it. However, I did not think much about what I would do with physics as an occupation after I graduated; I took it mostly because I enjoyed it.

I very much enjoyed the beauty of Minneapolis. The University was on the bank of the gorge of the Mississippi, which was very beautiful. Minnehaha Park was one of my favorite places, made famous by Henry Wadsworth Longfellow in his poem "Song of Hiawatha" and the story of the Indian maiden Minnehaha. The falls in the park are very beautiful, especially in the spring. The statue at the top of the falls of Hiawatha holding his bride Minnehaha in his arms is both beautiful and romantic. Minneapolis is also famous for its parks and lakes. Lake Calhoun and Lake of the Isles are very beautiful, but my favorite has always been Lake Minnetonka, about 15 miles west of the city and one of the largest lakes in the state.

In about 1954 I first tasted pizza. There was only one place in the city that had it—Totino's on East Hennepin Avenue. Barbara had come up from Mankato for a football game and was with me the first time we went. They made it in large flat pans in the oven. It was very spicy and there were additional spices on the table. It was love at first bite.

About this time I volunteered to become a writer for the college Engineering magazine called the "Technolog". This magazine was a rather uninhibited magazine that carried a number of good

technical articles of interest to Engineering students and it also had the dirtiest jokes that its editors thought they could get away with. I wrote several articles for them over the next 2-3 years and enjoyed it very much. One of them was an article on Univac computers in the November 1957 issue. I was very interested in computers and hoped that someday I could work with them. Little did I know that they would be the basis of my entire professional career.

22. 1956: Graduating And Getting A Job

In early 1956 I was looking forward to graduating with a degree in physics, and wondering what to do. I made the decision to continue on in the physics area through a master's degree, so the immediate need was for a summer job. I checked out the local possibilities, and found there was a relatively new company called Engineering Research Associates (ERA) that was in the computer business that might be a possibility. Some of my classmates had worked for them and had given them good reviews. Also, Barbara's cousin Dick Nelson was in the Personnel department there. After learning what I could about their business so I could talk intelligently to the people I would talk to, I applied for an interview, first for a part time job during the Spring quarter, and then hopefully for a summer job. The people that I talked to were in the process (I found out later) of building the world's first airborne computer.

22.1. Univac; The First Computer Company

The Univac company where I would spend the first 22 years of my professional career had two roots: the parent company called Univac that specialized in commercial computers located in Philadelphia, and the ERA company specializing in military and scientific computers located in St. Paul. John Vincent Atanasoff had built the first electronic digital computer at Iowa State University in Ames, Iowa in 1939. However, Atanasoff never pursued the concept and went on to other research. The first electronic digital computer that had any lasting impact was the Electronic Numerical Integrator And Computer (ENIAC) designed and built by J. Presper Eckert and John Mauchly at the University of Pennsylvania in Philadelphia and unveiled February 14, 1946. ENIAC had been built under government contract for the Aberdeen Proving Ground in Maryland to compute firing tables for artillery. It weighed 30 tons, had 18,000 vacuum tubes, 6,000 manual switches, occupied 15,000 square feet, and took two days to configure it for a computation. It was not programmable, but it worked well and provided convincing proof of the value of electronic computers. (An article in Popular Mechanics, 1949, forecasted that "Computers in the future may weigh no more than 1.5 tons". They were right. If they had said "no more than 1.5 pounds they also would have been right. In 1971 Intel announced the world's first microprocessor, the 4004. It had the about the same processing power as ENIAC on a chip 12mm square and sold for $200. At that time Gordon Moore articulated "Moore's Law" which said that microchip performance would double every 18 months. He was right as least for the next 45 years.) Eckert was 31 years old at the time. (I got to know Eckert much later in the mid 1970s.) Soon after, Maurice Wilks of Cambridge University (England) developed the world's first programmable electronic computer. I got to know Maurice later in the early 1980s. At that time he had retired once from Cambridge University, and then had come to work for Digital. I was his successor at MIT on Project Athena. In 1986 he retired a second time from Digital and went back to work at a laboratory in Cambridge and is still there. After the completion of ENIAC, Eckert and Mauchly formed a company, called the Eckert-Mauchly Co., to build computers for commercial applications. The first computer that they built was called the Universal Automatic Computer, or Univac. The first Univac was delivered to the U.S. Census bureau in March 1951. It was so successful that they later changed the name of the company to Univac.

Completely independently, a group of former U.S. Navy personnel who had worked together in World War II had formed a company called Engineering Research Associates (ERA) after the war in St. Paul. Because of their contacts in the Navy and a reputation for high quality engineering, ERA did well on government contracts. Their plant was a converted WW II glider factory at 1902 West Minnehaha Avenue in the St. Paul midway district. The building was built like a hanger and was rather shabby. It was painted battleship gray and pea green. The floors were bare cement. Snow came in during the winter and in the summer there were bats in the rafters. ERA developed considerable expertise in highly reliable digital logic modules that they sold to the Navy and other defense organizations. Later they were given a contract by the Navy for the development of a complete computer that became the forerunner of the Univac Scientific Computer that I was to program and use extensively. The first ERA computer was developed under Task 13 of their on-going Navy contract, so that called the computer "1101" which is 13 in binary. They shipped their first production computer to the National Security Agency (NSA) in December, 1950, making ERA the first computer company to deliver a computer designed to be built in more than one copy. The 1100 series of computers would provide the bulk of revenue and profit for Univac for nearly 40 years. For an excellent discussion of the early days at ERA see the book "A Few Good Men From Univac" by David Lundstrom. His description of the environment and people is excellent, and many of the projects and people that he describes are ones that I knew.

