From Horse and Buggy Days to the Atomic Age

1897-1971

MEMOIRS

George Monroe Bateman
1971

Chapters

CHAPTER I: THE BACKGROUND

During the past few years, persistent pressure has been exerted upon me to write the story of my life. I approach this assignment with considerable hesitation.

My ancestors were of English and German extraction. Three of my grandparents immigrated from England as converts of the Latter Day Saint Church. My Father's family lived near the Thames River in Essex, England. Grandfather used to freight vegetables into London, and he always prided himself on having one of the finest teams of horses in Essex. In the early 1870's, Grandfather Bateman immigrated to America, his party including his wife, son, father and mother and most of his brothers and sisters. His father-in-law, John Wilks and family, also came to this country at the same time. As members of the Latter-day Saints Church they were in search of a better life. Grandfather first settled in Almy, Wyoming, near Evanston, which at that time, was an important coal mining town and the western terminal of the Union Pacific Railroad as far as Idaho and the great Northwest was concerned. After the coal mines caught on fire and closed down, grandfather used to freight sugar into Idaho and bring back fresh eggs and produce.

Grandfather fell in love with Bear Lake because its beautiful lake and green valley reminded him of his beloved England. He moved his family to Bloomington, Idaho, which remained his home until his death in 1936. Grandfather was a profound student of the scriptures and an excellent speaker. He was a member of the Bloomington Ward Bishopric for many years and was respected and beloved by all of those who knew him. It has always been a source of great pride for me to carry his name in my generation.

Mother's paternal ancestors came to America before the Revolutionary War and settled in Virginia, Maryland and Pennsylvania. Mother's grandfather, John W. Hess, his father and mother, joined the Mormon Church in 1834, and this started a long westward trek that was full of sorrow, hardship and heartbreaking experiences. Along with numerous other Mormon pioneers, they left a trail of blood and tears as they were in turn driven from Ohio to Missouri to Illinois and finally, into the wilds of Iowa. While in Illinois, John W. Hess married Emeline Bigler and both of them answered the call of the United States Government and enlisted in the Army. At that time our country was at war with Mexico. This detachment was largely made up of Latter-day Saints and, therefore, was known as the "Mormon Battalion." Great grandmother Hess went along with her husband as a laundress. Her brother, Henry Bigler, also was a member of the battalion. He was one of those who discovered gold at Sutter's Fort in California. The march of the battalion through deserts, mountains and wild country was one of the greatest epochs of endurance in our national history. Upon arrival at Santa Fe, New Mexico, the commander of the Mormon Battalion decided to leave all of the women and the sick behind because the march across the hot deserts of Arizona and California to San Diego would be very strenuous. Great grandfather Hess objected to leaving his wife in such an isolated land without friends As a result, he and a number of others were released from the Army. The Hess family spent the winter of 1846-47 in a camp at a place which is now known as Pueblo, Colorado. They finally arrived in Salt Lake valley on July 28, 1847, and spent the

first winter in Salt Lake City. It was during the summer of 1848 that the sea gulls saved the crops of the Utah pioneers. In 1848, John Hess went back to Iowa to bring his mother and her Family. He was gone all winter, and in his absence, his first son, Jacob Bess, who was named for both of his grandfathers, was born on January 6, 1849. The Hess family moved north of Salt Lake City and helped to found the city of Farmington, Utah. John W. Hess resided there until his death in 1933. He lived a long life of service, successively being Bishop and then Stake President for more than thirty years, and was the father of 63 children.

Jacob Hess, our grandfather, grew up in Farmington and did much to help his mother in the support of her large family. He married a young girl who had immigrated from England. In the late 1860's, the young family migrated to Georgetown, Idaho which was an unsettled region at that time. Grandmother Hess's maiden name was Hannah Thornock and her folks moved to Bloomington which is about twenty miles from Georgetown. Grandfather Hess told me how he once bundled up his wife and placed her on a small sled with hot rocks around her and pulled her over the crusted snow and frozen wastes to Bloomington so that she could be with her mother on the birth of her second child. The snow was too deep for horses, and wolves followed him part of the way.

Grandfather Hess moved to Bloomington and lived there until about 1814. During this period, his family increased to ten children, six girls and four boys.

CHAPTER II: BLOOMINGTON, IDAHO

It has been a pleasant experience to summarize the story of how the Bateman and Hess families came to the same small pioneer town, a town whose population was made up of native Americans, English, Danish and Swiss. All of these people had one thing in common--to seek a better life through their religion, Mormonism. The Bateman and Hess families were worlds apart as far as background and interests were concerned.

Grandfather Hess was a pioneer from the time of his birth and had been subjected to many hardships. He always worked hard, started his day before sunrise and retired early. He was serious and had very little sympathy for the idlers, but he could enjoy a good joke and laugh as heartily as anyone. The Hess home was a model of cleanliness and the family room served as kitchen, living room and bathroom. They also had a parlor with a big red sofa which was reserved for very special occasions such as Christmas.

My father's family was reared in the suburbs of London, England. My father, Alfred John Bateman, who was named after his two grandfathers, was born in Almy, Wyoming, on July 11, 1874, shortly after their arrival in this country. Grandfather Bateman was very deliberate in all that he did. He used to freight eggs from Bloomington to Evanston, Wyoming. He kept the eggs in a cellar while collecting them. As a boy, I watched him carefully turn every egg over in order to insure their quality.

Grandmother Bateman had a living room in which she had a bay window full of flowers. During the cold winters the fire was never allowed to go out. On the coldest nights she carefully moved the flowers near the stove and put a tub of water next to them to prevent freezing. She also had one of the most beautiful gardens in Bloomington during the summer seasons. The church on Sunday was often made more beautiful because of her flowers. This type of hobby was rather unusual in this pioneer town where most of the people spent the greater part of their time winning the bare necessities of life. The Bateman family was somewhat easy going and loved horse racing, celebrations, and sports.

It is a sad commentary that the town of Bloomington, once so full of life and hope is gradually dying because of the automobile and mechanical agriculture.

Clara Hess, my mother, was born in Bloomington on the 26th of February, 1875. She grew up to be a rather bashful, plump, but attractive girl. She attended public school and church, and liked to play with the other boys and girls. She was a serious hard-working student and was not interested in romances. It was necessary for her to discontinue school to help support her fathers growing family. During her lifetime she never forgot this and it was always her constant effort to let nothing stand in the way of her children's education.

While she was at school, she met a tall, well built, curly haired boy who began to show more than usual interest in her. He succeeded in gaining Clara's approval to accompany her home, but he received a very cold reception from grandfather Hess. John was very

persistent because he was sure that he had found the “only girl.”

John apparently did not possess any great degree of interest in his school work. Grandmother Bateman said that he never displayed much interest in reading, but preferred to be out in the open with horses. He made many freighting trips with his father and became an expert horseman. If father had received advice and guidance in his youth, he could have been very successful in animal husbandry or as a veterinarian.

During their teenage years, Clara and John worked at odd jobs and each one was able to save up a little money. The puppy love romance between them grew as the years passed, and finally blossomed into a happy marriage. This occurred on Valentines Day, February 14, 1895. Mother said that it was a cold and snowy day. The young couple was poor in worldly goods, but they possessed a deep love for each other and hopes for a happy future.

They moved into a one-room apartment and felt wealthy because they owned a new wagon, a team of fine horses, a cow, a flock of chickens, and had many friends. John worked and hauled out logs which he sold to the saw mill. The young family had very few material needs. The cow furnished milk and butter and the chickens laid eggs. Working in the fields on shares produced wheat, potatoes, and pork and beef were plentiful.

A most exciting event took place on December 6, 1895, when the first child was born. He was a very small but beautiful baby with golden hair and blue eyes. He was named for his father and great grandfather and for his middle name he received his mothers family name, Alfred Hess Bateman. The newborn baby was the first grandchild of George and Anna Bateman. Grandmother adopted him as her very own because he resembled her own babies. Alfred was a small but healthy baby, and probably no youngster in Bloomington received better care or more attention than he. He was precocious and walked before the normal time.

John continued to work wherever he could, but because of lack of opportunity he accumulated very little wealth. In 1884 Great grandfather Wilks willed a choice corner lot in Bloomington to his favorite grandson. During the winter of 1896-97 John worked in the canyon and was able to accumulate logs and lumber to construct a home on the corner lot. With the help of relatives and neighbors, the two room log house was finally finished and the happy family moved into their first home. It would be very difficult to describe the joy and pride that Clara experienced in living in the first home that she could call her own.

About this time John was a pitcher for the Bloomington baseball team which held the Bear Lake Valley championship. He also returned to school for a short time. These activities took up much of his time and as a result, the family resources reached a very low point. Clara was pregnant and, felt neglected because she found it necessary quite often to do the chores. The beautiful summer of 1897 faded when the cold frosts came in early September.

September 12, 1897 was Sunday and the hands of the clock stood at about 9:45 A. M.

Many of the people were passing the new two room log house on their way to Sunday School. A midwife was in the bedroom with Clara and an anxious father was tending a young son, and keeping the fire in the stove burning. Finally, when the hands of the clock stood at about 10:00 A.M., son number two announced his entrance into the world with a loud wail. Clara said that I was born with plenty of dark hair and brown eyes and that I was one of her largest babies. During weeks after my birth, friends and relatives called to inspect mothers newest creation. Grandmother Bateman was probably the least enthusiastic of all of the visitors and explained, "you can certainly tell that he is Jacob Hess' grandson.

Quite a commotion ensued over naming the second son. It looked for a time as though I would have to get along without a name. At that time I was not in the least concerned about this problem. Grandmother Bateman wanted to name me after a friend in England and mother held out for another name. Father had recently studied American History so he suggested that I be named for one of his favorite historical characters, James Monroe, and his father, George Bateman. A few months later I attended church for the first time and was christened, Monroe George Bateman by grandfather Bateman. In my early youth I was known as Monroe or by nicknames derived from my first name. Clara said that I was a good natured baby and was seldom ill. I developed quite normally in spite of the efforts and curiosity of my elder brother. It was necessary for the young mother to be continuously on guard.

Hardship and near tragedy are often experienced in our lives when we least expect them. These experiences tend to strengthen and develop the best that is in us. When I was about seven months old a terrible epidemic came to town. Many of the children were stricken and died. The two young sons came down with Scarlet Fever and became very ill. I feel certain that our lives would have ended at this tine, but for great love, faith and tender care of our parents. A doctor was called in and he carefully examined the sick babies. He indicated that Alfred had passed the crisis and would soon recover, but when he came to me he looked very grave. My temperature remained high and I showed signs that were considered as terminal in the medical profession. He called my father in the kitchen and told him that my death was a matter of a few hours and suggested that he inform mother so that it would not be too great a shock. Mother overheard the conversation and fell on her knees. She cried out in great agony and, prayed that her little son be spared.

An answer soon came to the young mothers prayers for a neighbor woman dropped in and suggested that I be placed in a boiler of warm water, slightly above body temperature for about fifteen minutes. In desperation, father carried out her instructions. Father has told me how he held me in the warm water and, how he and mother prayed silently in their hearts for my recovery. At first I seemed to weaken and to be in the early stages of death. After about ten minutes I began to break out with a red rash over my entire body. Clara then took me out of the warm water bath and wrapped me in warm blankets. My temperature soon dropped to normal. Under the tender care of my parents I was shortly on the road to recovery.

One of our neighbors gave us a sheep dog named Toby, and he soon became the loyal guardian and playmate of the two sons. In the summer of 1899, Alfred and I wandered

away from home to a wooded field. Mother and the neighbors searched everywhere and were unable to find us. After the hunt had gone on for several hours, old Toby came barking and pushing on mothers dress. After several attempts the dog made mother understand that the youngsters were in danger and that he could lead her to them. The search party found us playing on the banks of a swift and deep canal. From that time on, old Toby was the most privileged member of the family and our faithful guardian.

The months passed and, on March 22, 1900, a third son was born and received the name of LeRoy. He was a good natured, healthy, blue eyed baby with beautiful blond hair. It is my opinion that he was mothers favorite baby along with little Russell. They were very much alike. LeRoy was a very good baby with an even disposition.

CHAPTER III: LIFE AT OUR COUNTRY HOME 1900-1907

Bloomington offered very few opportunities for an expanding family, so the young parents decided to leave their old home town. This was one of the most fortunate decisions that they ever made, because from that time on, the children of John and Clara would be subjected to changing environments which would give them increasing opportunities for growth and development.

Father had developed into a very good "horse trader." He swapped the Bloomington home, a team of horses, some cows and pigs for a country place which consisted of fifteen acres of irrigated land and a three room house. It was located about half way between Bloomington and Paris. Mother told me that it was a happy day when they piled their furniture and belongings into the wagon and left for the new home. On this momentous trip, Alfred and I had the privilege of sitting on the red sofa while the horses jogged along the dusty road.

In the new home the combined living room and kitchen were located on the East side, while the parlor and bedroom were on the West. The place also had a garden with an apple tree and two rows of English currants. Grandfather Hess lived about one block North of us across the road. He had two young sons; Milford who was about the same age as Alfred, and Quill, who was a month younger than I. A close comradeship grew between the young boys.

It was an ideal place for boys to grow. As far as one could look were lakes, sloughs, farmland, streams and mountains. Our parents must have grown despondent when they tried to keep track of us for we roamed the area like real explorers.

On the 13th of March, 1902, a fourth son was born and he was given the name of Claude. He was the most active of mothers babies with dark hair and brown eyes. Alfred and I were designated as baby sitters and quite often young Claude acted like he did not appreciate our assignment. One of fathers cousins also had a son named Claude, who was a few months older than our younger brother. Our parents, after being bitterly accused of stealing a name, renamed their son, Harold.

When Harold was about two years old, mother became very ill with diphtheria. The medical doctor came and gave each of us a shot of diphtheria antitoxin. Harold crawled under the bed and it was my Job to drag him out in the open. It was like tackling a young wildcat and we both ended up with scratches. Alfred and I had already had the dread disease. Fortunately, the remainder of the family did not become ill. Mother bad a difficult time, but finally got well.

Each fall the carpets in the parlor and bedroom were taken up and, cleaned. A fresh layer of straw was spread over the floors and the carpets were again stretched and tacked down. It was fun to run over the bulging carpet and hear the crunching of the straw. We also looked forward to emptying our bed ticks and filling them with fresh straw until they looked like big balloons. These ticks were replaced on our beds. After sleeping on our ticks for a few weeks, Alfred and I soon found grooves which would serve us well during

the long, cold winter. By March our beds had so many layers of blankets that we could have made good use of a book marker to indicate which layer to crawl into.

Each Spring, Grandmother Hess brewed up a very strong tea from Rerbe and Dark. Each of the boys was forced to swallow a cupful of this bitter brew. I can remember, in the process of swallowing it, cold chills and quivers ran up and down my spine, and most of my digestive processes were set in reverse. After this ordeal, we were certain that our blood had been purified and we were good for another year.

One day when I was wandering over to grandfather;s house, I noted that there was considerable commotion in the back yard. It seems that a skunk had gone into the chicken coop. These animals are very destructive as far as chickens are concerned. Grandfather had gone into the coop and was quietly encouraging the skunk to leave, but grandmother slammed the coop door shut and excited the skunk. Grandfather called for someone to open the door so he could, escape, but no one moved. This left him only one choice and that was to kill the skunk with a club. In doing this he was amply sprayed. In spite of the fact that he buried his clothing and soaked himself in a tub, it was necessary for him to sleep in the barn for more than a week.

The drinking water for the family and the animals was furnished by an open well located on the North side of the house. By means of a squeaky pulley and rope, the water was brought to the surface in a wooden bucket. Water for the animals was poured into a long wooden trough. In the winter snow and ice used to gradually accumulate until the cows arid horses found it necessary to kneel down on the slippery surface in precarious positions in order to drink. In the Spring the mixture of ice and manure melted, and some of it drained into the well. In the latter part of May it was fashionable to have "summer complaint," which was probably caused by the organisms which drained into the well and multiplied.

My childhood days (from about 3 to 9 years of age), were spent at the country home. When I look back these seem to be the longest years in my life. The brothers and uncles were constantly together. We had many unforgettable experiences. In the winter we enjoyed skating and coasting down the snow clad hills. One time when we were skating I hit a thin ice layer which was probably over a warm winter spring. I nearly drowned before Alfred and the uncles could get me to safety. It was necessary to walk about a mile in the sub-freezing weather. When we arrived home my clothing was frozen as stiff as a board and mother had considerable difficulty removing it from me.

One of the favorite sports was wheel rolling. We used an old buggy wheel which we rolled up to the top of a gently sloping hill. While the other boys. held the wheel, one of us would stand spider-like in the wheel with our feet spread apart at the bottom and we held on to the spoke with our hands. The wheel was then given an initial shove and it accelerated down the hill with the rotating occupant. This was rather dangerous as a sport. The after effects were rather unpleasant. With the resultant bumping, jarring, and whirling, one was unable to walk normally for some time. One time when I was riding, the wheel ran into a slough and I was doused in cold water. The parents finally confiscated all of the spare wheels and put an end to this sport.

We enjoyed swimming very much and used to sneak off to the Paris Creek which was about 2 miles away. This was a frigid stream with a few deep holes. Mother was fearful of drowning and forbade us to go. On several occasions we were punished, but we kept going and finally became fairly good swimmers. In the summer time we always looked forward to several trips to Fish Haven on Bear Lake where we could swim and boat to our hearts desire. I treasure these trips very much as they furnished an escape from the daily work that must be done on a small farm.

One time we learned of the great achievements of the Wright Brothers in aeronautics and decided to try some experiments on flying. Alfred volunteered to be our first bird man. We cut up old gunny sacks and fitted him with wings and tail. Grandfather Hess had a barn with a hay loft on the second story and an open end through which the hay was placed in the loft by means of a fork, rope, track, etc. We suspended Alfred about two stories above the ground on the track by means of a rope. I can still remember how he flapped his wings. We shoved him out on the track and cut him loose. He plummeted to the ground like a piece of lead. We rushed down to where Alfred had landed and he showed no signs of life. We turned him over and he was still, breathing. Fortunately, he had fallen on a manure pile which had a lot of straw in it and he suffered no injuries. This ended our experiments on aeronautics.

John gave us a pony whom we called, Kit. She was our constant means of transportation and we used to ride her bare back as fast as she could run. I believe that old Kit enjoyed these wild rides as much as we did. She seemed to take pleasure in dumping us on the ground and waiting for us to climb back on again. Old Kit was our companion for nearly ten years.

John spent the late summers putting up hay. He had a derrick with a long pole which was used to lift the hay on the stack. Alfred drove the team while Dad both operated the hay fork arid stacked the hay. When I was about six years old it was my misfortune to get my ankle caught in the swing rope and be flung up in the air. I can remember that father gently picked me up and took me to the house on horseback. He hooked up the white top buggy and rushed me to the Doctors office in Paris. Doctor West diagnosed my injury as a badly crushed right ankle with a partial severance of the Achilles tendon . He recommended amputation, but father strongly opposed this and stated that he did not want a one-legged son, so the foot was not severed. My Leg was placed in a plaster cast enclosed inside of a wooden box. Mother said that I dragged this around for more than six weeks. In time my right leg healed completely. As I look back I always remember that the love and faith of my good parents saved my foot on one occasion and my life on another.

Each year the farm produced a small stack of wheat and one of oats. It was a big day when our turn came for the threshing machine. Mother cooked up large batches of food, and the hungry men consumed more than she could put before them. The horse drawn threshing machine was a mechanical marvel to me, and I dreamed of the day when I could be head man on one of these.

The wheat was taken to the grist mill where it was ground “on shares” into flour and bran.

The flour was placed in storage for the long winter, while the oats were stored in the granary for the horses.

Bear lake was formerly a choice hunting ground for the Blackfeet Indians and they used to wander back once in awhile in the early days. I can remember that one night I pressed my face against the cold window pane to look out and I was so scared that I lost my voice. On the outside of the window was the face of an Indian peering into our living room. Mother was alone, but she grabbed a nice large loaf of bread and handed it to the Indian and he went away peacefully. We were always taught to feed the Indians and not to fight them.

John's fame as a horseman began to spread. By 1904, he was shipping draft horses to Colorado and California. At that time hay burners were the main source of power on the farm. A Mr. Zimmerman from Riverside had stayed at our home and brought us a trunk load of oranges. During the next ten years, John purchased many carloads of draft horses and shipped them to him. Probably no other man became a closer friend than Mr. Zimmerman and he had a profound effect on father throughout the remainder of his life. He also recommended that father purchase some land in Riverside, California and move his family there. But mother would never permit it because she felt that such a move would be detrimental to the growing family. For many years father advocated this move and it became a very touchy subject in our family discussions.

Just at the turn of the 19th century a new world was beginning to come into being which was to profoundly influence our mode of living. In those early days we had very few conveniences, our home had no modern sanitary features and bathing was strictly a Saturday night ritual performed beside a hot cookstove in the kitchen. Each home possessed a necessary structure located at a convenient distance which has been immortalized by Chick Sale. In mid winter it required a hardy pioneer to dash out in the frigid weather to this little house and be further exposed to the raging elements, but I am sure that many will remember the liberal education that they gained by studying Sears & Roebuck Catalogs under these conditions. Our rugs were made of rags and our houses were lighted dimly by coal oil lights. Most of us kept busy and enjoyed a happiness and security of our own making. We had very little use for money. When roads were to be built or repaired, or irrigation ditches to be cleaned, or school houses to be constructed, these jobs were accomplished by each family doing its share.