In 1952, Remington Rand, a major office equipment manufacturer, acquired both ERA and Eckert-Mauchly. A merger would give them a significant competitive advantage. Remington Rand had sufficient capital to fund the enormous amount of engineering and development required. The military work could carry out research and advanced development of new technology at government expense on military projects, and then this new technology could be used to competitive advantage in commercial computer work. In mid 1955 Remington Rand merged with Sperry Corporation to form the Sperry Rand Corporation. Sperry was a major defense contractor and inventor of the famous Sperry gyroscope. The first general manager of the combined computer division was William C. Norris who was the surviving member of the small group of ERA founders. Norris had grown up on a farm in Nebraska and obtained his engineering degree from the University of Nebraska. I got to know Norris later when he was CEO of Control Data Corp that he founded in 1957.

Television was just starting to come into Fairmont in about 1950. The nearest stations were in Minneapolis, and the signal did not reach Fairmont very well. The appeal of TV was so great, that some of the local craftsmen erected enormous towers to support the TV antennas. They were actually able to get a picture, although it was low quality with a great deal of "snow" and the signal would fade in and out. All TV was monochrome (black and white). When a family got TV it was an important neighborhood event, and friends would be invited over to see the popular TV programs. Television was much more common in Minneapolis. For Barbara's birthday on April 7, 1956, we bought her our first television set. We got it used from a television shop that sold used TV sets at $1 per inch of screen size. Our set had a very large cabinet and weighed about 60 pounds. It was black and white and had a screen size of 13 inches (for $13). I would get home from work at Univac and we would eat supper in front of our TV set watching "Crusader Rabbit", and "Rocky and Bullwinkle". Crusader Rabbit has been forgotten, but Rocky and Bullwinkle have lived on. We also watched the Steve Allen show and others. Since we had not had TV when we lived in Fairmont, it was a big treat to watch TV even on a 13 inch set.

In late 1956 TV was getting very popular. The top TV shows included:

- I Love Lucy

- The Ed Sullivan Show
- I've Got A Secret
- Gunsmoke
- The Jack Benny Show

We watched and enjoyed them along with millions of others.

This was the time of the "big bands", including Guy Lombardo, Lawrence Welk, Tommy Dorsey, Les Brown, and Benny Goodman. The big name bands came to the Prom Ballroom, which was in the Midway district between Minneapolis and St. Paul. We went there a few times to hear the big bands. One memorable time was when we went with Mort Mondale and Shirley Edwards to hear Harry James and his band at the Prom. Harry James was very popular at that time and there was a huge crowd. When he would play his trumpet solos all of the dancers would gather around at his feet to listen to him. It was a lot of fun.

22.2. A professional job

I started at Univac on March 19, 1956. My office was in a warehouse complex that Univac had rented in the St. Paul midway district on the southeast corner of University and Prior, a few blocks away from the glider factory which was on Prior and Minnehaha Avenue. My job was to do numerical analysis and programming for the project.

I worked part time during spring quarter and then continued full time in the summer. The project was called "Project 2052" for reasons that I don't remember. The project was to build an airborne computer that would accept signals from the aircraft radar to get the location, speed, and direction of the target, and then point the tail gun on the airplane, which was a B-24. Because of weight and power restrictions, the computer used a special architecture that was a Digital Differential Analyzer, which computed the change in values rather than the entire value itself.

The design of the computer was done mostly by Seymour Cray, who was a quiet, soft-spoken engineer/mathematician who stayed mostly in his office and developed the specifications. Later he become the most famous designer of large computers in the world. He had been born nine years before me. In 1957 he and eight others left with Bill Norris to found the Control Data Corporation (CDC). He designed the CDC 6400, which was the fastest and most innovative computer in the world when it was first delivered in 1964. He continued to design the world's fastest computers at CDC and later at Cray Research which he founded in 1972. He died tragically in a car accident on 5 October 1996.

Most of our design work was done on the Univac 1103 computer (the second generation after the 1101), an immense vacuum tube super computer that occupied a room of 1000 square feet. It was one of the largest computers in the world of its time. It had a 4000 byte main memory (actually 1024 36-bit words) and a 64,000 byte drum memory (actually 16,000 36-bit words) with paper tape input and output. The memory drum was about 24 inches in diameter and about four feet long. The computer weighed 17 tons and required 45,000 watts of power. It could carry out 50,000 operations per second (such as an addition). A Personal Computer in 1995 was 1000 times more powerful and cost less than 1/1000 as much money. In spite of its limited power by modern standards we did a great deal of very useful engineering work on the machine. I was responsible for running many of the design programs on the 1103, and the feeling of power was awesome.

23. 1957

On October 4, 1957 the Russians launched Sputnik, the first man-made object to orbit the earth. There was a lot of excitement in the press, and a lot of people went out at night to try to see it (including us) even though it was the size of a basketball. Of course no one could see it. It was very important, however, because it marked the start of the space age. The American government finally got serious about developing rockets and the space race was on.

24. Starting full time work

I had originally been scheduled to work on a large Navy computer project for Univac called the Naval Tactical Data System (NTDS), which was one of the largest projects that the company had. However, before I started work the company won the contract to build a state-of-the-art computer for Nike Zeus anti-ballistic missile defense system for Bell Telephone Labs. Because they needed people badly on this new contract, I was transferred to this new department before I started work. I started work on June 30, 1958. My job was to help design the computers and software for the missile guidance and radar systems. Although I did not realize it initially, it was a wonderful assignment, allowing me to not only learn about computers, but to also work on state-of-the-art technology and travel all over America.

I found that the former president, Bill Norris, had left the previous year (1957) and had founded Control Data Corporation with Seymour Cray. If I had not gone back to school I probably would have gone with them because many of my friends had.

My office was in the Univac building on West Seventh street in St. Paul. The building is on the bank of the Mississippi River near Ft. Snelling, overlooking the spectacular gorge of the Mississippi River. As I walked through the front door that first morning I wondered what the future would hold for me. I hoped that I could work for Univac for the rest of my career. Little did I suspect that I would work on missile defense systems for the next ten years with Bell Labs and for Univac for the next 22 years. Little did I realize that I would have adventures far beyond anything I could imagine.

Because the Nike program was secret, the project had extensive security. All of us on the project had government secret clearance. The entrance to the work area was locked with a buzzer to access, and with a guard that checked everyone who entered. All files had to be locked up when we left the area, and we were forbidden to talk to anyone about what we were doing, including our families.

Looking back, I can not believe the audacity that we had. The task that we had was to develop a state-of-the-art computer system, including a totally new computer, totally new software, and the world's first ground-controlled digital guidance system that would guide one missile to shoot down another flying at 17,000 miles per hour. Amazingly, five years later we did it at Kwajalein atoll in the South Pacific. As part of the project we had to develop the world's first all-digital missile guidance system under contract to Bell Telephone Labs, who had the prime contract for the entire anti-ballistic missile system from the Department of Defense. They had many other contractors to do the missile, radars, communications, etc. Univac had the job of developing the missile guidance computer and software. The team that was put together was composed heavily of new college graduates, most of whom had never heard of computers. This was the team that was going to develop a state-of-the-art computer-controlled missile guidance system. I was unique in that I had taken a course in computers at the university and was the only one that knew how to program. Along with the other new employees, I was given a self-study course in how to

program that was supposed to take two weeks to complete. Because I knew how to program I completed the course in a few days.

25. The end of the 1950s

By the end of the 1950s, my generation had accomplished many things. Hitler, Tojo, and Mussolini had been defeated. Europe and Japan had been rebuilt with the help of the Marshall Plan. This generation had built the St. Lawrence Seaway and the Interstate highway system. They had taken a country in depression and had built America into the world's greatest success with unprecedented unity, security, and prosperity by any measure. In 1960 America had the greatest educational system in the world, and Minnesota was among the best in America.

People of my generation had many difficulties, including being born in the greatest depression in American history and having their lives interrupted to fight World War II and the Korean War. But those difficulties made them strong. My generation was committed to getting an education based on a firm belief that education could lead to the realization of the American dream, and it did. My generation largely avoided the singles scene and short-term marriages, and instead built stable and caring families. My generation limited the size of families to what we could afford and did not assume that the government or employers would care for our children. Families were concerned about the welfare of children. My generation felt responsible for its own destiny and accepted this responsibility as its own. This generation was financially responsible; if we did not have something, we did without or waited until we could afford it rather than engaging in immediate gratification. We did not incur excessive debt, having seen the hardship of the depression. America was not yet overpopulated, and the grandeur of American natural scenic beauty had not yet been paved over with parking lots or covered with strip shopping malls. Utopia had not yet arrived in 1960. Most men worked as long as they were physically able. The average age of death in 1960 was 68.

The 1950s provided daily marvels of affluence. There seemed to be an endless array of new inventions and machines. Television became affordable and widely available; nine out of ten households had television by 1960. Children were routinely vaccinated against polio and other dreaded diseases. One could look up and see the trail of a jet. The first commercial transatlantic air passenger service started in 1958. This lead to the death of the passenger ship transportation business but paved the way for the cruise line business.