Mechanical monsters began to appear on the roads, throwing thick clouds of dust and scaring the horses Father came home one day and told us about a new method of lighting homes by electricity. A few months after this the electrical age hit Bear Lake Valley. An electrical power line was being constructed between Paris and Bloomington. Alfred, the two Hess boys and I took a contract to skin all of the poles between the two towns. In this manner we earned our first cash.

During my early years I was rather shy, slow and deliberate, while Alfred was quite the opposite. Mother must have despaired of me ever living a normal life, As I look back it seems that she failed to realize that I had an analytical mind which reflected on every step that I took. I became interested in subjects which were not related to the one at hand namely, getting dressed in a hurry so I could do the chores and get to school on time.

Because winters in Bear Lake were very severe and we lived about two miles from the school, mother kept us home and taught us the alphabet and numbers. We started school relatively late in life.

John and Clara finally decided to send Alfred to school in Bloomington. He was dressed in his best clothes and rode old Kit on his first educational adventure. The folks must have glowed with pride for he was a very handsome, brilliant boy, with blond hair and blue eyes. At about noon he came home with a bloody nose, a black eye and torn clothing. A gang of boys had given him a severe beating. This experience made the parents very unhappy and they decided to turn their backs on the town that had so rudely treated their son, and send him to Paris. This was a very important decision because Paris was a county seat, educational and religious center for a large area in those days.

In the fall of 1906 the four boys went to Paris to begin their education. As newcomers to Paris it was necessary to fight almost every boy in our age group to establish a place in the youthful social order. The Bateman and Hess boys worked as a unit so that in a relatively short time we were well established. Our first teacher, Miss H. Hart was a fine woman and we all enjoyed a satisfactory year. The winter was severe and cold. Part of the time we walked and most of the time we rode old Kit whom we turned loose when we arrived at school. In the winter we found it necessary to start for school while it was still quite dark and often, the ground and trees were covered with a fresh layer of snow. Under these conditions, packs of hungry coyotes would occasionally follow us at a discreet distance.

Alfred and I either walked or caught rides on the way home. There were no speed limits in those days, but occasionally, some of the gay young adults on their way home would drink too much and they would race their horses down the roads. One time father's two youngest brothers, in a jovial mood, picked up Alfred and I and poured whiskey and beer into us until we became completely intoxicated. They let us off near home and we staggered to mother with considerable difficulty. Of course father and mother were very much upset because they feared and guarded against alcoholism. Father got on his saddle horse with a buggy whip and went to Bloomington. I never knew what happened but after that, the "gay travelers" steered clear of us? It is my opinion that this experience was beneficial because it was the first and. the last time that either one of us became intoxicated. The memory concerning the intoxication was so unpleasant that I have never had a desire to personally repeat the experience.

As brothers, we tended to pair up. Just as Alfred and I had become close pals, Roy and Harold were also inseparable. This close relationship continued until we later left the family hearth.

In the Spring of 1906 one of fathers uncles influenced him to sell out and move to the upper Snake River Valley near Idaho Falls where good land was readily available almost for the asking. John and Clara with four healthy sons seemed to be an ideal family for a pioneer effort such as developing a new farm from virgin land. This very desirable move was not the way the family went because John had never been interested in farming. His heart was with horses and he could never be happy or successful on a large farm. A decision was made at that time to buy a house in Paris. We would soon leave the place

that had meant so much, but living in town would make it possible for us to attend school. The education of her children was mothers deepest desire and she was willing to sacrifice everything to gain this objective.

CHAPTER IV: BOYHOOD DAYS IN PARIS, IDAHO 1907-2913

John purchased a place in town which was located on Canyon Street South of Main street, in the Spring of 1907. It had a good barn for horses, a relatively large lot and excellent neighbors. I shall leave much unsaid about the house, because even at this early age, my opinion of my future home could only be expressed in language that should not appear in print. By this time all of Johns sons were seasoned experts in cleaning horse stables and hauling manure, but the job of cleaning this house stopped us cold. Most animals are unclean only when they are penned up. In this instance we learned that certain humans can be the most filthy of all living creatures.

We scraped the floors and walls many times and a new front was added to the house. We finally moved in and under our mother's capable supervision, it soon began to feel like home. We found many playmates all around us . Alfred became a star actor, orator and singer. One time the Primary organization of the Church put on the play, "Snow White and the Seven Dwarfs." I took the part of Grumpy and Alfred played one of the lead parts and sang a solo. The parents were very proud of him. In the process of keeping busy, I can remember that I supplied copious quantities of pigweed, which grew in profusion in our neighborhood, to our pigs until they bulged with vitamins.

John was gone a lot since he was engaged in shipping horses to California and selling stallions to farmers. Clara had her hands full with four boys in town. A fifth son was born October l4**,** 1907 and he received the name of Russell. He was mothers most beautiful baby with blue eyes and curly golden hair. I sometimes felt that mother loved him too much. It fell my lot to help mother and tend Russell.

During this period, I can remember one date very well because I had the privilege of talking on the telephone for the first time. On May 25, 1908, Mrs. Laker who lived across the street told mother that there was a long distance call for her from Afton, Wyoming. Fearing bad news from either of her two sisters who lived there, Clara sent me over to receive the call. It was a very difficult task for me to tell mother that aunt Lizzy Linford, one of her beloved sisters, had passed away.

Father was in urgent need for more ample quarters for his horse business, so he sold the little home and purchased another about a block west on Canyon Street. The new home was rather desirable from many standpoints. Some of the best people in Paris were our neighbors. The place possessed the finest horse barn in Paris, two branches of the creek flowed through it and it had a pasture of several acres. The house was large, windy and in a bad state of repair. We spent considerable time during the summer of 1909 in converting the house so that it would be suitable to live in.

Winter seemed to come too early that year and mothers health was not very good. She was again pregnant and had to carry the burden of taking care of four husky, hungry boys and their little brother. Little Russell seemed to have delicate health and in December, both he and mother were ill in bed. I shall never forget the night of December 14, 1909. As usual, the boys went up to their room after an evening of chores and were soon sound asleep. At about midnight father wearily came into our room and turned on the lights. He

stood by our bed and sobbed. Alfred and I awoke and climbed out of bed and John drew us into his arms. He then told us in broken tones that we had just gained a little sister, but our beloved baby brother had passed away.

His funeral was held and I can remember the long cold ride from Paris to the Bloomington cemetery. As I watched the casket lowered into the frozen earth, I felt cold both in body and spirit, for this was my first encounter with death. It was very difficult to mix emotions of two types; those of sorrow as an after effect of the loss of a baby brother, and those of joy as a result of the birth of a baby sister. I was also greatly concerned for the welfare of mother, who was still suffering from the shock. Mother's great and enduring love for little Russell has always been an inspiration to me. Our new sister was named Lucille, and through the years she was a source of pride and comfort for mother.

On about 1910, John decided to build a new house for the family just west of the old one. Our spare time during the winter was spent logging in the forest. The logs were taken to the saw mill and sawed into lumber. The new home was finally completed in 1911 and it was a pride to all of us, since it was one of the nicest in town. It was still necessary to carry all of our water from a neighborhood well. A few years later a waterworks system was installed in town and father had a cold water tap and drain constructed in the house.

We now owned about a hundred acres of meadow land and the fifteen acres at the field. In the winter we kept busy hauling hay from both places and manure back to the field. The brothers became rather specialized in respect to the chores that must be done each day. Alfred was the dairyman and milked the cows. Roy and Harold were experts in reducing large yellow pine logs into pieces to be fed into our kitchen stove, which seemed to have an insatiable hunger for wood. It was my assignment to take care of the nutrition of the horses, cows, pigs and chickens and clean out the stable. The parents managed to keep us busy most of the time and this was important because we had very little opportunity to get into mischief.

In the third and fourth grades, it was my misfortune to have a succession of teachers who seemed (from my viewpoint) to have very little patience with me. At that time I was rather shy, stubborn and left-handed. I always liked to deliberate on any work that I had to do, and this made me appear to be slow and lazy. This view was certainly shared by my third grade teacher who was a very nervous woman. She tied my left hand behind me with a rope, made me stand in the corner and punished me whenever I tried to write with my left hand. I somehow survived this school year by drawing within myself and learning how to write with my right hand.

The next year we had a woman teacher who taught by force and had no patience for slow or deliberate students. One of her favorite methods of discipline was to grab a student by the hair of his head and shake him back and forth. One of the boys once came to school with a crew cut and she grabbed him by the ear. We certainly must have been a very poorly disciplined group of boys and girls. The following year required three different teachers to finish out the year, and the last one was a cowboy with an education. He was an expert with the lasso rope and he could pop a black whip within a few inches of your nose at a distance of about fifteen feet. He showed us how to tie knots and was an

excellent reader. In a short time he won the mutual respect of all of us and I began to find school an interesting adventure. This was the end of a period which must have been very discouraging to my parents because I made only two grades in three years.

In the fifth grade we had an ideal teacher, one who had patience and knew how to inspire and kindle the interest of her students. Ellen Budge was a stimulus to me. It seems that she was able to touch me in such a way that high scholarship became my greatest ambition from that day on. In one short year I moved from near the bottom to the top of my class. Life seemed to take on a new meaning and my self confidence began to grow. During the next two years I was very fortunate in having Frederick Price as a teacher in the sixth grade and Daniel Rich in the seventh grade. Both of these men were dedicated teachers who inspired their students, and at the same time helped us to develop lasting backgrounds in such areas as arithmetic, spelling, writing and reading.

Shortly after the birth of Boy Scouting in this country, our local church unit organized a boy scout troop in Paris, and I was elected leader of the Lions Patrol. Our younger brothers formed a second patrol and they were called the “Brave Eight.” This was one of the first scout troops in the State of Idaho.

Near our home was a large wooded area which extended up into the canyon, and a creek with ice cold water meandered through it. It was an ideal playground for boys. The Lion's Patrol built a log cabin on a small island in a remote section of the pasture. The entire structure was securely fastened together and a stove was placed inside. We also installed a secret drawpole which made it possible for us to get on or off the island and it was withdrawn when not in use. When we were in the cabin with a warm fire and plenty of good food we felt happier than any Norman fluke in his castle.

In the winter the cabin became covered .with snow, and it was a warm place in which to meet, even when the freezing winds were howling outside. After fresh snow falls it was interesting to identify the tracks of many wild animals that lived in the wooded area.

Our patrol became a tightly knit group of boys whose close friendship lasted for many years. Our free time was spent in developing skills and sports such as woodlore, skating, swimming, horsemanship and boxing. Sometimes our games lead to feats that tested our courage and stamina. For example, on a cold February night we chopped a hole in the ice and each member of the patrol ducked himself in the cold creek water up to his ears. I can remember that I dashed through the snow into the warmth of our cabin, shivering in every naked joint.

After about two years of these happy days, the owner of the pasture ordered us either to move the cabin or tear it down. These were very unhappy days and the two patrols gathered in front of the beloved cabin. We could not tear it down because it had taken on a personality and was one of us, so we decided to move it. Our good neighbor, William L. Rich offered us a final resting place for the cabin. His son, Clarence was one of our most capable and loyal members.

O'Neal Rich, assistant patrol leader and I were elected as engineers and the “Brave Eight”

volunteered to furnish the motive power. The heavy cabin was jacked up the placed on rollers and a double track of poles was laid on the ground. The Brave Eight pulled on a long rope which was tied to the front of the cabin. It resembled one end of a tug of war. As the building slowly moved forward, the poles were taken up from the rear and moved to the front so that we had a continuous track.. It was necessary to bridge the creek and cross a swamp. We got wet and cold, had many difficulties, but we never became discouraged. The cabin reached its final resting place under boy power.

As I look back, it is my feeling that the feat of moving the cabin under such adverse conditions, had a lasting beneficial effect on all of the boys who participated. We learned to plan and work together and above all, we found that teamwork was absolutely essential to accomplish results. Certainly these and many more similar experiences contributed to character building. Every one of the boys have developed into successful citizens. For example, out of the twelve boys who constituted the two patrols, six later became bishops in the Latter Day Saint Church, three became successful medical doctors, and three have achieved leadership in their respective field in college education.

On January 29, 1912, our second sister was born and the parents named her Thelma. She was a very good baby and it was a pleasure to baby sit with her.

John found it difficult to provide full time work for his four growing boys, so Alfred and I left home during the summer months to find employment. In this way we earned sufficient money to buy our winter clothing and books.

I spent two summers with Uncle Joe Linford in Star Valley, Wyoming. This country is south of Jackson Hole and the Tetons and is very beautiful. During these summers I had the privilege of renewing my companionship with Quill who was my mothers youngest brother. On the range it was necessary to wrangle the horses and mi1k eight cows before dawn, and then put in about ten hours in the hayfield, followed by milking the same eight cows at night, and finally to bed. It was a hard life but we enjoyed it very much. Uncle Joe was the kind of a man that you liked to work for. I can remember that one morning when I was driving the cows to field, the saddle horse dumped me into the frigid waters of Salt River (Wyoming). As I came limping in, cold, wet and depressed, Uncle Joe looked at me with a poker face and merely said, "Breakfast is ready."

During my 14th year, Bishop Sutton of Paris First Ward appointed me president of the Deacon's Quorum whose membership included twelve boys between the ages of 12 and 15. In this capacity we kept the church supplied with wood, helped take care of the church building and worked on welfare projects for widows in the ward. We had a very fine quorum. Later I was appointed president of the Teachers Quorum.

During the summer of 1913 I worked for Mesa Rich, father of one of my closest friends, O'Neal Rich. One of the men who was working as part of the crew was William E. Morgan, Principal of Fielding Academy. He seemed to have special interest in O'Neal and myself, and talked to us on numerous evenings on the great advantages of an education.

CHAPTER V: MY HIGH SCHOOL DAYS 1913-1917

The summer of 1913 in Bear Lake Valley seemed to end too early, for the alfalfa was frozen and the leaves on the trees took on the beautiful autumn colors in August. September was wet and cold with cloudy days accompanied by rain and sleet. Attempts to stack hay on the Amasa Rich ranch seemed futile. The old saying, “Rain means more rest,” was not appreciated because it also meant, “no hay, no pay”. The hay remained wet so we fenced the stock yards but we soon ran out of work. I became restless and anxious because it was about time to start school and I needed money to purchase clothing, books, and to meet other personal expenses.

On Thursday, September 25, we had reason to be happy and thankful, for we had more than a week of good haying weather. On this day we worked as long as we could see, had supper and retired somewhat exhausted. But our deep slumbers were disturbed by the heavy rain that beat on the old leaky tent. As the endless night crawled on, our beds became sodden and the rain changed to snow. By morning the upper layers of our bed covering were frozen stiff as boards and it was necessary for me to snuggle up to my bed partner to keep from freezing. We experienced difficulty in making a fire and cooking breakfast. Our boss, Amasa Rich decided to leave the remaining hay on the ground and let the cattle dig for it under the snow during the winter. We cleaned up camp, packed all of our gear and left for town, and I can truthfully say that I had no regrets. I did not realize that this would be my last season as a farm hand. On our way home the sun came out in all of its glory, and the earth covered by the freshly fallen snow, looked white and clean. We soon forgot the unpleasant night and enjoyed the beauty of Gods creation.

On Monday, September 29, 1913, I entered Fielding Academy as a preparatory student, (equivalent to the 8th grade), along with 0 Neal Rich and five others. Alfred began as a freshman at the same time. The selection of Fielding Academy was fortunate for me because of the high quality of scholarship and religious ideals that were stressed. We had excellent teachers, three of whom later completed Ph.D. degrees in their respective fields. One of these was brother Wallace Vickers who later became professor of English at the Utah State University. It was my good fortune to have him in grammar and composition for two years. I was very weak in this area and I am sure that it was his interest and excellent teaching that made it possible for me to develop some proficiency in the use of the English language.

Principal William E. Morgan always seemed to have a special interest in me and one day he pronounced a blessing on me which has always been a beacon in my life. "You are a choice spirit and it you will always strive to do your best in all things and live a good life, I promise you will be blessed exceedingly, and your life will be full of great achievements and honor!" It seems that from the day I entered the Academy I have been afforded an endless succession of opportunities. I graduated from the preparatory department on the 29th day of May, l914, with highest honors.

Bear River, which begins in Wyoming and ends in Great Salt Lake, enters Bear Lake

Valley on the south east side and leaves on the extreme north end. In the spring the flood water from the river used to cover the bottom lands of the valley and make it difficult for us to go to Montpelier. Later in the year the flow of the river reached a very low point. The Utah Power and Light Company planned to build a number of large power plants along the course of the river, and found it necessary to stabilize the flow of the river. As a result, they decided to make use of Bear Lake as a storage reservoir for the flood waters. They constructed a series of large canals across the valley and a large pumping plant on the north end of the lake large power lines were also built through the valley. This project required almost six years for completion and a Mr. E. G. Whitcomb, general superintendent came to Paris to live. He had a stable of fine harness horses and hired Alfred and I to take care of them. Because of his friendship I was able to get a job as upper deckman on the old Wasatch Dipper Dredge for the summer of 1914.

The dredge was really a large steam shovel and was served by a motor boat and a large barge. This combination was used to haul coal and supplies from the wharf at the Dike to the dredge. It was my responsibility to help take on supplies and assist the cook. The cook was an old German chef who was very exacting in everything that he did. He treated me as a son and although my work with him was difficult and unpleasant at times, I learned much from him. When I returned to high school in September, he gave me my first razor which I used for many years. The work on the dredge was very pleasant with swimming and many rides on the motor boat. One time one of the workmen who could not swim was swept off the barge and sank to the bottom of the canal. I immediately dived down to him and after a struggle brought him to the surface. From that time on I enjoyed the respect of every man on the project.

The construction of the high tension line to the pumping plant at the north end of Bear lake was restricted to the summer months. It traversed swamps, meadows and sloughs, hence, difficulties were encountered during periods of high water in the spring and in the winter. I worked during the summers of 1915 and 1916 with the construction crew and it was made up of quite a number of rough characters. There was considerable gambling and drinking after work, and one night one of the workmen came dashing through the camp swinging a cleaver. Someone hit him on the head and he was a casualty for several days.

During the first summer I became rather expert as a post-hole digger. In some cases it was necessary to row a boat out to the middle of a slough to dig some of the holes. We used a long box which was open at both ends, and this was placed so that one open end was in the water. It was necessary to stand on the upper end of this and dig with a long handled scoop. As we continued to dig the box sank into the hole and kept the sides from caving in.

In the summer of 1916 we finished the construction of the high tension line, and our construction crew was largely composed of linemen. Each lineman had a helper called a “grunt.” The grunt laid on his back and watched the lineman who was working at the top of the pole assembling cross arms and doing other necessary work. Whenever the lineman needed something, it was immediately supplied by means of a pulley and rope. I worked as a "grunt" for a tough character called Smokey, but he was a friend and often bragged

about having the best grunt in camp. One night a drunken lineman came into my tent at about 2 A.M., and was trying to force me to drink a bottle of raw whiskey. Old Smokey heard the commotion, rushed to the tent and knocked the intruder out of the tent in one blow. He turned around to me and said, "Son, you are clean and we are going to keep it that way!" I became attached to this man who was one of the roughest characters in camp. He fought, drank and gambled, but I felt that he was really an unpolished diamond. My experiences in these rough construction camps have helped me to be more tolerant. In every good man there are imperfections, and in every bad man there are good qualities, if we but look for them.

The coming of the automobile and the tractor ruined father' s draft horse business, so he turned to race (harness) horses. Several of his horses held the best records in their class. Training of race horses is a skill that requires patience, horse sense and time, and probably few men were equal to John as a horseman. His great regret was that none of his five sons followed his favorite sport. Personally, my love for horse racing ended when I found it necessary to walk the horses for long periods of time in order to cool them after racing. For quite a period of time John was bitterly opposed to automobiles. Finally in 1916, he purchased a new black Model T Ford and proudly drove it home, but he almost knocked down the buggy shed. I was considered to be the most mechanical member of the family so father asked me to drive the car. I carefully read and memorized all of the instructions for the operation of the vehicle. The car was started with me behind the wheel and it seemed that everything I did made the Model T move faster. After jumping an irrigation ditch, missing two trees and running through a narrow opening in the fence, I was finally able to get the car stopped without a scratch. Probably no other episode in our family history has contributed so much conviviality as this wild ride.

During my high school years my home life was full of worthwhile experiences. Mother was strict and was dedicated to the ideal that hard work was the basis of success. We had very few idle moments, for the chores had to be done, hay had to be hauled, and wood chopped. One way to get out of this hard work was to study, and as a result, I spent plenty of time in the preparation of my school work.

The brothers were doing very well in school and the baby sisters were developing into pretty young girls. One year Lucille won the first place in a beauty contest. John was elected a member of the Paris City Council and later ran for Sheriff of Bear Lake County. This was my first experience with politics, and my youthful observations of the campaign made me happy when he was defeated.

The attempts of John and Clara to enforce a curfew resulted in a number of amusing events. On quite a number of occasions I found it impossible to beat the deadline of 10:30 P.M., so I became very skillful in crawling into the bedroom through the window. I can remember the last time I attempted this maneuver, mother stood inside in the dark watching me, and very gently said, "George, the door is unlocked." After this I used the door and noiselessly crept to my room. One night my younger brothers, Roy and Harold, piled all of the milk pans that they could find behind a door through which I must pass. The falling pans caused such a commotion that almost all of our neighbors knew when I retired that night.