Cars became ever bigger, fancier, and more powerful. Atomic energy promised an inexhaustible source of energy too cheap to meter (which did not happen). Antibiotics cured serious diseases in hours. Millions of soldiers had graduated from college under the G.I. Bill. Social Security had eliminated old age poverty, and retirement at age 65 became the norm. The Diners Club and American Express credit cards (available in 1958) made purchasing easy. Synthetic fibers including nylon, rayon, and polyester provided fabrics with wonderful properties. The Xerox copy machine, the Barbie doll, and the "pill" were important inventions that came at the end of the 1950s which would change the world forever. No problem was beyond the ability of American technology to solve. Business cycles and depressions seemed to have been conquered. Elvis reigned and American self-confidence and capabilities were at their peaks. American industrial strength was unmatched in the world and seemingly always would be. In 1955 Secretary of State John Foster Douglas said that America would always enjoy a trade surplus with Japan because Japanese products would always be inferior to American products. (He was wrong). John F. Kennedy was elected president in 1960, America's first Catholic president. His "Camelot" administration began.

26. Epilog

Although the decade of the 1950s was one of the best for America, history did not end January 1,1960. The following comments about what followed are offered without any value judgment, and simply as statements of historical fact (there is no point in passing judgment on historical fact).

At the end of 1945, the United States had half of the world's manufacturing capacity, generated half of the world's electricity, and controlled two-thirds of the world's gold. The period from 1945 to 1960 was characterized by constant and significant increases in the standard of living. This consistent record of success created a widely shared expectation that the increase in standard of living would continue indefinitely and that people were "entitled" to a constantly improving standard of living. A good life was no longer good enough. The success in World War II suggested that all problems could be solved. When problems were not solved or peoples' expectations were not met, the only possible explanation was that they were "victims". This was an appealing rationalization, and soon many people saw them selves as victims. A suitable "victimizer" could always be identified. Thus, the ethics of personal responsibility was replaced by the ethics of victimhood. The idea of personal responsibility was replaced by the idea of government responsibility. For more information on this phenomena, see the book "The Good Life and its Discontents: The American Dream in the Age of Entitlement" by Robert Samuelson.

People that had much fame and fortune often ended up unhappy. The Dionne quints led difficult lives. Emilie died at age 20 of an epileptic seizure. Marie died alone and alcoholic at age 36. The other three were abandoned by the country they helped so much, and lived out their lives in poverty and isolation. Judy Garland died of a drug overdose on 22 June 1969 at age 47, hooked on drugs, depressed, and unable to work. Elvis Presley died on 16 August 1977 at age 42, hooked on drugs, overweight, and dis-functional. Julie Andrews escaped the problems of fame and fortune, and had an extraordinary career.

Concurrently, after 1960 the strong sense of American community and social unity started to fail. Whereas the objectives in the 1940s and 1950s had been to improve the quality of life, the focus in the 1960s and 1970s was to deal with increasing internal social problems. Within the next few years in the presidency of John F. Kennedy, America had the Bay of Pigs, the brink of nuclear war, and the start of a war in Vietnam. American society began to fragment due to television, social discord caused by the unpopular war in Vietnam, and increasing heterogeneity. The increasing heterogeneity fractured the synergistic relationship among school, church, and town that I had known in Fairmont.

In spite of the social problems, this period saw tremendous advances in science, technology, and medicine. World War II had channeled large amounts of money into these areas for the war effort. One result was the creation of the Radiation Laboratory at MIT that advanced the art of electronics tremendously, especially in radar and related electronics. The "Rad Lab" laid the groundwork for the vacuum tube counters, adders, and other logic circuits that were soon used in electronic digital computers. Enormous advances in rocketry were funded by the war effort. These advances led the newly elected president John F. Kennedy to commit in May of 1961 to put an American on the moon before the end of the decade. This was perhaps the most exciting adventure undertaken by mankind since the voyage of Columbus. NASA fulfilled the challenge in 1969 with a few months to spare.

Science and technology advanced in other areas. Cars became extremely reliable; they could go 80,000 miles on a set of tires and 100,000 before scheduled maintenance. Medical and dental technology improved tremendously. An appendectomy became "band aid" surgery and infectious diseases ceased to be a problem. Most surgery is done on an out-patient basis.

Replacement of organs and joints such as hearts, lungs, kidneys, knees, and hips became common. People kept their teeth into old age.

The United States became highly affluent. The shopping malls had an astonishing array of abundant goods for sale, most of it unnecessary. The American middle class began to enjoy a life style that earlier only the very rich could afford. House sizes doubled or tripled, and there are many second homes for vacations. The annual vacation with Caribbean cruises and trips to Hawaii became highly affordable, as did the American dream of a nice house, a two-car garage with two cars in it, children's education at private collages, designer clothes, regular restaurant meals, air conditioning in homes and cars, and $100 athletic shoes. The enormous abundance of high calorie food and a life style of ease took its toll on the population. The average adult gained 25 pounds from 1930 to 1980; half of the adult population became fat, and one-third became clinically obese.

The changes described above represent a remarkable change in sociology from the environment that I grew up in. Of course we will never see that earlier environment again.

Changes in Minnesota

Univac, which had been the world's first computer company and arguably the world's greatest computer company from a technical standpoint, lost its competitiveness and had to sell off several divisions and lay off half of its work force. It ceased to be a significant force in the computer industry. The same thing happened to Control Data Corporation, which went from being the world leader in high performance computing to virtual non-existence.

Minnesota went from having absolutely no gambling in 1940 to having pervasive gambling 50 years later. The Indians went from being some of the poorest in Minnesota to owning and operating large gambling casinos. Many became wealthy. The state government became addicted to gambling as a source of revenue, and became a chief promoter of gambling regardless of the very serious social problems that it causes. An estimated ten percent of gamblers became addicted to gambling.

My beloved Boundary Waters Canoe Area became much too popular and therefore had to be heavily regulated. No longer could a group simply show up and enter the wilderness: the wilderness was "closed". Government permits are now required to enter the area, and everything is regulated including who can enter, when you can enter, where you camp, when you can camp, what you can bring in, and what you must bring out. Unfortunate but necessary.

Politicians periodically lead the effort to commercialize the Boundary Waters Canoe Area and open it to development. Fortunately the conservation interests have been able to hold off serious damage so far, but it gets more difficult every year.

The soybean industry in Minnesota from which margarine is made is bigger than the dairy industry. Colored margarine is legal.

Changes in Fairmont

Fairmont remains a wonderful place to work, play, and live. As Garrison Keillor says about Lake Wobegon, Fairmont is a place that time forgot but which the decades could not improve. People still say "hello" to you on the street because they think that they should know you even if they don't. The entire town is a loosely-connected club, with a strong web of long time personal relationships. Transactions are carried out verbally based on trust with a minimum of paperwork, and a person's word is usually considered as good as a contract. One can still live very well in Fairmont without a car. Every time I look out over Lake Sisseton from our house, it is more beautiful than I remembered it. Just as my uncle Alfred did for 20 years, the senior citizens still

gather at their same coffee shops at the same time every morning, sitting in THEIR chair playing dice with THEIR dice cup. Woe be unto any stranger who might accidentally sit in "their" place. The power of place is very strong, and some people who had left many years ago to get good jobs or to see the world have drifted back to enjoy the quality of life available in Fairmont.

However, the same forces that changed America changed Fairmont also. Most of the small towns in southern Minnesota and Iowa have lost ground economically to the larger cities. Hand's Park closed. Interlaken was torn down and replaced by houses. The Strand Theater was demolished to make way for a bank expansion. The Sweet Shop burned in 1972, and the empty lot was converted to a small park. Many of the Fairmont buildings were torn down to make way for banks or parking lots. All of the public schools in Ceylon were closed and the students bused to Fairmont. Fairmont Central School where I attended grades K-6 was converted entirely to school administration and staff offices. The high school where I attended grades 7-12 was burned down by a student in sympathy with teacher disagreements with the school board.

In 1956 the National Highway Defense act was passed, creating a massive national highway for "national defense". The driving time from Fairmont to Minneapolis was cut from 5 hours (going from town center to town center) to 2 1/4 hours with no stop signs.

The Fairmont commercial environment went down hill. A shopping mall was built on the edge of town. The mall took considerable business away from the central business district, resulting in many of the businesses closing up. The mall then failed and closed except for a couple of businesses. In 1946, the central business district in Fairmont was so busy on a Saturday night that it was impossible to find a parking place or even walk on the sidewalk. Fifty years later in August 1996, I walked uptown on a Saturday night and saw only four people.

The town has expanded south and beautiful houses have been built around the lakes all of the way to the Iowa border. The hospital near our house where my brothers were born was torn down and replaced by a luxury condo. The parks have been significantly upgraded and are beautiful, although the stately elm trees that I liked so much were killed by the Dutch elm disease and have not been replaced. The Luedtke farm that seem so far out in the country is now in the city limits and is only a couple of minutes from the business district.

Caring for the elderly has become a major business. The two largest businesses in Fairmont are city and county government, and financial services.

Fairmont realized the value of its history, and has done an excellent job of preserving and restoring its early heritage. The Martin County Historical Society took over the Catholic school building, added another building next to it, and established a wonderful museum (the adjacent Catholic Church had been taken down years earlier). The Nicholas theater was restored starting in 1979 and again became the Fairmont Opera House, used as a regional arts center. The first house in Fairmont, built and owned by Dr. Chubb, was restored and opened to the public. Heritage Acres was established on the west edge of town to preserve the farm environment and way of life from earlier times. Buildings representative of the early times have been brought in, as has a wide variety of machinery. An active group of volunteers has organized an antique tractor club, and they do all kinds of demonstration farm work including plowing, planting, harvesting, threshing, and all kinds of gardening,

The residential section of Fairmont looks much the same as it did 50 years ago. When I return to Fairmont and walk through the residential section it seems that perhaps I am 26 years old again. Perhaps when I return to the house, my dad and mom will be there along with my two brothers. Maybe my memories of what happened after 1960 are just a dream and they never happened.

Then I walk into the house and reality returns. But thinking about the past was fun while it lasted.