It was always a pleasure to return to Fielding Academy each fall. Roy A. Welker followed W. E. Morgan as principal of Fielding Academy and it was my good fortune to have him as advisor and teacher. He probably had more influence on my life than any other man. He was a gifted leader and an inspirational teacher. I can remember that he included two years of German in my course of study, and when I expressed the desire to drop this subject, he said. that the day would come when I would bless him for keeping me in this subject. In this connection it is interesting to note that a reading knowledge of German was required when I completed my Ph.D. in Chemistry ten years later.

My years at Fielding were my happiest and in some ways my most successful, because I loved my work, respected my instructors and had great faith in purpose of life. It is regrettable that I have lost some of this fine idealism as a result of the erosion of later experiences. I took courses in agricultural sciences, mathematics, woodwork and social sciences in an effort to find, a career that would suit my limited talents.

In my third year I took chemistry from Ezra Price with about thirty other students and I received the only "A" grade in the class. Mr. Price was very enthusiastic about my work and recommended that I consider the field of chemistry as a possible career. He also told me about graduate school, Cornell University, and what was generally required to complete a doctor of philosophy degree. From that time on, the achievement of this objective became a driving and guiding farce in my life.

During my high school days I was active in scouting. I was in charge of the Paris First Ward Troop and O Neal Rich was my very capable assistant. We had a very good troop and went on quite a number of rugged overnight hikes in the mountains. I also had a good record in church participation.

In March, 1917, I had a conference with Principal Welker and at that time he made a check of my high school credits and found that I had sufficient credits to graduate that year. He seemed a little upset because he said that it is not a good thing to skim through high school in three years. He further emphasized that thoroughness is required if one is truly preparing for a worthwhile career. At the next school assembly I was promoted from a junior to a senior.

I was rather active in debating and was on the Academy team for two years and debating manager for one year. One year we went to Afton, Wyoming in mid-winter in a bob sleigh. The box on the sleigh was covered with canvas and we had a heating stove in it. Two days were required for the trip. My first trip out of the high mountain region was in the Spring of 1917 when we went to Preston, Idaho to debate against Oneida Academy. On this trip I visited Utah State where I later completed my undergraduate collegiate work.

A great joy came into my life when Principal Welker announced to the assembly that George Monroe Bateman had achieved the highest scholarship and, therefore, had been selected as Valedictorian for the class of 1917. One of my brothers ran all the way home to inform the folks of the great honor that I had received. When I arrived home, mother

stood with tears in her eyes and said, "Now I feel repaid many times for all of the sacrifices that we have made and we are proud of you!"

My last days at Fielding Academy were spent preparing the Valedictory address which I still consider to be one of my best papers. Our thinking at that time was colored by the ominous war that was raging in Europe so that I was rather idealistic and serious. Finally, on May 12, 1917 with great fear and humbleness I delivered my address entitled, “True Preparedness,” and this officially ended my high school days.

CHAPTER VI: MY COLLEGE YEARS 1917-1921

After my happy clays at Fielding, it seemed that life was just beginning for me. I wanted to go to college, but I realized John and Clara would be unable to give me any financial help because of their large family. In addition, Clara was again pregnant.

During the summer of 1917 a wave of patriotic frenzy swept the nation because we were at war with Germany. The idealistic message of President Wilson rang throughout the land, We must make the world safe for democracy! Many of my friend's and associates were joining the army or navy. Mother was having many anxious moments since she had two sons who were eligible for service, and another one coming up. Alfred was working near Salt Lake City and joined the 145th Field Artillery in August, 1917 and a short time later left for training in California. I was subjected to considerable emotional pressure to enlist, but decided to defer any action until Uncle Sam indicated that he had immediate need for my services.

In this period of great anxiety and stress, mother gave birth to a third daughter on August 24, 1917. She was a beautiful baby with blue eyes and blond hair and was named Othel. Through the years she was closer to mother and more considerate of her than almost anyone else.

Immediately after graduation from Fielding, I left home and obtained work at Camp Lifton which is situated on the north end of Bear Lake. At this time a large pumping plant was being constructed. After several weeks on the job I was promoted to the position of Chief Electricians Helper. In this capacity we installed the electrical system which controlled the operation of the big pumps. It was very interesting and instructive experience and the summer months soon passed.

Early in September I handed my resignation to the camp superintendent and told him that I planned to start my college education in a. few weeks. He looked rather disappointed and stated that I had been selected for a permanent position as a power operator for the Utah Power and Light Company. He counseled with me to consider this worthwhile opportunity with a large and growing company. At this time it was necessary for me to make one of the most important cross-road decisions of my life, one path leading to relative security and the other to adventure and many unknowns. I n the end I chose the more difficult path.

In the early part of September I returned home. On September 11, 1917, Thomas Sleight, a pioneer educator of Paris, Idaho, and a Bear Lake Stake patriarch called me to his home. He was my Sunday School teacher and had shown much interest in me during my youth. He said that he had been inspired to give me a blessing before I left for college. This blessing has proved to be a guidepost and a source of inspiration through the many years that have passed.

At last the happy day came when I left for college. Father cranked up the old Model T

Ford which contained my luggage and my younger brother, Harold. As we moved out of the yard, mother stood with the infant, Othel, in her arms, flanked by LeRoy, Lucille and Thelma. Her face was strained by anxiety and tears moistened her face. She was unable to speak.. Her second son was leaving home to find his own place in the world.

The trip to Logan, Utah, was slow and there were times when we found it necessary to push the old Ford over the steeper slopes. The road over the rugged Wasatch mountains was a little more than a wagon track, and it required almost all day to travel the 65 miles. Father left me at my new home which was a one-room apartment at 21 East 5th North. I shared the room with my old friend, O'Neal Rich who is now a physician in Salt take City.

In my freshman year at Utah State I registered for a heavy course consisting of Chemistry, Physics, Algebra, English History and English. I also entered into school politics, acted as campaign manager for one of our Fielding Academy graduates, Clem Hayward, and he was elected president of our class.

Particularly during the first semester I had considerable difficulty from the financial standpoint. After paying my tuition, rent, and buying my books, my bank balance amounted to less than fifty dollars. There were times when I found it necessary to get along on one meal each day, and to find any kind of work, such as sweeping the classrooms and washing dishes in the college cafeteria. I became an expert pearl diver" and this paid for one meal each day. In the evenings I swept out the part of the building occupied by the Art Department. I am sorry that this was my sole contact at college with some of the great creations of art and sculpture.

In my freshman year I was pledged by one of the leading fraternities on the campus. When the time came for the initiation I found myself without the necessary funds. When one of the fraternity leaders personally asked me to give my reasons for not joining, I was too vain to tell him that I was broke. He explained that the fraternity could be of great help to its members. When he failed to obtain my approval he became somewhat angry and stated that the Greeks would blackball me from that day until I left college. After this experience I began to feel that fraternities existed chiefly to satisfy the vanity of the members.

The World War was in full swing and every day our classes became progressively smaller since many of the students were being called into the service. We drilled daily in our fancy uniforms and studied military tactics. At that time the Army was using the old Napoleonic methods of drill and my heels became rather sore because I always seemed to be in the way of the fellow behind me in the rear rank. Lucian Meecham who later became a prominent Mesa, Arizona, citizen was our cadet Captain. He gave us a rough time but our company took pride in having the best commanding officer.

During the year I met a fine girl who was slightly older than I. She checked my English and helped me in many ways. I took part in debating and won the interclass championship for which I received the Thomas Medal. At the honor assembly I received honorable mention for scholarship.

In February 1 accepted a position as a part time assistant in the Utah Experiment Station with Professor Greaves who, at that time, was one of the top men at Utah State in both teaching and research. This position was what I wanted because it gave me an opportunity to work under a capable man, and also solved my financial problems for the remainder of the year.

A few weeks after accepting this position, Dr. Greaves called me into his office. He was looking at my record book and was very angry. I explained that I had. made a mistake in recording data, had torn out the page and thrown it in the waste basket. He stated that it was a very grave offense to tear a page out of a record book and that all of the results in the book would be subject to question because of the missing page. He pointed out that the regular procedure was to draw a line through the errors and move to the next page with the new observations. He further stated that I would be under probation until the missing page was replaced. I felt that it would require the patience and sagacity of Sherlock Holmes to track down the missing page. After a number of inquiries I learned that all of the waste paper from the college was dumped in an empty coal chute near the heating plant. On inspection I found the chute was an underground cavern about two thirds full of waste paper. I almost lost my courage and came very near withdrawing from the college. Finally, I decided to examine every scrap of paper by individually transferring it to the empty end of the chute. I can remember that I started at about 8 P.M., and worked until about 5 AM. with no sign of the missing page. My patience had almost run out and I devoutly called for Divine assistance in my search. Finally, after moving almost every scrap of paper I found the missing page which I carefully ironed out and restored to the record book. A few days later I met Dr. Greaves and he was showing one of his rare smiles. He had the record book in his hand. I told him of my successful search for the missing page and he placed his hand on my shoulder, and said, “Use your errors to improve your weaknesses. Do not try to ignore them by tearing pages out of your book of life.” As I look back I am certain that this trying experience had a profound influence on my life. In a few days I learned a very important lesson, that honesty and accuracy are important prerequisites for a scientific career.

In May, 1918, Professor Humphrey, Head of the College Extension Division informed me that I was one of 44 college students selected from Agricultural Institutions throughout the United States for summer employment by the International Harvester Company. The company was producing a new farm machine, called the combined harvester, which was designed to cut, thresh and sack the wheat in one operation. We would be called traveling experts and receive a months pre-training by a master mechanic. Our pay was over $200 per month and all expenses. I was of course thrilled by this great opportunity. Because of the war the combines were prematurely rushed on the market as labor saving devices and we had considerable difficulty in keeping them running. The harvesters were pulled by twelve or more horses and the motive power of the machinery was furnished chains driven by a large bull wheel. The farmers had to have considerable patience to keep the combine going. Green weeds stopped the canvas conveyors and clogged the cylinder; wheat spilled out over the screens, chains jumped off their sprockets, and many other troubles showed up.

I can remember one hot day in July 1918 when I was lying under a combine, struggling to make necessary adjustments. Smut, dust and wheat beards were drifting down on my dirty face and in my anguish I expressed the wish that the officials of the International Harvester Company also share my experiences. My efforts and thoughts were suddenly interrupted when I heard Mr. Wells, the implement dealer call my name. I crawled from under the machine looking more like an African than a white man. As soon as I gained the upright position, Mr. Wells said, "George, allow me to introduce Mr. MacCormick, Chairman of the Board and Mr. Legge, President of the International Harvester Company. I was really shocked and felt like crawling back under the combine. Both of these gentlemen grabbed my greasy black hand. and shook it vigorously. We sat down in the shade of the machine and had a pleasant conversation regarding the combine and its shortcomings. They indicated that the factory was improving every shipment and that they would welcome any recommendations from the field. Both of these men proved to be very democratic and very concerned about field problems.

Later in the summer I caught a 1:00 A.M., train on the way to my next job and sat in a coach seat next to a soldier. The car was dark so I soon fell asleep and was suddenly awakened when the train came to a jerking stop and the lights were turned on. I almost fainted for sitting next to me was my brother, Alfred. He was on his way home on furlough for a few days before being shipped with his unit to the European front. Since I had not been home since Christmas, I decided to accompany him and pay a visit to our parents and the old home town. He was greeted as a hero by our neighbors. When we left after a short visit, John was so upset that he escaped to the barn, and Clara stood with baby Othel in her arms surrounded by Roy, Harold, Lucille and Thelma.

My first summer as a harvester expert ended in Bear take Valley where the wheat ripens in late September. I worked out of Montpelier and started several combines in the dry farming area around Geneva. It was a pleasure to be back home and have the opportunity to visit old friends and relatives. On my 21st birthday, September 12, 1918, I registered in the first universal draft for World War I. October 15 found me in the army as a private, and because of my college and previous military training, I was assigned to the Student Army Training Corps unit located on the Utah State Campus. The primary purpose of this branch was to serve as a reserve for future army officers.

Our unit consisted of nearly 700 college men and we spent our time in classes in Mathematics, Spanish, and military tactics, and at the same time we were subjected to a. rather heavy dose of military drill. We were very short as far as uniforms were concerned and most of us wore shoes that were several sizes too large.

Influenza soon struck the camp and I was one of the first to go to bed with a high fever. One of the ninety-day-wonder (brand new 2nd Lieutenants) assumed that we were homesick and ordered us to get up. Quite a number of the men followed orders but I remained snugly in bed. A sergeant tipped my bed over and threatened me with KP , but I remade my bed and retired again. I became very angry and suggested that he let the Medical Doctor be the judge of my state of health. He immediately summoned a physician who took my temperature and found it to be 103F. He diagnosed my case as flu and ordered all of the sick men back to bed. Two of the boys who obediently followed the

orders of the officers became fatally ill and died.

A few days after my flu episode, I received orders along with two other soldiers, to proceed to Salt Lake City and take examinations for entrance into the Military Academy at West Point. This assignment had come to us because of our previous academic records and the results of the alpha army tests that were given to us shortly after entering the service. One of the trio, George Dewey Clyde, who later became Governor of the State of Utah, was ill with the flu and I was still weak. The third man received the appointment.

Upon my return to Logan I found that there was urgent need for a "mule skinner to haul wheat from Blue Creek to Lampo, a bleak railroad stop on Premonitory Point north of Great Salt Lake. I volunteered and soon found myself on the way to a lonesome frozen country where I would share the company of eight mules for over a week. The mules and I made a daily trip to Lampo with two wagons tied in tandem, piled high with sacked wheat. The distance was about twenty miles and we encountered cold winds and freezing temperatures. The mules strongly resisted the trip to Lampo but I had considerable difficulty restraining them on the homeward stretch.

I was glad to get back to the Utah State Campus, but my joy was short lived. Almost one third of the camp was in the hospital with the flu and I was appointed acting hospital Sargent until the epidemic subsided. On November 10 I was very happy when I noted my name on the roster with orders to leave for an Officers Training Camp in a few days. On November 11, after a vigorous drill and workout, we went to classes. At about eleven o clock we heard the bugle playing and we hurried to the parade grounds for assembly. I can remember that as we stood in company formation, Captain Abbott and his officers marched along our front and made a careful inspection. With tears in his eyes and a smile he sharply called out the order, “At ease.” He then stated that Germany had agreed to Armistice and would officially end eleven minutes after 11 a.m. He then looked at his watch and ordered all of the S.A.T.C. cadets to stand in deep silence in memory of the numerous soldiers who had given their lives for their country.

We were glad to learn that the War had ended and soon received the happy news that we would be home for Christmas. We spent the next few weeks in classes in the gymnasium. We wore heavy flu masks which sometimes made it difficult to breathe and which had a tendency to freeze to our faces when we were drilling in the winter air. The flu epidemic was at its worst among the civilian population. School, churches, and movie houses were closed, so that I was anxious to remain in the service until the beginning of college in January. At my request, Captain Abbott gave me a new assignment as acting quartermaster sergeant. In this capacity I worked until January ll, 1919 packing blankets, uniforms, and other tasks. An army inspector came to Logan and was very angry when he found that I had not been discharged on or before December 21 in accordance with orders. I guess I was about the last S.A.T.C. cadet to be discharged from the service. In spite of my discharge I was permitted to sit at Uncle Sam's table and assist in the discharge of the l45th Field Artillery (Utah National Guard). Brother Alfred was a member of this unit which had spent over a year in the front lines in France, and I was very happy that he was again a free man. He went to Salt lake and found a job near Sandy.

I moved from the campus to a very nice boarding house and shared my room with a good friend, Cyril Clarke, whom I first met in the S.A.T.C. The next Monday we started college again. This year was one of the happiest of my life. I was in top health, carefree, and full of desire to enjoy life at its best. Cyril was a top guy and we enjoyed evening trips to Preston and Hyrum. One girl accused me of being an angel on the dance floor, but a devil in a chemistry class. One night Cyril and I spent an evening in Hyrum. The girls turned the clock back by one hour and as a result we missed the last electric car to Logan. The town had no hotel and the station was cold so we walked back to Logan on the icy roads. While walking these eight slippery miles I had plenty of time to review and the next day I wrote one of my best examinations.

In May I again renewed my position with the I. H. C. beginning in Nephi, Utah, and ending the season in Fairfield, Idaho. The harvesters had, been materially improved and it was necessary to rework all of the 1918 models. A Le Roi gasoline motor was mounted on the fore-carriage and this drove the machinery by means of a big leather belt which had a tendency to slip off. During the summer I made a trip home and had the privilege of visiting my youngest brother, Rao, who was born on April 18, 1919. John and Clara were very happy to have another son.

When I arrived in Logan for my third year of college, I found that John and Clara had purchased a home on First South near the old Brigham Young College (now Logan High School) and had even moved several of the family cows and the furniture from Paris, Idaho. They invited me to come home. It was a hard and expensive winter for the family.

During the past two years I bad been completely weaned, but John and Clara still looked on me as the little boy so that at times I must have been a problem child because of the late hours I kept, especially at week ends. They still considered after 10:30 P.M., as being late.

Alfred paid us a visit during Christmas, and after many hours of persuasion, I convinced him that he should start college the next quarter. For the first and only time the entire family was living together under one roof. John and Clara now boasted of five husky sons and three pretty daughters.

I was very busy during my Junior year. I carried a heavy schedule of courses, worked as a chemistry laboratory teaching assistant and was active in student politics. I was college debating manager, member of the Buzzer1 (annual college yearbook) staff, class secretary and chairman of the "Barbarian Council" which was an organization of over 300 war veterans. President Peterson called me to his office March and stated that he felt that the Council was a positive force in the Lands of the present leaders, but that he was fearful of the future. Near the end of the year we allowed the organization to gradually die. In April I accompanied the debating team on a trip to California and we spent a few days traveling. It was an exciting trip. We visited San Francisco and Los Angeles but lost the debates. At this time I had a nice visit with Mr. Zimmerman who was fathers old friend. He showed me the land which he advised father to buy many years ago.

Late in July, John sold the Logan property and moved back to Paris, and I renewed my pleasant relations with the International Harvester Company. This summer was very much like the previous ones. I started in Nephi, Utah. The l92O model of the combine showed many improvements including a new and more powerful gas motor, which was mounted over the grain wheel with a direct drive. After being in Nephi for about two weeks I received an emergency call to go to Cambridge, Idaho (a distance of over 800 miles) to repair a 1919 model with a Le Roi motor. Farmers as a group are very careless and leave their machines out in the weather. I realized that this would be a difficult operation for me because I had had no experience in repairing gasoline engines. Before leaving Nephi, I spent two days in a garage and during that time worked with a mechanic and we almost rebuilt two combine engines. On the way to Weiser, Idaho, I studied a book on combustion engines. From Weiser I traveled via the Pacific and Idaho Northern (P.I.N.) on an ancient train which almost jumped the tracks on several occasions. This railroad followed a very crooked and narrow river for a distance of almost 100 miles to Council, which is a beautiful summer resort. At Cambridge the farmer took me out to his dry farm and I found the combine engine to be badly rusted. I removed the head and filled each of the four cylinders full of kerosene and took the magneto to town to be recharged. Two more days were spent at the Implement Shop learning how to repair and adjust combine engines. On my return to the farm I found the pistons were frozen in the cylinders and I jarred them loose by means of a small, long pole. It required about two days to complete the repairs on the combine. With great apprehension I cranked the engine and it started easily to my great surprise. It ran smoothly and needed very few adjustments. The farmer hooked his horses to the combine, commended me on my expert" workmanship and drove to the wheat field. I felt rather humble and said nothing. Later when I told the story to Mr. Seal, the branch manager of I.H.C., he laughed heartily and said, “With your pluck and self confidence, you should go places!”

One morning when I was working out of American Falls I noticed a familiar figure coming out of the railroad yards. It turned out to be my younger LeRoy who had been working out West and was on his way home via fright to go to college. We had breakfast together and I offered to pay his bill. He objected strenuously and took off his shoe and showed me his summer earnings in the form of U. S. Currency. He indicated that his shoe was a safe place to carry currency. Late in August I was sent to Grace, Idaho to start new combines. After a rather pleasant weekend party I met a number of friends rather late on a Sunday morning, and they suggested that we pay a visit to the Harris home. At that time I met Florence and her parents. Of course I noted that she had gone to Sunday School and that she was a nice girl. I was soon on my way to another town so that I did not meet Florence again for another year.

On or about the 1st of October, 1920, I returned to Utah State as a senior and roomed with Alfred in the Saxer home. At that time Dr. Saxer was professor of mathematics. This was the last year that we would spend together and we enjoyed it very much. During this year, in addition to carrying a schedule of heavy courses, I also worked as an instructor of Chemistry. About the only extra- curricular activity that I entered was the presentation of a scientific paper for the William Peterson Scientific Award, which resulted in a tie between Hyrum Flanders (another senior) and myself. After about a week the judges finally made the award to Mr. Flanders, because some of them felt that my subject,

"Radioactivity" was a little too impractical. Unfortunately, all of these gentlemen died before the advent of the atomic age. In the Spring of 1921 I was elected to Phi Kappa Phi, National Honorary Scholastic Society along with about eight other seniors. Several very good high school teaching positions were offered me for the coming year, and I accepted the offer for Grace, Idaho. I graduated from Utah Agricultural College on the 30th day of May, 1921 with a B. S. degree, and at that time I began to seriously understand what commencement really meant.

CHAPTER VII: THE RELUCTANT HIGH SCHOOL TEACHER 1921-1924

While at Utah State I followed a program that prepared me for entrance into graduate school. In 1921 the United States was experiencing a minor depression and money was scarce. It was necessary for me to go to work and build up my bank balance before beginning the expensive and difficult venture. I had a contract for a position in the Grace High School, but lacked a State High School Certificate which would permit me to teach.

Summer School began about a week after graduation, and I found myself back in the classroom, studying methods of education, curriculum and psychology. I enjoyed the work very much, especially the classes in Vitalized Education taught by Superintendent Ryan of the Logan Schools. In his classes we built an enthusiasm for the great profession of teaching, and I am certain that this background has had a marked influence on my teaching. A teacher must offer a challenge to his class and at the same time inspire his students. By the end of the second term I had completed 12 semester hours. With six additional hours which I had already completed in my undergraduate work, I was able to satisfy the professional requirements for the teaching certificate. In September I went to Paris; and took examinations on Idaho High School Methods and on the State and Federal Constitution. I passed these with flying colors and was happy with the though that the much coveted certificate would be mailed to me in a few weeks.

I remained home for two weeks and helped John with the fall crops. This short visit afforded me an opportunity to renew my acquaintance with mother, father, brothers, sisters, and old friends. I went to a number of parties and dances, and enjoyed them so much that I was reluctant to leave. Fathers oldest brother, Fred, who was formerly an elementary teacher, warned me against going into teaching and said that it was a nerve wracking experience. I had no desire to teach in elementary school and considered the opportunity to teach in high school as a stepping stone to higher education.

My arrival in Grace via Bert Orrs famous stage created no stir and the town paper did not even take the trouble to mention it. My room mate, Mr. Leon Garrett, who later became the financial secretary of the University of Utah was already established in the Turner home. After dinner we took a walk around town and were not thrilled by what we saw. In the fall, heavily loaded grain trucks came to Grace to unload their contents and hurried back for additional loads. The roads were not paved so that the trucks threw up dense clouds of powder dry dust as they moved along. A heavy pall of dust hung over the valley and obscured the setting sun. Some of the town area was made up of vacant lots overgrown with shoulder high weeds. As we walked along the main street we noted that the business buildings were arranged in a haphazard fashion on each side of the street. On the north end of town we came across the blacksmith shop which had turned almost black with the soot from the unvented forge. Around the shop was a vast amount of broken down farm machinery scattered in random fashion. We stopped in and talked to the blacksmith and found him to be rather an unusual individual, a native of Austria, and an excellent craftsman. During my stay in Grace, he became one of my best friends. He seemed to be highly complimented that a teacher would spend time with him in his humble shop. As time went on, I became acquainted with many fine people in Grace and I began to think in terms of these personalities, rather than in the physical ugliness of the

town.

On the first Monday after our arrival in Grace, Mr. Garrett and I walked to the high school and had the opportunity of meeting the faculty. Mr. Edwin Smith was the principal and I found him to be a nice fellow. He gave me a rather heavy teaching load consisting of General Science, Algebra, Physics, World History and Shop. The General Science class was one of the most difficult assignments that I ever handled. It consisted of about fifty young buckaroos fresh from the farm. One morning when I came in the classroom about five couples were holding hands, and I suggested rather emphatically that if there was any hand holding during the class period, I would be the main participant. Almost every girl in the class rushed up to me holding out her hand, and I nearly had a riot on my hands. I probably blushed more deeply on this occasion than any other in my life.

I enjoyed the other classes very much. I re-equipped the shop with tools generally found on the farm and we repaired screen doors, built wagon boxes, pig troughs and constructed concrete sidewalks. The old village blacksmith became my right hand in this course. Several members of the class later became successful building contractors.

During the Christmas vacation, my room mate was married and it was necessary for me to find a new boarding house. Here the environment was not conducive to study since the children were undisciplined and the house was disorderly. I found it a relief to go elsewhere and my favorite escape was the Harris home which was a model of serenity. McGee and Harriett Harris were two of Graces most respected citizens and their daughter was the towns most eligible debutante. My affection for the young lady of the house increased because I found in her many of the fine qualities possessed by her good parents. Her father had been bishop of the Lago Ward for 24 years, member of the Idaho Legislature, Mayor of Grace and patriarch of Bannock Stake, LDS Church. In late November I presented Florence with a diamond.

The winter soon passed, and in May Florence came to Paris for a visit with Clara, John and the family. The folks fell in love with her and welcomed her as a daughter. On May 23, we left for Salt Lake City where we visited with Florence's sister, Viola and her husband, George Mathews. On the next day, May 24, 1922, we were married in the Salt Lake Temple.

The next day after our marriage, I took a walk down Main Street in Salt sake City and ran into my old boss, the branch manager of the I.H.C. He greeted me like a long lost son and stated that he wanted me to go to work the next morning. Since I still nurtured the ambition to continue my college education, the opportunity to go to work and accumulate a little money proved too tempting. So I cut our honeymoon short and took my young bride back to Grace. Then I left for Nephi, Utah on the first train with my bag of tools. Of course, this sudden change in our plans was the cause of our first unhappiness, but two weeks later Florence came to Nephi and we spent our somewhat delayed honeymoon at the Forrest Hotel during my spare time.

Late in the summer I worked in a number of towns in Idaho which are near Grace, so that Florence was again with me. At this time we heard that Arimo, Idaho, Public Schools

needed a principal. We went to this little town and met with the Board of Education. I had met these gentlemen several times in the past in the capacity of a harvester expert, and they offered me a contract for the position. I accepted after my release from the Grace position. The Fall of 1922 found us in the town of Arimo and I had never dreamed of holding a position as principal of a combined elementary and high school. I was without experience and the school, in the immediate past, had a record of a rapid turnover of its administration. In some small towns about the only change that takes place is the replacement of their public school teachers, so I proceeded very carefully. Mr. Nelson, clerk of the school board was a very fine man and I quite often consulted him, and I always enjoyed Mr. Tom Woodland and his fine family. We appreciated the friendship of many other worthwhile people and our two years in Arimo were among our happiest. The town had no water system so that it was necessary for me to carry every drop of water that we used from two wells which were located more than two blocks from our home.

In addition to my position as principal, I found it necessary to teach several high school subjects, coach basketball and was in charge of the towns entertainment. I can remember that I coached basketball by carefully studying a book and then working out the formations with the players. We won more than half of the games during the playing seasons. I established a school library and a science laboratory, and worked for a community wide water system, which was installed the year that we left.

In the Spring of 1924 I read a book, "Life of Pasteur; and my ambition to begin graduate training was fanned into a flame by the inspiration of this great scientist. I applied for a graduate assistantship from several universities and accepted the one from Cornell. When my resignation as principal was made public, many people of Arimo came to our home and asked me to reconsider. At this critical point in my life I found it difficult to choose the more difficult path. Florence and I had denied ourselves of every luxury and our only means of transportation was either by foot or train, but we had been able to save up nearly $14,000 “Coolidge” dollars. At the final Commencement at Arimo, I plead with the students and asked them not to close their books, because their lives were just beginning.

We arrived in Grace and I accepted a job with the Utah Power and Light Company as a handy man and painter. Florence was expectant..... a baby girl was born on July 20 and we named her Cornella. During the summer, Guy, Florence s brother, suggested that we buy a very fine I.ago ranch which was for sale at a reasonable price. The value of this property has since increased more than twenty-fold. We had sufficient to make a very substantial down payment and Guy very kindly offered to help us get started. I was strongly tempted. Why should we pull up stakes and leave all of our relatives and friends in my mad attempt to gain an advanced education in a remote land? I finally concluded, “Now or Never!”

CHAPTER VIII: THE GRADUATE STUDENT(1924-1927)

During the early part of September 1924, I had considerable apprehension as to the advisability of taking my family on this long and expensive venture. It was over two thousand miles to Ithaca, New York, our baby was less than two months old, we had less than half enough money to meet the total costs, and we would be gone for three or more years. We paid a short visit to John, Clara and the family at Logan. After a fond farewell we returned to Grace.

On September 15, father and mother Harris took us to Alexander where we boarded the train. It was a sad parting, and father Harris told us not to worry, but to work hard and that he would completely back us both spiritually and financially. We arrived in Chicago and enjoyed a short visit with Florence's brother, Dr. Earl Harris. I can remember that we discussed the great opportunities of medicine, and he suggested that I give some thought to specializing in medicine. I never liked Zoology and Surgery, hence, I was sure that medicine was not for me. We left Chicago after an overnight visit and arrived in Ithaca at about three o'clock in the afternoon. It was raining and everything looked clean and green, and in every direction I could see low hills blanketed with a verdant cover. I felt rather lonely and lost, and wondered what to do next, when I heard someone calling my name. I turned around and to my surprise and great joy, I saw professor H. Pack of the Utah Agricultural College, who was on leave completing his Ph.D. requirements at Cornell. It was certainly a happy experience to see an old friend in this moment of loneliness. He took us directly to his home. The trip had been rather trying because of our infant.

We enjoyed the hospitality of the Pack home while I went hunting for an apartment. We had arrived relatively late in Ithaca for the fall semester, so that suitable apartments were practically nonexistent. We finally found a nice lady who was willing to share her apartment with us. Her son was also a graduate assistant in chemistry. Our new home was located on the second floor of a business building on Eddy Street near the main gates of the Cornell campus. We had one bedroom, but we shared the kitchen, bathroom and the living room. Above on the third floor was a girls dormitory, while below was a drug and candy store. It was a very discouraging experience to move a young wife who had grown up in the wide open spaces of the West into these quarters.

It rained and the sun rarely shone, so I purchased an oilskin rain coat that almost reached to the ground when I wore it. After the family was settled I paid my first visit to the Dean of the Graduate School. We had a pleasant conference, and he emphasized that in graduate work, the important requirements were not the accumulation of credits and high grades, but the acquisition of a broad and basic knowledge of your specialty and the capability to use it in the solution of problems that may arise in industry and basic research. He also stated that it would be necessary for me to demonstrate reading ability in German and French, and complete a suitable research project.

My next meeting was with Professor L.M. Dennis, chairman of the Department of Chemistry, and he suggested that I spend my first year refreshing my knowledge in the main areas of chemistry. During that year, in addition to my work as a graduate assistant in first year chemistry, I took courses in physical, sanitary and organic chemistry, and

audited classes in inorganic and analytical chemistry. The weather continued to be wet and cloudy, and the flat stone sidewalks were at times slippery. Every morning, noon and evening, the chimes in the library tower pealed out their message of cheer and inspiration. I am certain that every Cornelian, after he has left the campus, is thrilled when he recalls this unforgettable experience.

The Department was located in the new Baker laboratory, which even today is one of the finest structures on the Cornell campus. During the first three months I found the course work very difficult and the results of my examinations were very discouraging. As a result of my three years of high school teaching, much of my background in mathematics and science was very rusty, so that I found it necessary to begin with the elementary courses in order to build a strong foundation. In January my grades began to show marked improvement. Group study with other graduate students was a major factor in my progress.

It was my good fortune to cultivate a number of friendships that contributed to my growth from every standpoint. One of these was Felix Reifschneider, a native of New York City, and a graduate of Cornell. He was a brilliant student, but an unrealistic dreamer. He was working for a Ph.D. in Chemistry, but he continuously dreamed about becoming the manager of the public transport system of a large city. He loved trolley cars, but possessed a strong phobia for buses. He left Cornell in his third year of graduate study to become the manager of the Manila (Philippines) public transit system.

When problems became too difficult, Felix and I used to rent a boat and row on Lake Cayuga until we reached Taughanock Falls. At this point a small ribbon of water seamed to leap off the high cliff and fall with a splash on the shore of the beautiful lake. We always enjoyed this wonder of nature, because merely watching it cleared our minds and built up our morale. After this relaxing experience it was surprising how much we could accomplish. I enjoyed the course in physical chemistry very much and Professor Briggs was a master teacher. In March I lost my laboratory partner in this course and, noted that a red haired Texan by the name of Prickett was also working alone. He walked over to my desk and asked, "How would you all like to work with me?" We worked together and became close friends. One day he invited me to have lunch with him and Professor Sherman at the faculty club. At that time Dr. Sherman was head of the Department of Dairy Industry which included courses in dairy chemistry and, bacteriology, as well as the regular courses in that area. These luncheon meetings continued, and resulted in the growth of a close friendship with one of the finest men I have ever known. This friendship with Dr. Sherman later afforded me an opportunity which made it possible for me to complete my highest objective at Cornell in a minimum of time.

After a hard winter, the delightful Spring came and my graduate work was progressing very nicely, but it always seems that the tragedies and realities of life are just around the corner. Our baby, Cornella, had not shown normal growth and development, so Florence took her to a baby clinic. On that day when I returned home I found my young wife almost in a state of shock. The physicians had examined the infant and found a prenatal glandular deficiency for which medical science had no cure. They further indicated that the baby s mental development would never progress beyond the third year level. During

the remainder of the Spring, Florence never regained her normal state of health. She had her tonsils removed and it was necessary to keep a hired woman in our apartment for several weeks. Finally, in desperation, I sent her and, the baby back to Idaho to spend the summer with the hope that she would again find good health and happiness in her old home surroundings.

Shortly after the departure of the family for Idaho, I was able to find a suitable apartment at 218 Delaware Avenue. After moving most of our belongings to the new location, via the coolie method, I settled down and began my summers work The heavy expenses due to illness materially depleted our savings, and caused me to doubt the feasibility of going on for a doctors degree, so I settled for a Masters degree. During the month of June, I spent much of my time in the library, classroom, and research laboratory. My old friend, Felix, was somewhat worried over my over-work and state of health, and suggested a trip to New York City for a change. One early morning in July, 1925, we left Ithaca by foot and stood on the highway thumbing our way. The cars passed us without even a glance in our direction until almost noon when a Catholic Priest stopped and inquired concerning our destination. He said that he was not afraid of us in spite of the headlines in the morning papers, that described the murder of a traveler who picked up a hitch hiker. We assured him that we were harmless Cornell students on the way to New York City. He proved to be a man with an attractive personality, and as a result, we enjoyed every moment of the trip. We arrived at Times Square at about 10 P.M., and the good priest bade us farewell with his blessings for a safe and worthwhile visit of the great city.

I was dazzled by the lights and beauty of Times Square. The entire weeks spent exploring the great city. Under the able tutelage of my good friend who was a native, I was soon able to travel to all of the boroughs of New York without fear of getting lost, and enjoy the parks, museums, and other wonders. We also swam in the ocean at Far Rockaway Beach and made a trip to the eastern tip of Long Island. We decided to return to Ithaca as far as possible by Street cars and other public transit systems. After a considerable number of transfers and walking we arrived in Scranton, Pennsylvania and rented a room at the end of the first day. The next day we took street cars out to the end of the line and then attempted to thumb our way and finally ended the day by sleeping in a barn . By this time our beards had grown and we certainly looked like we belonged to skid row. The next day we walked to Binghamton and caught a freight to Ithaca. When we finally arrived home we were very hungry, since we had very little to eat during the last two days.

I was very happy to get back to academic work and was able to complete my thesis for the master degree, and I also passed the German requirements. In late September I began my second year at Cornell and I was not sure whether it would be my last. Florence and the baby returned from Idaho in October and they seemed to be happy about the apartment. We attended church at Barnes Hall with the Mormon Colony at Cornell. At these meetings we enjoyed many close friendships which have lasted through the years. later, Dr. Parmley, now professor of Physics at the University of Utah and myself became councilors to Dr. Dye who was branch president. In late November, I passed the qualifying examinations for the Ph.D., and felt very lucky because only seven out of forty-four survived. I also passed the French language examination and started a

comprehensive review in preparation for the final orals which would come when I finished my doctorate thesis.

It was mid December, 1925, and a thick layer of snow covered the earth and I was in the Assistants Office grading papers, when the phone rang. Professor Dennis, Chairman of the Department of Chemistry was on the other end of the line. He told me to get in touch with Professor Sherman who had a Christmas present for me. I met Dr. Sherman at his office and we had a very pleasant conversation concerning my past record, my aspirations, and our mutual friendship during the past year. He stated that he was very happy to offer me a research fellowship with an annual stipend of $1500 (Coolidge dollars!) plus university tuition, and all laboratory fees. It was stipulated that I would be required to teach a short course in general chemistry to farmers, otherwise, I was to spend full time on research and study. For a few days I felt like I was walking on air. This amount of money would almost cover all of our living expenses!

In the early months of 1926, Ithaca had one of its worst winters. The snow was so deep that we were unable to get to the campus for nearly two days. One of the classes that I enjoyed at this time was Biochemistry. At that time, Dr. Sumner was engaged in research on the separation of urease, an enzyme which catalyzes the hydrolysis of urea to ammonia and carbon dioxide. He cooled his solutions by placing them in a crude ice box hanging in the window and refrigerated by the frigid winter air of Ithaca. One morning when I was busily engaged in a biochemical experiment, professor Sumner came into the laboratory and invited me to come to Dr. Gages laboratory. This grand. old gentleman was one of the world s leading microscopists. He looked up from his microscope and said, “You are the first to have the privilege of seeing the crystalline form of a pure enzyme!” It might be said that enzymes are protein in nature. Most of the biochemists of that time were very critical of Dr. Sumner s discovery and assumed that it was an enzyme adsorbed on the surface of a protein. More than twenty years later, Dr. Sumner received the Nobel Prize in recognition of this great discovery.

In March, 1926, my masters examination was scheduled, and my committee consisted of two of the top men in the chemistry department; Professor Bancroft former President of the American Chemical Society, prolific writer, authority on Colloid Chemistry, and founder and editor of the Journal of Physical Chemistry; and Professor Chamot who was noted for his work in chemical microscopy and sanitary chemistry. My thesis was a study of the optimum conditions for the flocculation of filter alum. I gained some valuable experience in research and the writing of this thesis under the direction of Professor Chamot, who was a native born Frenchman and was rather critical of the way American students misused the English language. My work at the doctorate level was made much easier because of this experience. Both of these men were feared because of the type of oral, graduate examinations that they gave. Some of my friends forewarned me not to walk off the plank as a result of their questioning. It was the most difficult ninety minutes that I ever spent, and I left the room deflated and very humble. About ten minutes later, the gentlemen congratulate me and also recommended that I continue my efforts for a Ph.D.

The work leading up to the completion of a Masters Degree had created quite a drain on

my time and energy, but the resultant experiences were of great benefit to me during the next eighteen months, when I spent full effort on study and research for the doctorate degree. During the Spring semester of 1926, I carried a heavy program. I enjoyed the lectures of Professor Bancroft in Colloidal Chemistry and the course in Electrochemistry under Professor Briggs. Both of these men were master teachers. Another course was Dairy Chemistry taught by a brilliant young chemist, Dr. Paul F. Sharp, who was chairman of my graduate committee. He was a very extensive reader of chemical literature, so that his lectures represented an analysis of the most recent results of research, hence, were very stimulating. It was in one of his lectures that I was intellectually inspired to work on a problem which developed into my doctorate thesis. This problem involved the effect of varying physical conditions on the viscosity of milk. Since milk is a colloid, any changes in its viscosity may be used as a measure of the effect of varying physical conditions such as pressure, aging, freezing, homogenization, etc. Several months were spent in the library searching the scientific literature covering the above subject, and more than a thousand articles were studied. Many of these were in German, or French, and a few were in Dutch, Italian and Spanish. I had some difficulty with some of the articles in Italian journals, so I took them to a shoemaker that I had seen reading Italian newspapers. I asked him to translate it for me. He studied it for several minutes with a blank expression and said something that sounded like, “no comprende.” In September, 1926, I began to summarize and correlate the literature on the viscosity of milk. It was necessary to re-write my critical survey several times before I was satisfied, and this analysis of the literature became the introductory part of my thesis.

During this time the design and construction of my experimental apparatus proceeded on schedule. After I had constructed the apparatus and had made several trial runs, the janitor accidentally bumped it with his broom and wrecked most of it. Instead of being angry, I thanked the janitor and told him that his accident would make it possible to build a better and improved apparatus.

I was very much occupied with my research problem from early in September to May, 1927. It was necessary to do a considerable amount of calculating and I almost wore out the departmental Monroe calculator. After working many days and nights my thesis was finally typed, approved and sent to the Bindery. My final examinations were scheduled for the middle of May. During the previous year, all of my spare time was spent reviewing and studying chemistry. It was my good fortune to work with two graduate students, one from India (Mr. Schroff) and the other from China, (Mr. Chiu). Both of these men were excellent and thorough scholars. We not only reviewed the major and important areas of chemistry, but we grilled each other and learned to think on our feet. This experience increased my self confidence and was a great help to me when I took the final examinations.

The big day came and I was grilled by a committee of five professors for two hours in the morning on the subject of Chemistry. On that afternoon, I spent about one hour defending my thesis. It was a thrill when Dr. Sharp called me into his office and said, “Congratulations, Dr. Bateman!” Tears came to my eyes and I was almost speechless for a few minutes. I had accomplished my objective that I had dreamed about for so many years in the minimum of time, plus the Masters degree. The Ph.D. was conferred on me in

June of 1927. During the months of June and July I prepared two papers from my thesis which were later published in scientific journals.