27. Appendix: Other Major events Before 1934 that shaped Minnesota's destiny

This section describes other events that in my opinion were important in shaping the world that I found myself in when I was born. These are the influence of the Indians on the settlers, and World War I.

27.1. The Indians And The Settlers

When the first Europeans came to America, the Indians were living in a stone-age culture, and had not discovered how to make iron or gun powder. In many ways they led a savage, brutal, and pitiful existence filled with pain and suffering. Nevertheless, the Indians gave much to the new European settlers, including corn, cotton, potatoes, rubber, and especially chocolate. The Indians gave much to the Pilgrims of the Plymouth colony in Massachusetts (including my ancestors the Cooks, the Warrens, and the Bassetts) which enabled half of them to survive the first winter. Without the help of the Indians it is doubtful if any would have survived.

The coming of the Europeans brought great benefit and great misery to the Indians. The benefits were the modern technology such as iron tools (axes, knives), guns, medicines, woven cloth, cattle, sheep, chickens, and especially horses, which the Indians treasured. The coming of the Europeans also brought great misery such as disease, liquor, loss of ancestral lands, cheating, and death. The first Europeans that came to the east coast of America in the early 1500s brought small pox, diphtheria, yellow fever, typhus, scarlet fever, whooping cough, and especially TB which decimated the Indian population defenseless against these new diseases. The Indian population shrank by perhaps 90 percent. That is why the Pilgrims found no Indians when they arrived in Plymouth: the Indians had all died earlier from epidemics of European diseases. (It has been suggested that if the Indian population had not been decimated by European disease they would have been able to drive out European settlers permanently and retained control of the Americas.) The Indians also gave a family of diseases to the settlers that ravaged Europe for hundreds of years. For these and other reasons the Indians were constantly looking for a way to regain control of their own destiny by any means at their disposal.

The Indians had been very badly treated by the U.S. government and by the settlers, including cheating of all kinds and murder. There were two main Indian tribes in Minnesota. The Chippewas, living generally to the north around the head of Lake Superior, did not have much conflict with the Europeans. They were nomads and did not adopt the European ways of building houses and planting the land. The Sioux (also called Dakota), belonging to the Iroquois group, were a generally aggressive, warlike group living in the central and south part of Minnesota. The Sioux were notable fighters who had lived on the plains from Mississippi to Missouri as their homeland. They were intelligent and willing to accept the white trader's ways, both good and bad. The Chippewa and Sioux were often engaged in fierce wars against each other. In 1825 the U.S. government had separated the two and tried to curb the fighting.

The Sioux ceded their tribal homelands to the Americans in the 1851 Treaty of Traverse Des Sioux in return for $3 million and a reservation 150 miles long and extending ten miles on each side of the Minnesota River (Ortonville to New Ulm). This reservation of 3000 square miles seemed adequate for the 6000 Indians. Few more fertile, more beautiful, or better-watered areas exist in America. The government tried to convince the Indians to begin farming as the settlers were doing, and many special benefits were given to the Indians that would farm. However,

most Indians believed that farming was beneath them and stayed with the traditional life of hunting and fishing. Unfortunately, a swarm of traders, fur company agents, lobbyists, crooked politicians, and petty opportunists appeared and were able to intercept most of the money due the Indians. Against the $475,000 due the Sioux when they moved to the new reservation, Henry Hastings Sibley (later Minnesota's first state governor) claimed about 1/3 on behalf of the American Fur Company that he represented. Another 2/3rds were paid to Alexander Ramsey (first territorial governor) for distribution to traders, fur companies, and merchants. Future payments suffered similar fates and the Sioux got almost nothing except the land.

There was much cooperation between the settlers and the Indians, but there was ongoing friction between the settlers and the Indians over begging, shootings, stealing horses, thievery, and drunkenness. The Methodists in Minnesota made great efforts to improve the quality of life of the Indians. They often helped develop treaties that protected Indian rights in the lands designated for Indian use, and of course they and other missionaries tried to convert the Indians to Christianity.

The Great Minnesota Indian Uprising of 1862

The following account of the Indian uprising of 1862 has been called racist and unfair by some who have read it. I believe instead that it is an accurate account of the environment in which the early settlers of Martin County found themselves. My purpose in including it is to give an accurate picture to my grandchildren of the conflict between the settlers and the Indians. It was not at all like it is shown in the movies, but instead could be incredibly brutal and ugly. The description here does not pass judgment but simply records history. The events described here are similar to those that occurred in other parts of America, including for example King Phillip's War in New England.

Most large-scale conflict in the world is conflict of culture: for example Irish against English, Protestant against Catholic, and Christian against Jew. Race played no role in the conflict between the Indians and settlers. Instead, it was a conflict over land and other resources between a stone-age culture and a more advanced culture with metal implements and gunpowder. The outcome in this situation was the same in the United States as it was in South America, Australia, Africa, and New Zealand.