I received offers for employment from a number of industries and colleges in various parts of the United States, including a post doctorate fellowship at Cornell in Dairy Chemistry. One of the last offers came from Dr. Arthur J. Matthews, President of the Tempe State Teachers College. During our three years in New York we had learned to love the green hills, the blue lakes and the majestic waterfalls of the region around Ithaca, but a yearning to return West was deeply ingrained in our desires. About this time, a young missionary, Golden Driggs, from Phoenix, came to our apartment. I consulted with him concerning the Tempe and Phoenix area. A Chamber of Commerce could not have been more enthusiastic then he. He predicted that Phoenix would become one of America s greatest cities, and that Tempe State would some day grow into a great University. He thoroughly convinced us and we accepted the offer from Tempe. It is interesting to note that these predictions came true and that I had a small part to play in the evolution of the old Normal School into a great State University.

The last week in July, 1927, was spent packing and cleaning out my office. On the last day at my office, my good friend, Dr. Sherman came in and we had a farewell talk. He said that he was happy that we were returning West and he was sure that we would find happiness and success in our native region. He further said that he wanted us to enjoy a trip in the East because it would probably be a long time before we had the opportunity to return, and he hoped that I would accept a small gift from him. He handed me an envelope and asked me not to open it until we had reached New York. I did not realize at the time that this would be our last meeting. During the previous two years my affection for this good man had grown, so that it was difficult to say goodbye. The friendships that we make in the course of living are among our most prized jewels.

I decided to go to Arizona the long and relaxing way. I had worked almost beyond my physical capacity, so that my health was not as good as it should be. When I went to Ithaca I weighed about 160 pounds, but it had dropped to 135 pounds. When we reached New York City, good old Felix and his sister, Bertha were there to greet us at Grand Central Station and guide us through the maize of streets of this great metropolis. We rented an apartment at Richmond Hill on Statten Island and enjoyed the sights for a week. It was an inspiration to ride a ferry boat past the Statue of Liberty every morning and evening. One day we went to Coney Island and Florence got off at the wrong station, and it took several hours for me to find her. At our apartment I opened the envelope that Dr. Sherman had given me and three one hundred dollar bills dropped out, accompanied by a note which said, “Please accept this little gift from a good friend. Enjoy yourselves!” We were stunned by his thoughtfulness and already we were eternally indebted to him. In our hearts we were indeed fortunate to have such a friend, and accepted the gift with provision that we would pay it back with interest.

On Saturday, our happy stay in New York came to a quick end. We bade farewell to the Reifschneiders, (Felix and Bertha) and boarded the good ship Creole which was bound for New Orleans. We felt a great thrill as we passed the Statue of Liberty and watched the great city fade in the distance as the ship moved out on the sea. The first two days of the

voyage as we moved south were cool and invigorating. Everyone was happy and the food, was excellent. We passed Cape Hatteras and moved into southern waters. The ocean took on a deep blue color and the air became warm and humid when the ship entered the gulf stream. Schools of jolly porpoise swam on both sides of the ship and they seemed to enjoy our company. The low lying shores of Florida slipped by and we entered the Gulf of Mexico. We struck a gale, the ship listed badly and the sea was very rough. Most of the passengers, including Florence and the baby became rather seasick and lost their appetites. One time only three or four of us were waiting at the table for our noon meal when the porter looked rather disgusted and said, Why dont you all get seasick, too!" The air took on a damp musty odor and the water looked dirty when we entered the Mississippi delta. On the way we noted swamps, large cypress and bayous on each side of the river. On Friday, after six days on the water we landed at New Orleans, and were rather wobbly on our feet for some time. The ground and buildings seamed to move up and down just like the ship on the ocean.

We spent several days enjoying the many attractions of this southern town. We were especially impressed by the French Quarters which had changed very little in the past two hundred years. Our happy trip was to end for we soon found ourselves on the Sunset Limited on our way across the vast states of Louisiana, Texas and New Mexico to sunny Arizona. The chapter in my life as a graduate student came to an end. What would the future bring?

CHAPTER IX: THE BEGINNING OF A CAREER 1927-1930

As the train raced across Texas, we were impressed by the variation of the scenery and climate of this great State. In the eastern part the landscape was interlaced by bayous and rivers and covered by trees and grass. As we moved West the climate became drier and desert flora began to take over. On the night of August 19, 1927, I slept very little because my mind kept wrestling with the prospect of a new beginning where I would be a total stranger. Sleep finally came, but we were soon awakened by the porter who said, "Time to get up, we will soon be in Tempe." I looked out of the Pullman and saw a landscape glowing in the early dawn and sparsely covered with cacti, mesquite and other desert plants. When the train stopped, only the station agent was on hand to greet us and it was with misgivings that we looked at the little desert town with its tall butte and. palm trees. Even though it was early in the morning, the air felt like a furnace and the buildings seemed to simmer in the heat. No transportation was available so the three of us walked up a dusty street to Mill Avenue where we had breakfast. After a number of inquiries, we arrived at our new home which was located at 421 Tyler Street, about one-half block from the college.

I shall never forget our first night in Tempe. Most of the furniture in the house should have been sent to the city dump for disposal. After experiencing a very hot day, we retired rather early in the evening. A t about eleven P.M. the bed collapsed, so we moved to the front bedroom. Finding it difficult to sleep because of the heat, I arose and walked around for relaxation, and stepped on something that felt like a needle. After this, my leg throbbed so much that I turned on the light and began to look for the needle, but instead, found a dead scorpion! We spent the remainder of the night looking for these dangerous natives. The next day we went to Phoenix and purchased a set of new furniture. The furniture was arranged in the rooms after a thorough house cleaning and we finally began to feel like we were home again.

After a few days I reported at the Presidents office and it was a pleasant experience to meet Miss Dobbs who occupied the dual position of secretary to the president and financial secretary of the college. She was a very gracious and capable staff member, beloved by all who knew her. She suggested that we officially report to Dr. Matthews. Upon entrance to his office, a large, pleasant man stood up, gave me a vigorous handshake and invited me to be seated. Before Miss Dobbs could introduce me, he started to describe in glowing terms the fine quality of instruction at Tempe State and further stated that I would always be proud that I had selected this institution as my alma mater. He then asked me if I planned to take the two year teacher training program, or the three year program. He proudly announced that the college was now offering the degree of Bachelor of Arts in Education. About this time Miss Dobbs introduced me as Dr. Bateman, the new Chemistry Instructor. At first Dr. Matthews looked a little disturbed and then he began to laugh heartily and said, "You looked so young that I thought you were one of our new freshmen."

Through his long and successful tenure as president, Dr. Matthews made an effort to personally meet every new student. I told Miss Dobbs that she had broken up one of the best sales talks I have ever heard. After this we had a very pleasant meeting and he stated

that my assignment would be not only to develop the area of Chemistry, but all of the fields of science, including Physics, Biology, Earth Sciences and Agriculture. He pointed out that this expansion of the curriculum was necessary, because the college was planning to add a program for the training of secondary teachers. Dr. Matthews also stated that he hoped I would stay with the institution and play a part in its growth, because the greatness of most colleges was due appreciably to loyal and capable men who dedicated their lives to their work.

I then went to my office which was also the physics shop and examined the college catalog for 1927-28. Geography had a fairly well balanced program, but only one elementary course was listed for biology, one for chemistry and none for physics. This seemed a small offering for Arizona's oldest institution of higher learning, in fact the only one located adjacent to the States Capital and at its center of population. Arizona was indeed a pioneer state, and it was very evident that much must be done in the development of the science program, even to catch up with the neighboring states. Fortunately, the old science building had laboratory facilities for an introductory course in chemistry, biology, physics and geography. Professor Irish during his tenure as instructor of science for the past 30 years, had done a creditable job in equipping these laboratories. In the past, these laboratories had been developed largely for the preparatory (secondary) program that the Normal School had once offered.

The first faculty meeting was a new experience. It was very friendly and democratic. Almost everyone gave an involved description of their summer vacation. One faculty member had returned after a sabbatical leave and his report was tedious and boring because he spent more than an hour detailing his achievements and hardships in meeting the requirements for the B.A. Degree in Education. Professor Irish outlined the registration procedures for the fall semester and these seemed to be rather complicated when compared with the short and simple methods which were in practice at Cornell University. President Matthews emphasized that the time had come to upgrade the training of the faculty, since an appreciable number of them either had only a bachelors degree or none at all. He introduced me as the only Ph.D. on the faculty.

As usual the academic year began with registration which consumed a long, hot and weary week. Nearly 500 students were personally advised and a program was worked out for each of them. This kept us occupied from 8:00 A.M. on Monday until 5:30 P.M. Saturday afternoon. Only eight students registered in physics and 13 in the chemistry course. My work with these students was on a somewhat individual basis. Most of them were better than average students, and to generally encourage the development of the science program at the college, the Pasteur Scientific Society was organized. Our request for approval by the administration was denied, because they felt that there was no need for it. In spite of this the society continued to function as a class activity, and in the following years continued to operate as a student organization without approval. In fact, the organization became one of the most successful on the campus, and for more than thirty years played an important role in the growth of the science program at Arizona State.

In January, 1928, we received a notice that a new branch of the LDS Church was meeting

in Curry Hall, which was located in the third story above the Tempe Hardware Company. We attended Sunday School and some of those present at the meeting thought that I was a traveling salesman who happened to drop in for a visit. Within a few weeks I was appointed to teach the adult (Gospel Doctrine) class. In March, 1928, the Tempe Branch was reorganized as the Tempe Ward, and Bishop Turley asked me to be one of his councilors. In September, 1928, I was ordained to this position by Elder Joseph Fielding Smith and served in this capacity for over eleven years.

Four years had passed since we left our folks in Idaho and Utah, so we had a deep urge to again visit our grass roots. Late in June, 1928, we left on a trip which proved to be rather difficult since the roads were rough and in some places did not exist even as a wagon trail. The car gave us trouble and we had many flats. After almost a week of pioneering we arrived in Logan, Utah John and Clara had changed very little in the past four years, but three little sisters and baby brother had grown up. We spent some time in Grace, Idaho with Florence's folks and later visited Alfred at Ashton. On the way home we enjoyed a tour through Yellowstone Park.

The offering in Chemistry in the 1928-29 college bulletin was materially increased. President Matthews reprimanded me for encouraging a number of students not interested in teaching, to attend Arizona State. He stated that he had a gentlemen's agreement with the University to limit our students to those solely interested in teacher education. It was pointed out in our meeting that such an agreement would not hold water and that the college should always be in a position to serve the growing needs of our community and state. Agreement was reached in this meeting, and in the ensuing years, the number of students interested in fields other than teacher education steadily increased. My classes also showed a significant increase from year to year.

In the Spring of 1929, we received the happy news that the college would receive its first building appropriation in more than a decade for the construction of a new library and training school. At a faculty meeting this new construction was discussed. This included plans to locate the Administration and Library building on the corner of College and Tyler Streets and the construction of the training school on the site of the old building which would necessitate its demolition. In the course of the discussion, I pointed out that the college should have a master plan of expansion for the campus. Plans of this type had been noted while I was a student at both Cornell and Utah State. My suggestions also included the relocation of the Training School on a new site, convenient to the campus with plenty of land for playgrounds and expansion. I also mentioned the possibility of the gradual removal of the college to the Papago Park where we would have sufficient land to develop a beautiful and well arranged campus. The City of Tempe would have been very happy to have made a gift of this land to the college. The comments that resulted from these suggestions made me feel that I had put a foot in your mouth. I shall only comment on the remarks of two members of the faculty. Professor Payne was very emphatic in stating that the Training School should be located in the center of the campus. Another faculty member whose name I shall not mention was extremely sarcastic. He stated that Bateman had expressed hair-brained ideas that you would naturally expect from a Ph.D. who had no appreciation of the past history of the college and its true purpose. The majority of the faculty expressed the same line of thinking so that the suggestions for a

master plan for the college went down the drain. It should be noted that almost all of the faculty had a Normal School background as far as training and experience were concerned. The ideal engraved in their minds was a worthy one--to make Tempe into a teacher training institution second to none, and any objective, more or less than this, was considered to be near treason.

On May 8, 1929 we were blessed by the birth of a beautiful baby. On the way to see her for the first time I can remember that the birds were singing and the flowers were in full bloom. It seemed that all nature was rejoicing with us on this perfect Spring day, so in remembrance of this happy event, we named her Flora Mae (May Flower).

As my second year at Tempe approached its end, I felt rather discouraged because of the limited funds available for the purchase of needed equipment and supplies. Except for the Journal of Chemical Education, the college library included no chemistry or physics journals on its subscription list, in spite of my repeated requests for nearly two years. I personally donated five volumes of each of the journals published by the American Chemical Society, with the hope that they would serve as a nucleus for future growth, but our librarian gave this type of publication a low priority. At that time all of the back issues of an important journal, such as Chemical Abstracts, could have been purchased at a relatively low price.

There were few chemists in the valley, so that the opportunity for cross fertilization of ideas and research was non existent. It was like living in a scientific desert, and I was fearful that my background and teaching would become fossilized. One event that disturbed me very much, in view of my efforts to improve the laboratories and library, was the purchase and construction of an ornamental iron fence around the college, making it appear like a penal institution. As a result, I coined an expression that bounced from one end of the campus to the other. “Millions for defence, but not one cent for the brute!” About this time I was called on the green carpet and Dr. Matthews looked very unhappy. Before he had a chance to speak I pointed out that the science program at the college had not made any progress in the past two years, and that I might as well make my resignation from the faculty, effective at the end of the school year. Before he could reply I walked out of his office.

A few weeks later when I was packing my books with the intention of accepting a college position in California, that had been offered me, President Matthews walked into my office accompanied by Mr. 0. S. Stapley, a member of the College Board of Education, and one of Arizona s finest citizens. Dr. Matthews pleasantly talked to me about his many years at the college and how he and others had struggled to insure its growth, and that the greatness of any institution depended largely on the men who stood by it through thick and thin. As examples of this, he paid tribute to the dedicated service of men like Irish and Payne. He further stated that young men have energy and enthusiasm, but they lack patience and experience. He said, “The College can grow only if you and others have faith in its future.”

Mr. Stapley then talked to me, like a father to his son. He indicated that he had come to Mesa as a pioneer, had helped to start one of the first hardware stores in that community,

and that he had experienced many hardships in developing his business which became one of the largest of its kind in the West. Striving against adversity makes men strong. He pointed out that my work at Tempe had been very satisfactory, that if I remained at Tempe, it would be my lot to accomplish my objective, even beyond my dreams, and that my name would be widely respected in the State. Mr. Stapley was a devout and faithful member of the LDS Church and this will make it easier to understand his concluding remark, because one of the most fundamental teachings of this church is to give service to your fellowmen. His statement follows: "You are the first member of our faith who has been honored by a position on this faculty, and I have been authorized to call you on a lifetime mission of service to this college!" This meeting made me feel humble and contrite, and I told these fine gentlemen that I felt honored to remain and do my best to the end. This meeting turned one of the most important corners of my life, and never again did the urge to leave Tempe carry any weight with me.

During the Spring of 1929, the Tempe Ward started the construction of a church building at the corner of 6th and College Avenue, and the entire project was placed under my supervision. At first it seemed to me to be an impossible task, because the Tempe Ward was very small with less than 60 members of humble circumstances. We worked from eight in the morning until after midnight for six days each, and I was almost constantly on the job from the first of May until almost the middle of September. During this time my pay consisted of the satisfaction that I gained in giving service, and working with dedicated members whose enthusiasm and faith in this work were boundless. It was a faith promoting experience which I shall always treasure. The new ward center was ready for occupancy in November, 1929, which was nearly six months ahead of schedule. With Supreme help and the faith of our members we had accomplished a superhuman task.

In the late summer we moved to a new home at 922 Maple Avenue where we lived for nearly six years. It was a relief when October came with its cool nights. Some nights in August were so hot and humid that one wondered if he would survive until morning, and on others, we had dust storms that penetrated through every door and window. In spite of the weather, little Flora thrived and was a healthy and beautiful baby. Our pride and joy in her helped us to alleviate our greatest sorrow. Little Connie was now almost six years old, but she had shown no mental growth for the past four years. She was a great burden, especially for her mother. On March 17, 1930, we received a message informing us of the death of Florence's father, McGee Harris at Grace, Idaho. He was a pioneer, served as a Bishop of the Lago (Trout Creek) Ward for more than twenty years, and most of his life was spent in giving compassionate service to his fellow men.

During the Christmas vacation the college library and administration were moved to the new building which was named for President Matthews, and this made it possible to assign the first floor of the old science building to chemistry. We were also given a generous budget which made it possible to purchase needed equipment and to furnish another chemistry laboratory. The academic year of 1929-30 was one of unity and good will, because the grand old man, Arthur J. Matthews, was completing the final year of his long and successful period of service, (30 years) as President of the College. In his lifetime he probably did more for education in Arizona than any of his contemporaries. The year ended with a banquet in his honor and all of the State s citizens joined in

wishing him a long and happy retirement.

CHAPTER X: THE DEPRESSION YEARS 1930 - 1933

Most of the faculty looked forward to the academic year of 1930-31 with considerable anxiety, because it was the first change in administration in thirty years. President Matthews had accomplished many things and had built a successful normal school, but in the last years before retirement, had been able to accomplish very little in the development of a strong faculty and curriculum to go with the needs of a modern college of education. An appreciable number of his faculty had normal school certificates representing training for two or three years. Sometimes it seemed that longevity of service meant more than anything else. In some areas, the work offered by the college appeared to be on about the same scholastic level as that of a trade school at the secondary level.

So it was the lot of our new president to move our "academic ship" from the normal school bay where it had been anchored so long, and sail out into the rough waters of a growing, modern world. We were told that the new president, Ralph W. Swetman was a capable and experienced administrator. He had been employed by the College Board of Education to raise the academic standards of Arizona State, to update and upgrade its faculty, and affect a college organization in respect to faculty rank and responsibility. For a number of years we had found it difficult to place high school teachers in the state, because of lack of accreditation. The first action of the president was to bring about changes which would win approval of the North Central Association of Colleges and Secondary schools, which was then a potent agent in the State since its members included the University of Arizona and most of our high schools.

Upon arrival, the new president arranged conferences with most of the faculty and some of these meetings were rather stormy. It might be pointed out that Dr. Matthews, several years before his retirement, bad warned the faculty of the impending changes, and had encouraged them to improve their academic background. Dr. Swetman was forthright in his methods, while many of the faculty were proud and sensitive, so that some resignations resulted before the cases reached the discussion stage. The death of two veteran members of the faculty have been unjustly blamed on the actions of the new president. One of these was a revered teacher who had heart trouble for a number of years before his death. In fact it had been necessary for him to take a years leave of absence, and on his return, occupy an office on the ground floor because of his heart condition. The other person was inflexible and sensitive and his devotion to the old normal school was so extreme that any discussion with him concerning needed changes would result in heated and vitriolic comments from him. Several years before his death by suicide, he had verbally attacked me and labeled my ideas concerning campus planning as "the work of a harebrained Ph. D., who did not appreciate the hardships that he and others had endured to make the institution." This almost fanatic loyalty to the past made the new presidents task very difficult.

I should like to state that my own relations with Dr. Swetman were normal at all times. He had a shuffleboard court constructed near the presidents home and we played this game on many a hot afternoon. I enjoyed these associations with him. However, my first contact with him came as a result of a report which I placed on his desk at the time of his arrival on the campus. This report was an analysis of the faculty, equipment and space

needs of the Science Department. I was impressed by the brevity of the discussion and his immediate analysis of our problems. He complimented me on the excellent report, and stated that he would approve most of the equipment for immediate purchase, but that it would be necessary to delay the employment of the two new teachers--one in Physics and one in Biology until next year. He then stood up and the meeting was suddenly over.

The faculty meetings were in marked contrast with those of the old days. Dr. Matthews was always relaxed and happy, and most of the employees of the college including the ground crew, janitors, faculty and president mingled freely together without any thought of rank. The meetings were unusually 1ong and hopeless, because of the extreme verbosity of some of the faculty. On the other hand, Dr. Swetman had a policy of a direct frontal attack on every problem, and he believed in efficiency even in the use of words. In one meeting I can remember that Miss Roll was starting one of her usual long, wordy comments, and that I had settled down to an endless wait by grading some chemistry papers, when President Swetman stopped her with the suggestion that time was valuable, hence brevity was essential at all times. From that time on, our faculty meetings were operated under Roberts Rules of Order and seldom exceeded one hour. Dr. Swetman was a follower of Ragg so that the concept of "the student-centered-school" became a common bill of fare at most of our meetings.

In the Spring of 1931, I was sent on a trip to visit most of the schools across the northern pert of Arizona. In those days, because of poor roads, this was an almost impossible task, but I was glad to be absent at the time when the contracts for the coming year were being given out. This trip included Parker where it was necessary to cross the Colorado River in Nellie Bushs ferry boat. The road up the river on the California side at that time was practically non-existent up to Highway 66. Thence, the road to Kingman led over a high range of mountains through Oatman. I visited schools at Kingman, Seligman, Ash Fork, Williams, Flagstaff, Winslow, Holbrook, St. John, Springerville, Eager and Snowflake. My final destination was over a high mountain range through deep snow drifts to McNary. It was necessary to telephone the latter school to hold the students because I arrived there at about three P.M. The people at McNary advised me to return via White River, Rice and Globe. This proved to be one of the most hair raising trips that I had ever encountered, since it was largely a wagon road carved out of cliffs which lead into two deep canyons, and out again. When I arrived home, after this very stimulating trip, I looked into the mirror to see if my hair had turned gray.