The great Minnesota Indian uprising began in August of 1862 during which the Sioux killed a number of settlers estimated by President Lincoln at "not less than 800". For a spellbinding history of the uprising read "The Great Sioux Uprising" by C.M. Oehler. The following summary is taken from that book. Events started on the morning of Sunday, August 17, 1862. Four young Sioux braves murdered five settlers in Acton Minnesota, seven miles southwest of Litchfield, on a dare (a monument marks the site). News of the murders spread rapidly throughout the Indian community and the Sioux tribes met to consider whether to turn the murderers over to the white law agency, or go to war. The Sioux wanted badly to attack the whites to get revenge for the many injustices done to them. The chiefs of the various tribes met in the village of Chief Little Crow that evening. The chiefs saw that many of the white men in the area had gone to fight the Civil War, and they sensed that they could strike decisively and drive the settlers out once and for all. The idea was to terrorize the settlers, drive them towards New Ulm and Fort Ridgley, and then capture these two towns. With these victories, the Winnebago and Chippewa tribes would join them and they could attack St. Paul in force. With St. Paul taken, the entire area west of the Mississippi could be depopulated (they almost succeeded). After many hours of arguing, Little Crow articulated the consensus decision to go to war. The next morning on August 18 the war was started. Contrary to the popular movie image, the settlers had almost no guns, and very few settlers knew how to use one. This is because they were

farmers and not hunters. Unlike the Chippewa, the settlers were easy to deceive and kill. The Sioux would approach a farmhouse, greet the family with handshakes and hugs (often as friends), and then shoot, stab, and hack the startled settlers to death. Mindless atrocities were common.

By August 19, 40,000 settlers were in flight to escape from the Sioux. When news of the uprising reached Fairmont, the fear of the Indians was so great that the entire town emptied out in a few hours with people fleeing east to get away from the Sioux.

The following describes a typical experience of the attack. This is a highly abbreviated summary of an eyewitness account by Mrs. L. Eastlick taken from "Historical Notes: Our Heritage From the Pioneers" published in the Fairmont Sentinel as a series of 219 articles starting November 15, 1951. This particular part of the story starts with article number 130.

Mrs. Eastlick lived with her husband John and five children at Lake Shetek, 40 miles southwest of New Ulm. On August 20, 1862 about 200 Indians approached the Eastlick homestead and began to fire their guns in the air and set fire to the out buildings. Other settler families were in the house with the Eastlicks including the Ireland family. The settlers fled with horses and wagons thinking that the Indians only wanted to loot the house. Shortly after they saw that the Indians were pursuing and rapidly overtaking them. Hoping to satisfy them by giving them the horses and wagon, they stopped and fled on foot and hid in a slough in the water. This offered little or no protection and the Indians continued to shoot at them for two hours. Mrs. Eastlick was hit in the side and in the foot by bullets, and shortly after in the head by another bullet but remained conscious. She called out to her husband but he could not help her without being exposed to gunfire. Shortly after he was hit by a bullet and killed. The Indians then called for everyone to come out in the open. One of the Indians was "Old Prawn", an Indian that the Eastlicks had befriended. Mrs. Eastlick expected to die momentarily and crawled over to her dead husband.

The following are her words. "I took my last farewell of poor John, expecting soon to follow him. I took his cold hand in mine, leaned over and kissed his brow and looked for the last time on him who had been my companion for twelve years, and had now laid down his life in trying to protect his wife and little ones."

The settlers still alive, mostly women and children, then came out of the grass. Mrs. Eastlick then describes what happened next.

"Little Freddy, one of my boys, aged five years, arose out of the grass at my call and started to come. Then for the first time I observed a hideous old squaw who had just joined the Indians. She ran after him and felled him to the ground with a blow upon the head from something she carried in her hand. Weak, wounded, and tightly held by my captor as I was, I could only stand and look on at the scene which followed, while such anguish racked my soul as, I pray God, that you mothers who read this may never feel. The old hag beat him for some minutes upon the back part of the head, till I thought she had killed him. She stepped back a few paces, when the little innocent arose and again started for me: but oh! What a piteous sight for a mother to behold! The blood was streaming from his nose, mouth and ears. The old squaw, not yet satisfied, again knocked him down and pounded him awhile; then she took him by the clothes, raised him as high as she could, and with all her force dashed him on the ground. She then took a knife and stabbed him several times. I could not stop or return, for my captor was by this time dragging me away. But my head was turned around and my eyes were riveted upon the cruel murder of my defenseless little ones."

"I heard someone call out, "Mother! Mother!" I looked and there stood little Frank, my next oldest child, on his knees, with hands raised toward heaven, calling "Mother!" while the blood

was streaming from his mouth. Oh! Who could witness such a sight and not feel their hearts melt with pity! None but the brutal Indians could. Frank had been shot once in the mouth, knocking out four of this teeth -- once through the thigh, and once through the bowels."

Mrs. Eastlick was then forced to walk ahead leaving her children. A few minutes later she was shot in the back, probably by old Prawn. She fell to the ground and pretended to be dead. A heavy rain began to fall. She lay there several hours, and then got up to try to find her children. She found her little boy Giles who had been shot dead. She went a little farther and found her son Freddy. He was extremely badly injured but alive. She thought he would die momentarily. She continued looking for her son Merton. She could hear the report of guns and the shrieks and agonizing cries of children as the Indians were torturing them all day. She gave up looking for any survivors and began to walk to the nearest neighbor who was 16 miles away. She had now gone three days without food or water with five bullets in her. She had no shoes and her feet were worn to the bone and she was deeply chilled from being constantly wet. She found some raw corn to eat.