One morning in May, 1932, President Swetman came into my office and he seemed to be very upset. He stated that the Board of Education was meeting and they were planning to discharge several teachers, one of which was Ostrander. He was our right hand man in the operation of the college farm, and in the teaching of agriculture and biology. Professor Ostrander had completed a Masters degree during a sabbatical leave in 1929-30 and was considered to be a successful teacher. I told President Swetman, that if Ostrander was dropped, I would personally resign, because there was no future in a college where a teacher could be removed on a mere whim of a board member. Ostrander remained with us until his death. Later in June, I was sent to Stanford University to interview two candidates for the new places in science. Dr. Kenneth Stoddard was employed as Assistant Professor of Physics and Dr. John Gillispie as Assistant Professor of Biology.

Both of these men proved to be satisfactory teachers during the next year.

About this time, the effects of the depression were beginning to be felt and our salaries were cut ten per cent and a few months later we took an additional "voluntary" cut of ten per cent. Many years passed before these cuts were restored and I was then teaching for about the same salary as I did as a high school teacher in Idaho. We had considerable difficulty balancing our budget and only one bank in the State was cashing a limited number of our salary warrants, and this bank was located in Tucson. The legislature materially cut our biennial budget so that pessimism prevailed on the campus and it was not all due to the presidents policies.

During the summer of 1932 we had our first summer school. It was well attended in spite of the intense heat and a total lack of air conditioning. Dr. Gillespie went to London to study in an arboretum under a special grant, but died from pneumonia on the way home. This was a great loss because he was a botanist of great promise and already had a long list of research publications. His wife, Doris, who also held a Ph.D., in Botany was appointed to fill his vacancy, but it was necessary for her to ask for a leave of absence at the end of the first semester because of pregnancy. This was granted and Mr. Martin Mortensen, a former superintendent of Thatcher Schools, was employed by the Board to fill her place. In the Spring of 1933, the College Board of Education ignored the leave of absence granted to Dr. Doris Gillespie and rehired Mr. Mortensen for the school year 1933-34. This was more than President Swetman could stand and was the straw that broke the camel's back.

In May, 1933, he accepted a position as President of Oswego Normal School in New York State. Later he held a meeting for all of the students and faculty and vented all of his anger at the faculty and board, whom he stated, failed to give him support during the depression years. At this time he made public his resignation as president of Arizona State. His speech was both bitter and incriminating, and it stunned all of those who were present. It was my feeling that it was an improper procedure for President Swetman to drag all of his administrative disagreements before the student body. The period of service of President Swetman thus ended after three years, and. Arizona State University owes much to this man, for the institution was never again the old “placid normal school!”

CHAPTER XI: THE PLODDING YEARS 1933 - 1941

The abrupt departure of President Swetman left the college without a head during the month of June, 1933, and the Administrative Council consisting of Professors Payne, Irish, Murdock, Burkhard and myself moved into the vacuum. The Board of Education of the college announced the selection of Dr. Grady Gammage, president of our sister college at Flagstaff. This was very welcome news, because Dr. Gammage had a very distinguished record as an administrator. Early in July, he arrived on the campus and quietly went to work. We were certainly in need of a man of his qualities, since we were almost bankrupt, both morally and financially. He enjoyed the confidence of the faculty and staff and we soon had an effective and united team.

During the 1930s our progress and growth were handicapped by the great depression, and the problems that confronted Dr. Gammage and his faculty were of the type that would require years to show any appreciable change. For this reason, I call this the plodding period. I quite often felt that we were not progressing as rapidly as we should. Dr. Gammage a policy of leadership was rather flexible. He once told me that there was no honor in being a “dead hero because he who runs and survives, can fight another day when conditions are more favorable.” The adverse conditions prevalent everywhere required a persistent, plodding policy which would fit the limitations of this period, and at the same time, insure the positive and gradual growth of our college Dr. Gammage gave us just this.

September 1934 arrived and it was hard to believe that we were beginning our eighth year in Tempe. Flora Mae was rapidly developing into a beautiful and gifted little girl, so that she was the beam of sunshine that helped us carry the weight of the great tragedy of our lives. Early on Monday, October 15, I rushed Florence to the Cotter Maternity Home which was located on East 7th Street. Before noon our lives were gladdened by the arrival of a beautiful, healthy baby girl, and we named her Georgia Rose. For some time we had been planning to build a home, so in November I purchased two building lots which were very convenient to the campus. In the Spring of 1935, Georgia caught the whooping cough and we almost lost her. About this same time we began to build our new home at 1106 Van Ness Avenue. Money was scare, but my credit was good, and skilled labor was available at depression rates, so that we were able to complete the house and move into it during late August, 1935. The design was based on the model home that I visited at the World s Fair in Chicago. The old furniture did not seem to fit, but we enjoyed being in our own home and lived there for nearly twenty two years. Our home became one of the garden spots of Tempe because we planted orange, lemon, tangerine, grapefruit, fig, date, apricot, plum, and pecan trees. We often had fruit for our friends and neighbors. Our backyard was furnished with swings, bars, and other types of playground equipment. As a result, we had as many as a dozen children on our hands almost every afternoon.

When we built our home many of our friends doubted our wisdom of going into debt for a home in such dark financial times, as we were experiencing. As an after thought, it might be noted that at that time, I could have bought Paradise Valley land for about $60

per acre, which is now valued at more than $5,000 per acre: With the money that I spent on my home, I could have purchased about 100 acres of land now valued at nearly half a million dollars. I guess we were blind when it comes to Real Estate, but when I decided to become a teacher, everything else went out of the window!"

Very shortly after his arrival on the Campus, President Gammage requested me to take charge of the development of pre-professional programs in areas other than teacher education, and these included curriculums for pre-medicine, pre-dentistry, pre-engineering, pre-nursing, pre-law, etc. It is interesting to note that two of these programs, engineering and nursing, later became fully accredited schools. A fully accredited curriculum of medical technology was established in cooperation with the Phoenix hospitals in 1939, and I was in charge of this program for nearly twenty years.

The enrollment in chemistry, physics and biology showed a healthy growth, and we had an unusually high proportion of superior students. Many of these completed majors in chemistry or biology, and became high school science teachers, while others completed training elsewhere for medical, or dental careers, or for Ph.D.s in chemistry.

Because of the growth of our science classes and a shortage of funds, we suffered from a chronic shortage of laboratories and equipment. About the only campus improvement and repair that took place was under WPA and other government financed welfare projects. We completed plans for an addition to the old science building, and funds for this construction were approved by the State Legislature, but the Governor vetoed this portion of the budget. This action created a very discouraging situation, but I told President Gammage that the Governor had probably made the correct decision, because the old science building was not worth remodeling, and that a realistic view of the future would require the construction of a totally new science building.

1n 1937, as a result of pressure from farmers and others, the work in agriculture was separated from the science department and organized into a new academic department of the college. In spite of this separation, it was necessary for Agriculture to depend on faculty and facilities of the Science Department for many years. It was my opinion, (still is) that the separation of Biology and Agriculture into two administrative units had a tendency to weaken both of these areas, because of their close relationships, and the inadequate facilities of the college. Dr. B. Ira Judd became the first full time head of Agriculture and I have valued his friendship and close association during all of these years.

The little girls were growing up. Flora Mae was 8 years old and a successful student at the Payne Training School, while Georgia was almost three years of age. We were looking forward to the birth of our next child with the hope that it would be a boy. It was July 30, 1937, and I was eating a light lunch after a hot morning of summer school teaching, when Florence called me rather suddenly and stated that she was in labor. I rushed to the telephone and called both the Maternity Home and Dr Stroud. In my excitement I mislaid my car keys and finally was able to find them and get the family on the way. I broke all speed limits, but it seemed that the old stork was flying over the top of the car all of the was to the Maternity Home. The Doctor fortunately arrived at the same time as the

excited family, and I barely had time to calm the children on the lawn, when Dr. Stroud came out and said, “Congratulations, it s a boy!” On occasions like this, Florence always seemed to be in a hurry, but this time she surpassed all previous records. We named the baby, Harold Harris, the first name was for my brother and the second was Florences family name.

During the depression years the college had shown a steady and substantial growth, and there was increasing pressure from the community to expand our offering and include baccalaureate degrees in the Liberal Arts, as well as in Teacher Education. In the Spring of 1937, this pressure reached the legislature, but due to the influence of our Tucson friends, this objective was not reached for many years, however, the legislature did authorize us to grant a Master of Arts in Education. Many of the faculty at Arizona State bad not expected this, so that we were not prepared for it. The first graduate council was organized by President Gammage and included Professors Burkhard, Grimes, Wexler and myself, with Mr. Irish as Chairman. Very little progress was achieved by this committee during the first year. Burkhard and Grimes were from the old school of education, and they believed that an M.A. in Education was strictly what the title implied with little room for anything except Education. On the other hand, Wexler and I maintained that this graduate degree should also include majors in the subject matter areas which are usually taught in high schools. We finally agreed on a compromise with not more than half of the credits in subject matter fields for high school teachers. It was my privilege to be a member of the graduate council for nearly twenty years.

In the summer of 1941, the family enjoyed a trip to Idaho and spent some time in my old home valley, Bear Lake, enjoying its splendid summer climate. The World War II created considerable uneasiness, but the War Department had notified President Gammage that they would not call any of the faculty members who were Reserve Officers without several months notice. The school year, 1941-42 started rather normally and my classes were in full operation. On September 27, 1941, while walking across the campus to pick up my mail, I met Dr. Wexler who said, “Did you read the newspaper this morning?” This short question abruptly ended this chapter in my life.

CHAPTER XII: THE ARMY OFFICER 1941-42

After picking up my mail at the college administration building, I hurried back to my office where I heard my telephone ringing. The Western Union was calling to deliver the following telegram:

> Captain George M. Bateman--by direction of the President
> you are ordered to active duty with assignment to the
> Office of the Chief of the Chemical Warfare Service,
> Washington, D. C. effective October 1, 1941.

It was quite a shock to find it necessary in three short days to suddenly pull up stakes, leave my position and family, and put on the Army uniform again. In my younger days, I had dreamed of such an assignment with all of the glories attached to it, but now that the opportunity was on my doorstep it had lost most of its glamor, and I wished that the cup could pass by me. As one gets older, he learns that his dreams and reality are more often quite different, and that glory is really hard work and service to others.

This military order caught me almost completely unprepared. The President of the college had been assured by the War Department that none of his faculty would be called into active service until the end of the current academic year. Later I found that my early call to service was based on my satisfactory record as an Army Reserve Officer. The Assistant Chief of the Chemical Warfare Service, who was the officer in charge of my last summer tour of training at Port Bliss, told me that my name was among those at the top of his list of reserve officers.

My most difficult ordeal was to break the word to my young family and leave them so abruptly. At that time Flora was twelve years old, Georgia seven years, and Harold was four years old. Our oldest child had been born with a glandular deficiency which limited her mental development to that of a three-year-old child. For the past seventeen years, she had proved to be a continuing tragic experience in our lives. In addition, the mother was in a poor state of health at that time. The little girls clung to me and begged me not to go away. On the morning of October 1, 1941, I sadly bid farewell to the family and boarded the train for the nation's capitol.

As the train traveled across the changing landscape of the southern states, I was thrilled by the beauty of the green fields and the woods. I felt keenly moved by the thought, "how blessed we are to live in this land which is blessed above all other lands." The following words came to my mind:

> Oh beautiful for spacious skies, for amber waves of grain,
> For purple mountains majesties above the fruited plain.
> America! America! God shed his grace on thee
> And crown thy good with brotherhood from sea to shining sea.

The train arrived in Washington, D. C., at about 3:00 a.m. and as I walked out of the railroad station for my first view of one of the world s most beautiful cities, I was thrilled by the sight of the capitol building and its majestic dome ablaze with light. A moment later my gaze dropped to the pavement where I saw several, large rats scurry across the street. This brief experience gave me a sense of foreboding of the contrasts that existed in this city. Along with the beautiful buildings, tree-lined streets, and good people, the city also had its slums, dark alleys, and human rats.

The next two days were spent hunting for an apartment and one was finally located near 21st Eye Street. This was about five or six blocks from the White House and near the George Washington University campus. I was scheduled to occupy the room at nights and a gentleman from Charlottesville, Virginia, who worked night shift, was to use the room during the day. At this time Washington, D. C. was rapidly becoming overcrowded, and it was necessary to make use of this multiple sharing of living quarters.

On October 5, 1941, it was my privilege to report for duty, and the Office of the Chief of the Chemical Warfare Service was located in a red brick apartment house a few blocks from the Lincoln Memorial. It was a very hot day and one of the secretaries experienced heat prostration and I helped carry her to an ambulance. For the first two weeks, the newly arrived officers, including myself, went through a rather thorough period of indoctrination and training. It was necessary for us to augment our knowledge concerning the operation of the Army so that we could meet the requirements of our assignments. This initial group of officers acted as a training staff for the rapidly expanding number of new officers that were inducted into the Service.

About October 20th all of the chemical officers stationed in the Washington area and Edgewood Arsenal were requested to attend a special buffet dinner at the Army and Navy Club. I felt out of place, since everyone seemed to be enjoying the exotic beverages that were being served. None of these drinks had been included in my previous experience so I asked a waiter where I could obtain a drink of water. He looked at me with a shocked expression and said, “Who all would want water with all of this good ‘licker’ around?”

About a week later General Porter, Chief of the Service, called me to his office and stated that I was to be assigned to the Intelligence Division, which had responsibility for maintaining the security of all classified and secret papers available to the CWS, investigation of the loyalty of all chemical officers, and the interpretation of all captured papers pertaining to chemical warfare. The General further noted that this assignment was made only after a careful FBI investigation of my past. The fact that I did not touch liquor at the buffet luncheon was another factor considered in the appointment. The General then laughed and asked me what I did for entertainment, since I did not drink alcoholic beverages, did not smoke, and apparently did not chase the women.

During the first week in November, 1941, a telephone call was received from our family doctor in Tempe that Florence was very ill, and he advised me to immediately come home. This was rather a shock to me since the letters from home seemed to indicate that all was satisfactory. A leave was obtained and I returned to Tempe via chair car since Pullman reservations were not available At home I learned that Florence a illness was due

partly to “the change of life” which comes to most women. We decided that the only solution to our problem was to rent our home in Tempe and take the family back to Washington, D. C. A going-away party was given in honor of our family at the Tempe LDS church which was attended by nearly 200 of our friends.

It was with an anxious heart that we packed the car and started the long drive which took us across New Mexico, Texas, Arkansas, Tennessee, and Virginia. The trees and vegetation in Tennessee and Virginia had taken on their beautiful fall colors so that we enjoyed the trip, and finally arrived in Alexandria where we rented a house at 13 Caton Avenue. This was a convenient location since it was near the public school, the bus line to Washington, and a good grocery store. I later learned that our new home was also a choice spot for bombing because we were centrally situated from the National Airport, the Potomac railway yards, the city of Washington, the Washington waterworks, Fort Myers, Arlington Cemetery, and the city of Alexandria.

As the days in November passed by, it became increasingly apparent that our foreign relations with Germany and Japan were becoming strained, and in addition suspicious movements of ships and men were taking place in Japanese territories Code messages were being sent to all defense posts in the Pacific requesting that the highest state of readiness be maintained against surprise attack.

Late in November I paid a visit to the Chief of the Far East Intelligence, which included Japan and China, and discussed the possibility of a surprise attack by the Japanese against either the Hawaiian or the Philippine Islands, or even against our totally undefended west coast He laughed at me and said that a poverty-stricken nation of imitators like Japan would never attack a wealthy giant like the United States. It gave me a feeling of insecurity to realize that many of the positions in our defense establishment were occupied by vain men like the one who had just laughed at me, who were more interested in keeping their boots polished than in the carrying out the responsibilities of their positions.

On Sunday morning, December 7th, the family attended church at Arlington. Since the sun was shining and it was warm, we decided to spend the afternoon at Mt. Vernon which is located about seven miles south of the city of Alexandria. The home of George Washington stands on a beautiful, rolling lawn overlooking the Potomac River as it flows towards the Bay. We were inspired by the beautiful home and its surroundings, and they helped us to better realize the greatness and vision of the “father of our country.” Later in the afternoon we returned to Washington and allowed the children to enjoy the many Christmas decorations and displays in the business district. They especially enjoyed “Mother Santa Claus” who was life-like, jolly, rocked back and forth in her chair, and gave a message of Christmas cheer. It was beginning to get dark so we started our return home by Pennsylvania Avenue. When we almost reached the Treasury Building, bells began to ring, sirens to blow, and the newsboys started yelling, “Pearl Harbor Bombed.” I was both puzzled and shocked. Daily warnings indicating the danger of surprise attack had been sent to all of the defense establishments in the Pacific area, and yet the Japanese were successful in crippling our Pacific Fleet. The whole event was so upsetting that I failed to concentrate on my driving and, as a result, committed a serious traffic violation

by stopping in a safety zone, of all places, on Pennsylvania Avenue in front of the White House. Several policemen were blowing their whistles and all traffic was stopped, while a policeman roughly directed me to move my car to a relatively quiet street near Lafayette Square. He exhausted his swearing vocabulary and then began to give me the "works" as far as violations were concerned. He requested my driver's license, and I also handed him my Army Identification Card. I told him that the bad news had affected my driving. After briefly noting my credentials, he tore up the citation slip and asked me to please drive safely. After this experience we drove leisurely past the German Embassy and noted that it was surrounded by a cordon of policemen. Bonfires at the rear of the Embassy compound indicated that the personnel were destroying their official papers.

The next Monday morning I was back in the office in full uniform for the first time, and the phone rang. It was a pleasure to hear the voice of my old next-door neighbor and former colleague on the Arizona State faculty, the Honorable John R. Murdock, Representative from Arizona. I accepted his invitation to attend one of the most historic meetings in the history of our country, a joint Congress meeting, where President Roosevelt in an eloquent and stirring speech declared war on Germany and Japan.

About this time representatives from the various Services were requested to attend a meeting in a small room in the Commerce Building. We were told that the United States and some of its allies were working on a project to utilize nuclear energy for the manufacture of atomic bombs which would be many times more destructive than the TNT bombs. Information was available that the Germans were working on a similar project. Of course, this information was given the highest classification of secrecy. The next day we were called back and told that a mistake had been made in giving us this information, and that death could be the penalty for disclosing it.

After the Pearl Harbor episode it was necessary to spend long hours at the Office (a temporary building), which was located on the land now occupied by the State Department. Signs were posted everywhere in the building with this warning, "Hitler has big ears." The Defense Department was on a 24-hour basis, and it was necessary to be away from home an average of one 24-hour shift per week. No street or home lights showed during the night in the Washington area, and frequently practice air raid warnings were sounded day and night. In the office we were required to dive under a desk or a table for safety. One of the air raid warnings caught me in the basement, so in accordance with regulations I dived under the nearest table and found that the space was already occupied by a Brigadier General, a beautiful secretary, and a colored janitor. This was a good example of desegregation. The janitor said, "This am de first time I's been under a table with a General, a Captain, and a beautiful secretary." This incident amused the personnel at the Office for quite a while.

As the winter of 1942 slowly passed, we found it difficult to adjust to war psychology and the crowded city life. Whenever there was spare time I used to walk down to the Smithsonian Institution and enjoy the natural history panels of wild animals in their natural habitat. One day a man said that he had seen me at the exhibit several times and wondered if we mutually longed for the wide open spaces. It seemed that both of us had grown up in the west and still loved the wilderness areas.

Sometimes the weather was rather cold, and we had difficulty in purchasing fuel oil to heat the house. Flora enjoyed her work at the George Washington High School in Alexandria. Little Georgia was attending the Del Rae Public School and was having difficulty with arithmetic and composition. Our son, Harold, kept his mother on the run most of the time. He used to coast down the hill, and one day he collided into a tree, smashed his tricycle but escaped without a scratch. Our greatest worry and care was Connie who was continually running away and getting lost. All of these worries and the fear of the war resulted in a gradual deterioration of their mother's health. Domestic labor was not available at that time, and I was unable to help because of the long hours required by the office.

Much of our work at the office was somewhat slowed down by red tape which was apparently necessary for governmental operations. For example, the British Army Chemical Corps requested a test sample of our gas mask for a horse which was valued at 60 cents. It was necessary for the British Chemical officer to submit this request in turn to their Military Intelligence Department which transmitted it to the Foreign Office, then to the U.S. Department of State, then to our Military Intelligence Department, and finally to Chemical Warfare Service Office. This request made four trips across the Atlantic Ocean, had 18 endorsements, and 6 months passed before the British got their horse mask. On one occasion I almost got into serious trouble by taking a short cut. The Canadian Government had requested a set of plans for the construction of a Mustard Gas plant. Since the plans were classified as "SECRET," I personally delivered a set to Military Intelligence with the necessary papers and instructions for shipment. About 3 weeks later General Porter came into my office using some very strong language, and asked me what had happened to the plans for the Mustard Gas Plant, which we were supposed to have shipped to the Canadians. He was greatly relieved when he found that our records were clear and that we had handled the shipment in accordance with regulations, but he ordered me to use every means available to locate it. I checking with Military Intelligence we found that a shipping clerk had changed the shipping from "the most secure method of transportation" to "the cheapest method of transportation available."

I contacted the Coordinator of Railroad Transportation and asked him to spare no effort in locating the shipment. It was like looking for a needle in a haystack. About a week later, a call was received from Brooklyn that the box was in a warehouse awaiting transport to Canada by the next ship. The lost package was ordered to be delivered to me personally under guard. I then took the plans to the Canadian Legation, suggested that the Minister put them in his strong box, and then have their chemical officers come to Washington to study the plans. Next they would make contact with our officers for any clarification of the plans, before any authorization of the project. I knew that this procedure did not conform with regulations, that it would save many weeks, and that we had a war to win, so I took the chance. About 10 days later the Chief of the CWS ordered me to his office and said that he was puzzled about what action he should take in my case. He pointed out that on one hand I should receive a reprimand for not following orders and regulations, and on the other hand a citation was merited because of the very favorable results of my action. He ended the meeting by saying, "Thank God we have officers who are willing to stick out their necks and think when necessary."

One day while going through some Plant Inspection Reports, I noted that over ½ million tons of virgin rubber were stored in one ancient wooden building, and this constituted almost the total reserve in the United States. The Office sent a letter to the Rubber Company, which recommended that the stock be stored in several smaller fireproof warehouses, to insure the safety of our reserve rubber in wartime. We received a discourteous reply telling us in effect to keep the "government nose" out of private business. About a week later, the morning newspapers had the following headline, "More than ½ million tons of rubber destroyed by a fire of unknown origin." In my opinion this loss was almost as serious as the Pearl Harbor episode because our Army and Air Forces moved on rubber.

Our reserve rubber stocks were reduced to a few thousand pounds, and the Japanese occupied all of the major producing areas. It was necessary for our country to turn its attention to the possibility of the development of synthetic rubber. At that time we made a study of the situation for the General Staff and found that a number of American oil companies had formed a cartel with some German chemical firms, providing that research on synthetic rubber be developed in 2 phases: first, that the methods for the manufacture of the nonomers (basic or beginning materials) be carried out in the United States; and second, that the process for the polymerization of these nonomers into synthetic rubber would be developed in Germany. The American companies kept Germany in touch with all our new discoveries in this area, while the Germans gave us no information concerning their phase of the research. It was, therefore, necessary for our scientists to completely develop this second phase of the synthesis of rubber, and this required time. It was hard for me to understand how our business men could have been so naive on such a strategic problem.

One of my assignments was the preparation of a professional paper for the use of the General Staff on the "Capacities of the Axis Nations to Wage Chemical Warfare." We had considerable evidence showing that the Japanese had used war gases in southeast Asia. I decided that the capacity of Germany, Italy, and Japan to manufacture chlorine might be a good measure since chlorine entered into the manufacture of war gases. A careful check indicated that the best source of information would be the Department of Commerce. It would soon be my privilege to learn what bureaucracy really meant. Armed with the necessary request from the War Department, I went directly to the Office of the Secretary of Commerce and was in turn referred to a descending labyrinth of divisions, sub-divisions, sections, sub-sections, etc., until I finally found the man who had charge of the documents that were required. He refused to let me look at them because they were classified, and the Department of Commerce had agreed with the respective countries to keep them secret. He stated that I would have to get permission of the chief of one of the higher divisions and that this would have to be in turn signed by the sub-chiefs in order for him to release the desired information. Three days had passed, and I was somewhat discouraged so I went downtown, and while I was wandering in the vicinity of the Post Office Building someone called my name. It was a great pleasure to see an old friend, Dr. Edgar Brossard, who was a member of the faculty when I was an undergraduate at Utah State. At this time he was Chairman of the U. S. Tariff Commission. We had lunch together, and he offered to turn over to me the complete resources of his office which

fortunately contained all of the documents that I was looking for. “A friend in need is a friend indeed.”

The Army had recruited sufficient chemical officers for a major portion of units, but only about a third of these had been assigned so that there was a surplus. On the other hand, there was a great shortage of chemists in industry and education. Mr. Parsons, the very competent secretary of the American Chemical Society, put on pressure to have some of the chemists released. A directive was sent out from our Office encouraging some of our officers to return back to industry and education where they could continue to serve their country effectively. During the winter Dr. Gammage, President of Arizona State, had paid the office a number of visits and strongly indicated his desire and need for me to return to my old position. He was requesting a large contingent of Air Force personnel for basic training and required my services to head up the science portion of the training program.

About this time my wife’s health grew worse, and it was necessary to hospitalize her for several weeks. After much hunting a good woman was found who was willing to take charge of the home and children during the daytime. She lacked patience; Connie almost caused her to lose her mind while Flora with her many friends, who used to frequent the front lawn during the late afternoon, gave rise to worry. She really had affection for Harold, and they got along in good shape. Several times she threatened to quit. One afternoon I returned home a little earlier than usual and saw little Georgia walking down the hill, and she was carrying a small valise. I asked her where she was going, and she said tearfully that she wanted her mother and was running away. We went over to the public school grounds and had a long talk. She decided to come home with me and have dinner. After dinner she went to her room and unpacked her valise which contained her doll and its clothing. She never attempted to run away again. I sometimes feel that Providence must have set the time for my return home that night, and I still shudder at the thought of what could have happened to her if she had run away in that crowded city. During the last week in April, Georgia and Harold came down with chicken pox, and it was necessary for me to spend many hours during the night time walking the floor with them and holding both of their hands until they dropped into sleep from exhaustion, otherwise they would have dug into the itching, inflamed areas of their skin thus causing permanent scars.

The heavy expenses resulting from the high cost of living in Washington and family illness had eaten away all of our savings and finally made it necessary for us to borrow money. In addition, my own health was deteriorating under the pressure of these financial and family problems. After considerable study, it became apparent to me that I could be of greater service to my country and my family as a civilian, so I submitted my request to be released from active duty effective May 31, l942. A few days later, Colonel MacArthur, commanding officer of my division in the Service, invited me to have lunch with him. During the course of this meeting, he indicated that I was one of his most trusted and capable officers; he hoped that I would reconsider my request. I thanked him for his kind consideration and pointed out that my services were critically needed by Arizona State because they were planning to implement an Army Air Force Training Program on the campus.

On June 1, 19242, we closed our home in Alexandria, Virginia and started our homeward trip. We passed through several ancient-looking towns in Maryland where the streets were narrow and paved with cobblestones. Our first night was spent in a beautiful green valley in southern Pennsylvania. The owner of the motel was a tall, slim man with a heavy black beard, and he wore blue denim overalls. That evening he came to our apartment, read a number of paragraphs from the Bible, and gave us a short talk on sinners and repentance. We appreciated this unusual service from this sincere man. The next day found us speeding on the Pennsylvania Turnpike to Pittsburgh and points west. We spent about a half a day visiting Carthage and Nauvoo, Illinois. I was especially interested in the once- thriving city of Nauvoo and noted the many vacant lots and the bare hill where a magnificent temple once stood.. It reminded me that nearly 100 years earlier my great-great-grandfather was taken off his sick bed, placed in a covered wagon in midwinter, and crossed the frozen Mississippi River to escape the mob that was driving the Mormons from their beautiful city. He later died of exposure on the plains of Iowa.

We followed roughly the old Oregon Trail through Nebraska and Wyoming. In western Wyoming, we passed through towns that I had known as a boy. These included the coal mining towns of Kemmerer and Diamondville, which looked more drab and run-down than I could have imagined. This seems to be the inevitable destiny of regions where "black gold" or coal is stripped from the earth, and nothing is left except a scar of man's greediness and his dirty, run-down towns.

We were happy to be able to move on rapidly towards Idaho and, finally, to enter beautiful Bear Lake Valley, the land of my birth and childhood. Old Paris Peak stood up prominently across the valley, covered by a mantle of white snow even in June, and surrounded by eternal mountains. This scene brought back happy childhood memories. Throughout my lifetime, it has been a stimulating and inspiring experience to occasionally return to this land, for only in these everlasting hills can I find God's unchanging touch, as I have always known it, unaffected by age and the forces of erosion and decay.

From Bear Lake Valley it was an easy drive to the Harris ranch near Grace, Idaho. The folks seemed happy to see us again, and we remained until August 15th, because there was a shortage of hay hands. I found that I had not lost any of my old skills that I developed as a boy. This healthful living gave us a new lease on life, helped us to recharge our mental, physical, and spiritual reserves, which at that time were at a low point.

CHAPTER XIII: EXPANDING HORIZONS 1942-1949

It was a very hot day in August when we arrived in Tempe, and the old home looked good in spite of the run-down condition of the grounds and the evidence of poor housekeeping inside. It was impossible to realize that our renters had done so much damage to the furniture in less than a year. We spent a busy month reconditioning the home.

In September 1942 school days were with us again; Harold and Georgia re-entered the Payne Training School, and Flora attended Tempe High as a freshman. Arizona State opened its doors to a greatly reduced student body, and the morale was very low because of the war. As time went on, many students disappeared from our classes either because of their sudden call to the service, or they could not settle down to academic work. It was rather difficult to carry on under these conditions.

President Gammage saved the day by completing a contract with the Army, which provided a basic training program on our campus for more than 600 air force personnel and which lasted about 18 months. The college not only benefitted financially from the government contract (We, the staff, did not because our salaries were still lower than in 1930.) but also from the presence of these fine young men on the campus. As they marched from one class to another, they usually sang stirring air force songs or counted in cadence with their marching.

My assignments for the program included the supervision and development of the work in physics and geography, as wall as teaching. It was necessary to purchase much physics equipment in order to handle over 600 men in our meager and inadequate science laboratories. This was a very fortunate event for the college, because it marked the beginning of a fairly well-equipped physics department for undergraduate instruction.

I have always considered appointments to administrative positions and committees of professional, civic, and church groups as opportunities for greater service to my fellowmen. During these years I served as Head of the Science Department of the college which included both the biological and physical sciences, and no effort was spared on my part to push the development and growth of both the faculty and physical equipment in these areas.

In the spring of 1943 I was called to the LDS Maricopa Stake High Council by Elder Spencer W. Kimball of the Council of the Twelve. Church activity has always been a part of my way of life, and I felt very humble in accepting this position but at the same time appreciated the confidence and recognition as evidenced by this appointment. In this capacity I visited the Chandler Ward, later the Lehi Ward, and also worked with the youth of the church. This latter activity fit in rather well with my favorite hobby, scouting. About a year later, Bishop McCook appointed me chairman of a committee to raise funds and plan a major addition to the Tempe Ward Church. This assignment continued for more than five years and proved to be rather difficult and time consuming.

My life was becoming too complicated with all of these special assignments. "When it rains, it pours" is sometimes true in the case of extracurricular activities, and the time comes when one must learn to say "no!" The Arizona Department of the American Legion appointed me chairman of a committee to study the higher educational problems of the G. I. after the war. In 1944 I was elected Commander of the Tempe Post of the American Legion. At that time the Post was very much in need of a shot in the arm, so we organized a campaign to raise money to improve and enlarge the Legion home and add club accommodations. Our most worthwhile accomplishment was the work of the Legion Education Committee. In 1944 the State of Arizona supported two teachers colleges and a state university; the two colleges were limited to the training of elementary and high school teachers. The City of Tucson and the University of Arizona were strongly dedicated to this condition of status quo as long as it was limited to the state colleges, so that any attempt to expand the physical plant at Tempe was immediately countered by effective opposition from the south.

The Committees study made it apparent that all of the states higher educational institutions must be enlarged if we were to accommodate the needs of the, returning veterans and also a growing state. The Committee decided to work for a law which would place the three higher educational institutions under a common Board of Regents which would have the power to expand each institution as needed. Accordingly, a petition favoring this change was circulated to all of the states legion posts. Immediate approval came from all of the posts with the exception of two, one of which was Tucson.

A few days after the receipt of the petitions, I was rather surprised to see the Department of Arizona Commander (a resident of Tucson) and a prominent Tucson business man walk into my office. After a pleasant meeting, the Department Commander (from Tucson) requested me to turn the petitions over to him. I stated that the petitions were locked up in a college safe, that the Committee would present them to the Governor and the Legislature at the proper time, and that the Department Commander would be invited to be present. Both men became somewhat angry, and the Tucson business man stated that the University was their bread and butter, and they were not going to let anything detract from its growth and development. He further stated that he had influence and asked me if I valued my job. I politely ignored his remarks, and this ended the confrontation. Later the petitions were presented to the Governor and some members of the Legislature in full view of the press.

For many years the college at Tempe had carried on a campaign to change its name to Arizona State College and, at the same time, expand its curriculum to include a Liberal Arts College; and this effort was greatly intensified during the first three months of 1945. At first President Gammage was opposed to placing the colleges under the University Board of Regents. Late in February 1945 a dinner was held at the Arizona Club which was attended by many prominent citizens of Phoenix as well as by the Department of Arizona Legion officials Over the protest of the Tucson members, the Board of Regents bill was discussed and approved by most of those present. On the way home from the dinner, Dr. Gammage indicated that some of his advisers were opposed to the bill, but he had decided to support it.

No difficulty was encountered in getting strong approval of the bill in the House (State Legislature), but the Senate buried it in a committee with the hope that it would not see light again. One morning my telephone rang at 3:00 a.m., and I awoke with a start when I heard the excited voice of Mr. Snodgrass, an important member of the Legion Education Committee, telling me that I had better come immediately to the Hotel Adams if we wanted to save the bill. A delegation from Flagstaff had come to Phoenix with a single purpose in mind - to defeat the bill - because they felt that it would have a detrimental effect on the college in their home town. We held a discussion that lasted over three hours. I pointed out that conditions could not be worse on either the Flagstaff or the Tempe campus. From 1930 to 1945 there had been no appreciable increase in appropriations, and no major classrooms had been built on either campus in nearly 25 years. Also, no worthwhile planning was possible as long as the colleges were under the control of three-member boards whose term of office was only two years. Finally, in desperation I said that it might be a good thing to take a close look at each man who was a member of the Board of Regents at that time. A check showed that almost all of these men could be numbered among Arizona's most distinguished citizens from the northern, central, and southern parts of the state. This last example seemed to satisfy our friends from the north, and they left pledging full support for the bill that would place the two colleges under the Board of Regents.

On March 7, 1945 our college faculty had a party at the Hotel Adams. At about the time the party ended, I met a Mr. Klein, an important member of the Legislature, in the balcony of the hotel; and he said “Congratulations Dr. Bateman, the Legislature has passed the Board of Regents bill and has adjourned. Now you can buy your insurance and refrigerators anywhere you like.” He was apparently referring to the fact that some of the former college board members were interested in selling insurance and appliances.

The Legislature had authorized a new name for the college, “Arizona State College” at Tempe, but empowered the Board of Regents to make any necessary changes in our curricula or degrees. The Board appointed a committee with Dr. George A. Works of the U. S. Office of Education as Chairman to make a study of the higher educational needs of the state with special reference to the two colleges. This committee made a very favorable report, so the Board of Regents authorized the colleges to grant baccalaureate degrees in the Arts and Sciences beginning with the 1946 fall term. The President had already appointed committees to work out the basic requirements for the degrees of Bachelor of Arts and Bachelor of Science. Dr. Herbert Gurnee was chairman of the B. A. group, while the B. S. committee was headed by me. These basic programs were ready for the students when they cane for fall registration.

The college at Tempe had finally moved into the ranks of multipurpose institutions, and we were very happy to be of greater service to the young people who would storm our doors With the end of the war, we experienced an explosion in our enrollment. Our student body increased from 550 to over 14,100 students in the five-year period from 1945 to 1950. As time went on, we became desperate in our attempt to handle the avalanche that was demanding services, classrooms, and laboratories far beyond the capacity of our budget and faculty. In those busy days I found it necessary to carry teaching schedules which were more than twice the normal loads, in addition to my work

as Chairman of the Division of Sciences and as a, member of numerous committees. On one of those trying days on the way home, I met President Gammage and told him about the extreme difficulties encountered in the old science building (later the old English Building) in our attempt to accommodate the rapidly increasing requirements of our program. He stated that he too was confronted with crushing problems and that his beloved wifes a condition was steadily becoming worse. He also pointed out that the Board had been very unfavorable to the college and that everything that he had accomplished in life was falling apart. He felt like this was his darkest hour. I pointed out that two years was too short a time to judge whether we had done the right thing in supporting the Board of Regents bill and that I was sure that better days would come.

During these busy years, I had always kept a dream in the back of my mind - a dream of a science building to be! On my various travels, I carefully studied the design and facilities of science buildings in various parts of the country. In the winter of 1945-46, a trip east made it possible for me to visit several new science buildings in Illinois and Michigan and also to study the design of laboratory furniture at the Kewaunee factory at Adrian, Michigan.

Our chemical laboratories were so overcrowded that the apparatus drawers were assigned to at least five students in different sections where one student per drawer would be a normal maximum usage. The plumbing often broke down in spite of the efforts of the plumbers; and, as a result, the floors were quite often covered with water, and some of the students went home with wet feet. The old science building had been in use for more than thirty years and was rapidly reaching the end of its trail in meeting the needs of the science department. About twenty years of my life were spent in this old, inadequate structure, and during most of this time it was a continuous struggle with poverty - poverty of space and equipment as well as salary.

In the spring of 1946, one of the top officials of the Phelps Dodge Copper Company came into my office. He was looking for President Gammage. I had met him on several occasions during my trips to the various copper camps in the state. He sat down, and we had a pleasant talk about some of the problems of the copper industry. When he was ready to leave, he asked me what I wanted most I reflected for a moment and decided to give him an answer that he was not expecting. I told him that we needed some good Arizona minerals to put in the display case in the hall. He looked puzzled for a moment then began to smile and said, “I believe I know what you had in mind, but I am glad that you did not ask for it. A short time ago we gave your sister institution a building for its School of Mines, and since then we have had many requests for gifts of buildings and these have caused us some trouble. You shall get your building, but it will come by legislative appropriation.”

Late in 1946 Dr. Gammage obtained a Federal Grant which made it possible to plan a new science building. Mr. Lescher of the firm of Lescher and Mahoney was retained as the architect. I submitted a set of tentative floor plans for a three-floor structure that we had developed over a period of over ten years. Mr. Lescher favored a two-story building to conform to the flatness of the valley, and it required an official action by the Board of Regents approving a three-story building to shake him loose. After that, he was a very

cooperative gentleman, and the planning proceeded very smoothly. It was necessary to specify concrete walls because a good quality of brick was not available in Phoenix at that time.

In the spring of 1947, the legislature appropriated $200,000 for an education building and, $325,000 for a science building. These sums would have looked good in the 1930s when we were a small Teachers College, and the value of the dollar had not been materially inflated but not in an institution whose enrollment was jumping at the rate of nearly 30% each year. In a conference with Dr. Gammage, I pointed out that plans for a science build with a potential that would allow for ten years expansion would be complete before the end of the year, and that it would cost more than $500,000 for the structure. Another $150,000 would be required for the laboratory furniture and equipment. After some study, the president agreed that it would be better to build one larger building instead of the two smaller ones. In order to conform with the specifications of the legislative act, it was named the "Science Education Building."

The bid for the building was let to the Pepper Construction Company for the sum of $508,000, and this left nothing for inside furnishings. It was necessary to deplete most of the departmental budgets to find enough money to purchase a minimum of fixtures for the laboratories. The construction of the building required about a year, and finally the finishing touches were applied in late November. A dedication program was planned for December 4, 1948. The front landing served as a stage, and bleachers were installed to accommodate a large crowd. It really was a big event in the history of the college because it was the first classroom structure erected in nearly thirty years, and it marked the beginning of a larger campus that would, in time, accommodate one of America s great universities. December 14 proved to be one of the coldest days of the year, and a biting wind cut in from the north. In spite of this, more than 1,000 people shivered through the program. Professor Carl D. Anderson, a notable physicist from the California Institute of Technology and discoverer of the sub-atomic particle, the positron, gave the dedicatory address; and President Gammage dedicated the building.

As a part of the ceremony, a covering was removed from the bronze nameplate for the building, and I noted that my name was included with the inscription, "Head of the Science Department and gifted teacher who designed this building." This made me feel very humble because I was certain that it would be difficult to live up to this honor during the remainder of my teaching career.

The next day after the dedication, my Chemistry class met as usual in the old building. We went to the laboratory, where each student packed all of his glassware and equipment in an old drawer, hand carried it to the new laboratory, and completed the experiment. In this way, more than 100 students helped to make the historic move, and no instruction time was lost. It is difficult to describe the happiness experienced by the department faculty and the students on that cool December day. After the extreme poverty and difficulties experienced in the old structure, it was almost like finding heaven on earth.

Through these years, it was hard to realize that our family was growing up. My many assignments kept me away from home many hours so that the mother, who had always

dedicated her life to her family and home, had done more than her share in raising the children. Georgia graduated from the elementary schools in the spring of 1944 and entered Tempe Union High. F1ora completed high school and entered college in 1946. Georgia excelled in sports and won a loving cup in badminton, while Flora demonstrated her artistic talents in college. Our backyard on 1106 Van Ness Avenue was large and covered with a profusion of trees. It was also well-equipped with playground equipment so that it was an ideal place for children to spend their leisure time. We had always believed that the best place for young ones, was home. As a result our backyard became the favorite gathering place for our children and their friends. Connie, our oldest child, was born with a glandular deficiency which limited her mental and physical development. She had a loving disposition, and at times it seemed that a choice human spirit was trying to break through the imperfections of her physical body. Her retardment and handicaps brought many trials and much suffering to her parents, especially to her mother, because it was necessary to watch her almost every minute during the day.