She was finally found by the mail carrier traveling from Sioux Falls to New Ulm. She and the mail carrier traveled very cautiously to avoid the Indians, but made slow progress. A few days later they saw some people in the distance. They approached very cautiously ready to flee from the Indians again. Instead she saw that it was her sons Merton and Johnny. Merton, who was eleven years old, had carried 15- month old Johnny for more than 50 miles but by that time could scarcely stand. The two boys had gone without food for two days until they found an empty house with some cheese. By this time Mrs. Eastlick's foot was so infected from the bullet that she could no longer walk. The mail carrier helped her and the boys hide in some wild plum bushes and promised to send help. He thought that he could reach Sioux Falls and send soldiers in seven days. They never expected to see him or the help ever again as they thought he would be killed. The mail carrier reached Sioux Falls but found that all of the settlers and soldiers there had been murdered. Finally, however, he reached Fort Clark in safety. After nine days, soldiers arrived and rescued them. As they traveled to New Ulm they passed many settlers who had been murdered and left in the road. Some had been scalped and one was beheaded. All of the houses and wagons had been plundered and belongings scattered about. They arrived in New Ulm to find that there had been a fierce three-day battle in which 15-20 houses were burned and many people killed, but the Indians had been driven off. Mrs. Eastlick later found out that little Frank had survived his attack and was taken as a slave by an Indian named Joe Leaboshie. He was never heard from again.

In addition to the battles at New Ulm and Fort Ridgley, major battles were fought at Birch Coolie and Wood Lake. This last defeat spelled the end of the Indian attacks in Minnesota. About 2500 Indians were captured; of this number 303 were recommended for capital punishment. One of the Indians sentenced had killed 19 women and children in a wagon by smashing all of their heads with a tomahawk. Easterners prevailed on President Lincoln to pardon all but 38. More than 1400 soldiers guarded the execution site. On December 26, 1862 the 38 Indians were executed in a simultaneous mass hanging in Mankato. A monument marks the location of the hangings to this day.

The final battle with the Indians was the Battle of the Little Big Horn where George Custer and 62 soldiers attacked about 2000 Indians in 1878. Custer and all soldiers were killed.

27.2. World War I

On May 1, 1915, a German submarine sunk the British passenger liner Lusitania with the loss of 1200 lives including 128 Americans. There was a loud outcry of protest in America, and the

Germans promised not to sink any more passenger ships. Americans wanted no part of European wars. In February 1917, the Germans initiated unrestricted submarine warfare against all merchant shipping, including that of the United States. The next month the German submarines sank five unarmed American merchant ships with the loss of all life on board, and soon American ships were being sunk weekly. The Germans knew that this action would bring America into the war, but believed that they could conquer Britain and France before American military strength could be mobilized. The Germans proposed to Mexico that they join them in the war against America, for which they would be given Texas, New Mexico, and Arizona. On April 2, 1917, President Woodrow Wilson went before congress and asked them to approve a declaration of war against Germany "to make the world safe for democracy". Largely because of the success of the German submarine warfare the Allied military situation soon became desperate, and England was on the verge of starvation and collapse. By November 1918, there were two million American soldiers in Europe under General John Pershing. America reached full employment and wages were high. Everything German was shunned in America. German beer was no longer served; works of German composers were no longer performed; and frankfurters were renamed "victory sausages". There was widespread hatred of Germans and anything German. Anti-war protesters were jailed. The armistice agreement was signed on November 11, 1918 and heavy war reparations were levied on Germany as punishment for starting the war.

About 112,000 Americans and four million other Allied soldiers were killed in World War I. However, nothing was really settled, and the stage for World War II was set. As a reaction to the horrors of war, there was strong support for total disarmament, because if the major powers had no weapons, there could be no more war, the popular thinking went. (It was wrong). In 1921, the major powers agreed to disarm, and America disarmed with great vigor. The disarmament movement succeeded in making America a minor military power but failed to bring lasting peace. After the war there was rampant inflation, and the dollar lost half of its value between 1914 and 1919. The government response to this problem was to do nothing.

In November, 1917, after centuries of Czarist oppression, the Bolsheviks led the Russian revolution and founded the Union of Soviet Socialist Republics, the first state founded on communist principles of Karl Marx and Frederick Engels. The Bolshevik leaders then stated their objective of overthrowing capitalism and installing a worldwide socialist revolution. They bragged openly about the large amounts of money being expended to prepare America for a take-over. Membership in the American communist parties reached 70,000 by1919, and was strongly aligned with the organized labor movement. All strikes came to be interpreted as the start of a communist revolution in America. Anyone who spoke out supporting labor or advocating change was labeled a Communist. Hatred of Communists replaced hatred of the Germans.