But this great and long-lasting sorrow was not without its reward, because such suffering tends to make one stronger, helps in the development of charity and the compassionate spirit. To a certain extent, all men are born short in one way or another, and none of us are perfect. It behooves us to remember that we all live to some extent in glass houses. We should search in our own hearts, for the imperfections we see in others may really be a reflection of ourselves.

Connie passed away on February 5, 1948, after nearly 25 years of loving care by her mother. Florences sister, Viola, and her brother, Guy, and his wife made the long trip from Idaho to be with us in our hours of sorrow. Death is as natural as birth, but we grieve because it is hard to lose our loved ones. Day by day each of us die a little and are reborn a little. The joy and satisfaction of living largely depends on the positive forces of life, overbalancing the decaying tendencies within us, be they physical, mental, moral or spiritual.

For many years several of the faculty members of Arizona State who were members of the LDS Church worked for the establishment of an Institute of religion near our campus. Since 1932 it was my privilege to show our campus and possible sites for the location of the Institute to several of the General Authorities, but each of these visits always seemed to end in the same way -no action. The local church authorities did not support the project because they felt that the wards in Mesa, Phoenix, and Tempe were ably taking care of our students. Institutes had already been established in Flagstaff and Tucson, in spite of the fact that Arizona State had more LDS students than any collage outside of Utah and Idaho.

In March 1946 I paid a visit to my old friend of many years, “Dad” Mann, who ran a small store on the north border of the campus. On this particular morning, I noted that the store was run-down and that Mr. Mann could hardly walk because of arthritis I suggested that he sell the business and enjoy the fruits of retirement, and he gave me a surprising answer. He said, “Bateman, I have given this much thought and have had several offers to sell for a high price because of my liquor license. I have great respect and esteem for you and your people and feel that the finest use that could be made of my property, which I

love very much, would be as a site for an Institute for your churches young people who attend the college. I am, therefore, giving you first chance to purchase it." I immediately contacted my old college dean, Dr. West, who was now Church Commissioner of education and vigorously presented the case to him. After some hesitation, he said, "George, it is usually necessary for the Council to consider and approve this type of purchase. I recognize the urgency of the situation and assume that they will go along with me in authorizing you and your stake presidency, if they so recommend, to purchase the property." The next Sunday morning the old Dad Mann Store became the property of the church and the potential site for a new Institute. As one of our college professors described it, "In one stroke, you have eliminated a beer joint and made it possible to build a church on the border of our campus."

In October 1944 President Lorenzo Wright of the Maricopa Stake, LDS held a conference with me. At that time I was a member of Maricopa Stake High Council. He indicated that Bishop R. L. McCook, Sr. of the Tempe Ward had asked to be released because of the illness of his wife. I received this news with sorrow, for I had been closely associated with the good bishop and his family for more than 16 years and had the greatest love and respect for them. I was shocked and almost speechless when President Wright said, "You have been chosen as the next bishop of Tempe Ward.." I had never aspired to this high position, for I had always gained the deepest satisfaction as a teacher; for only at this level can one give service which definitely shapes the character and the advancement of the individual. The assumption of this position would require me to take over the temporal and spiritual leadership of over 400 people in addition to the requirements of my profession. I felt very humble and pointed out that there were several other ward members who were more qualified from every standpoint. In addition to my heavy teaching schedule and position as Head of the Science Department, I was engaged in several other activities such as Commander of the Tempe American Legion Post, Chairman of the Medical Technology and Nursing programs, Member of the Graduate Council, and Chairman of the Planning Committee for a new science building on the campus. In view of all of these activities, I begged President Wright to "let the cup pass by me."

About five months passed with no further mention of this matter, so I began to feel secure in the thought that the assignment had gone to another. One morning in March 1945, I had just begun my lecture on general chemistry when my secretary signaled that I had a very important telephone call. I requested the party to call me later since I had a class in session. To my surprise I heard President Wright on the other end of the line say, "Okay, Brother Bateman, go back to your class but be sure and read the Arizona Republic in the morning. We will see you before the end of the week." The next morning the Republic had a big headline which stated that President Truman had given away several additional billion dollars to needy foreign nations. After some searching, I found another news item which stated that Dr. Bateman, Head of the Science Department of the college at Tempe, had been appointed as the new bishop of the Tempe Ward. I was very much disturbed, but I knew that there was no turning back.. Early that morning, congratulations began to pour in by telephone. Many of the non-Mormons expressed their regret that I was leaving the teaching profession to enter the ministry. It required considerable effort on my part to make them understand that my position as bishop was a labor of love and that instead of receiving a salary from the church, it was necessary to contribute both time and money as

a lay leader. It should be noted that the LDS church operates almost entirely with lay priesthood and that every youthful member has the opportunity to receive experience and training, which will qualify him for both leadership and teaching positions.

Later in the week, President Wright and his councilors paid a visit to our home and had a meeting with my wife and me. They pointed out that my special mission would be the financing and the construction of classrooms and chapel for the growing ward. They stated that I had a reputation for getting things done. I felt very humble in assuming this position, but my wife gave me her full support and assured me that I would be a good bishop. I selected Grant Layton and C. Ferrel Dana as my councilors. Later Grant Layton was replaced by Theo LeBaron. In a few weeks we completed the Ward organization so that it functioned smoothly. On October 1, 1945 at the quarterly conference of the Maricopa Stake, I was ordained a bishop by Elder Thomas E. McKay, Assistant to the Twelve.

By May 1948 we had sufficient funds to start the construction of the church. Construction proceeded rapidly and efficiently due to the capable assistance given to the project by my councilors and the faithful members of the Ward. Much of the work was done by the members, and it was an inspiring sight to see skilled labor, teachers, salesmen, farmers, and students working shoulder to shoulder. I am sure that every one of them gained a rich experience not only because of their giving but also from their association with their fellow members from many walks of life. The church will also mean more to them because they helped to build it.

In the spring of 1949 the structure was largely complete and ready for occupancy. My church service on the High Council and the Tempe Bishopric had covered a continuous span of over 20 years. The requirements of the position as bishop, plus the responsibility of financing and overseeing the construction of the church, along with all of the work connected with my profession (At that time I was also supervising the construction of the science building.) resulted in demands that were almost beyond my capacity. I gradually found myself approaching the upper limits of my physical reserve, and my knowledge of chemistry was rapidly being outdated, because I had very little spare time to keep up with the newer concepts. It has been said that the knowledge in chemistry, resulting from research, doubles every ten years. In May 1949, after considerable deliberation, I presented my letter of resignation from the position as bishop of Tempe ward, and it was accepted by the Stake President. During my time as bishop we had successfully accomplished our objective, the financing and construction of the church. In addition, the ward had grown and was in a very healthy state. I felt that I had much to be grateful for. My good friend, Ferrel Dana, became the next bishop of Tempe Ward.

This decade has been one of great stimulation and growth from every standpoint and, without doubt, represents the busiest and most important period in my lifetime. I shall always feel that I was especially blessed because of all of the opportunities that came my way. My hope is that I have done my best.

CHAPTER XIV: REACHING FOR THE SUMMIT 1950-1958

During this period it seemed that the "trial of life" was even steeper and more difficult, where one could easily slip if he failed to maintain an upward trend. Many changes were taking place in the university and the community, but also in scientific knowledge. The little town of Tempe expanded more than ten fold to a population of over 50,000 and the traffic over its once sleepy Mill Avenue grew to more than 40,000 vehicles per day. The "old Tempe Normal" whose future seemed so hopeless in the 1930's showed mushroom growth after World War II and became a complex university with an enrollment of over 20,000 students. The borders of the campus jumped across University Drive and Van Ness Avenue like a forest fire and threatened to raze every home in East Tempe. I used to enjoy a short walk to my office across the grass covered athletic field, but before the end of the 1950s all of this changed and life was never quite the same. Even our beautiful home on Van Ness Avenue which we loved so much was swallowed up by the expansion of the campus. The old Tempe Ward of the Mormon Church which had a very humble beginning in 1927 also grew very rapidly and in two decades expanded into the two thriving stakes of Scottsdale and 'Tempe, each with more than 3500 members.

The birth of the atomic age, plus the advent of Russian Sputniks, and our national space program catalyzed a revolution in our educational system, and placed mathematics and science on the top rung. Research and technology expanded at an accelerating rate. Government supported programs were developed to update and upgrade teachers of mathematics science. New type textbooks came off the press to modernize not only the subject matter but to improve the methods of teaching mathematics and science.

Well established boundaries between elementary, high school and college were crossed with the resultant upgrading and updating of course content at all levels. Elementary students started to study modern mathematics and text books for high school students included much of the material that was formerly taught at the junior college level. Lower division college courses began to emphasize basic concepts and principles in the sciences which were once reserved for seniors and graduate students. These changes, so far reaching and extensive, left many teachers behind because of their archaic background. It was necessary for me to begin a period of intensive study that lasted until the end of my career and I had to say "NO" to an increasing number of opportunities for community and church service.

It seems that the basic law of life is change. Each sunrise brings a new day and we are reborn with new problems, with more problems and with ever expanding horizons. Even our loved ones move along with this ceaseless law of change. In February 1950 our daughter, Flora, graduated from Arizona State with a BA degree in elementary education. We experienced a great void in our home when she left for her first teaching position in an elementary school near Glendale, Arizona. She was married to Robert P. Curry on May 24, 1950, in the new Tempe Ward Chapel. During the first two years of their married life they both taught in the Avondale schools. Then they moved to Tempe where Bob soon worked his way up to assistant superintendent of the elementary schools. Their

first child was born on March 4, 1954, and we were very thrilled with our first grandchild. A second son was born the Curry family on March 2, 1956, and the young parents had quite a struggle to save him, because he was a premature baby. He was named Jeffery Stanton and spent his first month in an incubator at the Mesa hospital. As the years passed he developed into a husky young boy. The Curry family overjoyed when the stork brought them a pretty baby girl on December 29, 1957, and they named her Julie Ann.

Georgia Rose, our second daughter, graduated from Tempe Union High School in May 1952 and entered Arizona State the following fall. In July 1950 our son, Harold, attended the National Scout Jamboree at Valley Forge. It was quite a trip for a 12 year old boy with stop-overs at New York City, Washington and New Orleans.

On May 29, 1950, the new Tempe Ward [building] was formally dedicated. A number of us had worked hard to finance and construct this church. The old Ward had gone a long way since its pioneer days in 1928 when we used to meet in an old public hall above the Tempe Hardware Company. By November 1929 we had completed a small unit which consisted of a recreation hall and several classrooms and these inadequate facilities served us for over 20 years.

The old Science Department at Arizona State had shown rapid growth during post war years and by 1950 had well developed programs in botany, chemistry, geography, geology, physics and zoology. In September 1950 President Gammage divided it into the Departments of Life Sciences and Physical Sciences. My assignment continued as head of the Physical Science Department which included Chemistry, Geography, Geology and Physics. The old Department of Science began in 1895 under the direction of a master teacher, professor F. M. Irish who later became the college Registrar. In the early history of Arizona State he offered a broad spectrum of science courses at the secondary level. In September 1927 President Matthews appointed me head of the department, and that time we had three instructors who offered courses in chemistry, physics, geography and agriculture. In its 55 years of existence the old Science department had only two heads!

Since coming to Tempe I had been quite active in scouting, as a member Roosevelt Council, Chairman and member of Tempe District Committee, and other assignments such as leadership training, but had hold no positions that involved direct contact with the boys. Our son, Harold's membership in the Tempe Ward troop shifted my interest to the troop level. In April 1951 plans were completed for summer camp, but the sudden resignation of the Scoutmaster left the boys without adult leadership. Rather than disappoint them I volunteered to take over and we enjoyed a very profitable ten days at Camp Geronimo. Our boys walked away with more than their share of honors while at camp. I continued in this position as Scoutmaster for nearly 5 years and was ably assisted by Karl Burk and others. The boys made significant progress and in time our troop became one of the top ones in Roosevelt Council. Eight of the boys earned the Eagle rank and we were very happy that one of these was Harold. In the meantime I completed training programs and received the scoutmaster's Key and the Spouter's Award.

At the annual meeting of the Roosevelt Council in the spring of 1952 I was both honored and thrilled when the Silver Beaver was awarded to me for distinguished service to

boyhood. An experience that will always be treasured was my service as Scoutmaster of troop 13 from Arizona, at the National Jamboree held at the Irvine Ranch, California in July 1953. In route the first two nights were spent at the San Diego Marine Base where the boys lived under marine conditions for nearly 2 days, and they found the experience rather strenuous. On the third day we arrived at Irvine Ranch which consisted of thousands of acres of rolling sandy hills near Santa Ana. By evening these hills were covered by a city of nearly 60,000 scouts arid. scouters, which seemed to rise magically out of the ground. The boys from different parts of our country brought a little of the flavor of their home section to the great encampment. The New England section had an atmosphere of sea going people while "Stars and Bars" confederate flags, along with "Old Glory" waved over the southern contingent. The Arizona area was one of the most unique and most interesting with its pole fencing, blooming cacti, pack burros and Dutch oven biscuits. The most impressive event of the Jamboree was the grand assembly, which was held in a natural arena with gently curved hills serving as a natural stadium for the seating of the scouts and scouters. In the growing shadows of the evening more than 60,000 spectators moved into the giant arena through the thickening dust. A pageant on the "Winning of the West" was shown and it was very impressive with its covered wagons, pioneers, Indians and fireworks. It was thrilling to hear the pioneer song, "Come, Come Ye Saints," rendered with such spirit and volume. At a set time in the program each boy lite his candle. The effect was startling, because one candle by itself could hardly be seen, but 60,000 candle power changed the intense darkness into the glaring light of a sunny day. This was given as an example of united action, many small forces in the right can add. up to a mighty power for good.

On November 20, l954, the Board of Regents reluctantly authorized the reorganization of Arizona State into four colleges. One of these was the new Liberal Arts College which contained a very large proportion of the college enrollment. Because of this heavy student load Dean Tilden organized the college into a number of divisions early in 1955. The main purpose of the divisional offices was to aid in the development of the various disciplines into strong departments. My old department was expanded by the addition of mathematics and received a new name, Division of Mathematics and Physical Sciences. At this time the new departments of Chemistry, Geography, Geology and Physics made their appearance on the campus for the first time. For a number of years it was my privilege to wear two hats, Chairman of the Department of Chemistry and Head of the Division of Mathematics and Physical Sciences, in addition to a full time teaching load in chemistry.

We accepted an invitation to attend a two week Institute on Radioactivity at State College of Iowa and left Tempe June 10, 1955. Florence accompanied. me and we were gone for nearly a month. On the way we visited Independence, Missouri which was an important place in early Latter Day Saint history, and the home town of President Truman. At the Institute we were kept very busy and our classes began at 8:00 in the morning and continued until about 10:00 in the evening. The program was very worthwhile because it was my first exposure to the important subject that gave rise to the atomic age. We met a number of people who had. become our close friends. One of these was Dr. LeRoy Eyring, a member of the teaching staff of the Institute who later followed me as Chairman of the Chemistry Department at Arizona State.

On our way home we visited the Mayo Clinic at Rochester, Minnesota, where one of my former students, Dr. J. D. Mortensen, was specializing in heart and lung surgery. His experiments with dogs with plastic aortas proved to be very interesting. The aorta is the grand trunk artery which carries blood from the heart to be distributed by branch arteries throughout the body. The dogs appeared to be normal and showed no adverse effects from the operation even after several years. Next we visited the University of Wisconsin at Madison and enjoyed the beauty of the campus and the surrounding lakes. Our return trip took us to the University of Iowa, The State University at Ames, Iowa, and also the universities of Nebraska, Colorado and New Mexico. We especially enjoyed the beautiful mountain scenery of Colorado and New Mexico in contrast to the flatness of Nebraska and Iowa. A short visit was paid to the National Philmont Scout Ranch near Cimarron, New Mexico. This national scout reservation consisted of nearly 120,000 acres of virgin forests and streams in beautiful mountain terrain. It would be difficult to measure the great thrills and inspiration that boys from the city jungles would gain, while spending a few weeks in this virgin land almost untouched by the heavy hand of civilization.

During the school year of 1955-56 it was my privilege to serve as president of the Arizona Chapter of the National Honor Society of Phi Kappa Phi. The efforts of this organization are directed towards the development of higher scholarship and the fulfillment of its motto, “The love of learning rules the world.”

One morning in September 1955 I left home to attend the first meeting of the faculty of the school year, and. leisurely walked across the green athletic field and enjoyed the beauties of nature. As a result I entered the meeting several minutes late, and was shocked when I noticed that my name and one other were written on the chalkboard. The faculty was voting for a faculty chairman for the coming year and through no effort on my part I won the election. In a few minutes I was properly installed as Faculty Chairman and was chairing the meeting.

One of the most pressing needs was the formulation and adoption of a new faculty constitution, because we were operating under an antiquated one, which had been adopted in the late 1930s when we were a small single-purpose -teacher training - institution. As a member of this early constitutional committee, a vivid memory remained of the many meetings that were held under the capable chairmanship of the late Dr. H. K. Wyllys, Professor of History, and the difficulty experienced in formulating the old faculty constitution and in obtaining faculty approval. College professors, as a rule, were firm believers in democracy, but they were always very wary of adopting any regulations that would possibly limit their rights in the academic community. As Faculty Chairman it was my responsibility to set up machinery that would insure the formulation and adoption of a suitable constitution. Profiting from past experience a new constitutional committee was carefully selected and was composed of members who were capable and enjoyed the respect and confidence of a majority of the faculty. We went to work in November 1955 with Dr. Paul Hubbard as chairman. Under his experienced and capable leadership, and after many months of study and hard work, a new constitution was formulated and presented to the faculty in May 1956. A long and stormy meeting resulted with heated discussions both pro and con, and when put to a vote the document squeezed through by a

small majority. The President presented it to the Board of Regents who approved it after careful review with a number of revisions, and in the fall of 1956 it became the basic law of the faculty at Arizona State.

Our son, Harold, graduated from Tempe High School in May 1955 and entered Arizona State the next fall. Georgia Rose, our second daughter was successful as a college student and graduated from Arizona State with a B.A. in elementary education. During her high school years she survived several romances, but finally found the young man of her dreams. He was a teacher of mathematics at the North Phoenix High School, and they shared the same background and interests, so their romance developed smoothly. On February 18, 1956, Georgia married Lehi Tingen Smith in the Mesa Temple. For the next 18 months Georgia taught at the Roosevelt Schools in south Phoenix while Lehi continued at North Phoenix High.

My assignment as a member of the Graduate Council ended in 1956. I had. been a member of this important committee since 1937, when graduate work at Arizona State had its origin, and during those 19 years many hours were spent in laying the foundation for the present Graduate College.

In1956 I was selected as a member of the athletic board and in Sept 1953 President Gammage appointed me chairman of this important board. My tenure in this position lasted about six years, and during this time the Intercollegiate Activities at Arizona State experienced many growing pains, which necessitated the construction of a new Sun Devil stadium, development of a new baseball field, placement of additional seating in the gym, and the planning of the new Sport's Arena and other facilities. The athletic program matured and we fielded several nationally recognized teams in football, basketball, baseball and track. Since Intercollegiate Athletics were not fully subsidized by the state, a major and continuing worry was the providing of sufficient funds to meet its budget. About 13% of the budget was provided by faculty and student contributions while nearly 87% was dependent on gate receipts from non-campus public. A losing football team or a few rainy nights could easily spell disaster to the budget. This problem was always a major concern of the Athletic Board and at the same time put the coaches under pressure to produce winning teams.

We moved. into the "old" science building in 1948 and in less than ten years were in the condition of the "old woman in the shoe", we had so many students that we did not know what to do. Some of our activities were located. in temporary buildings which were makeshift. For a number of years we had been planning a new center for physics, mathematics, chemistry and geology to be located on the city block directly north of the engineering college. This center would initially consist of wings B and C near the center of the block and would be designed to ultimately allow the addition of wing A on the south and wings D and E on the north and a high rise unit on the east side. The addition of wing A on the south exposure of the center at a later date, would make it possible to design a structure that would architecturally enhance the beauty of the campus and cover up the gross shapes of wings B, C and D.

When this plan was first presented to President Gammage he seemed somewhat shocked

and stated that he thought it was too ambitious for Arizona State in its present state of development. He further emphasized he had definitely decided to ask for only a biological science building from the 1957 State Legislature, and that the request for an additional science building might jeopardize the entire request for capital additions for that year.

President Gammage once told me that if you have a cause you know is right, do not become discouraged if you lose on the first attempt but keep coming back until you win. I decided to use his philosophy at this time. In addition, I felt that 1957 was one of my lucky years, because most of the important events in my life had occurred in years ending in seven. I was born on a seven, my folks moved to Paris, Idaho, on a seven where I graduated from high school on a seven (1917), entered college on a seven, received my Ph.D. on a seven and came to Tempe on a seven (1927). My only son was born on a seven, and the "old" science building (now Agriculture) was constructed during 1947. How could we miss with these statistics?

During the spring semester of 1956 my building plan was presented to our president several times and finally in June I again renewed my request. At this time he seemed rather disturbed and emphatically stated that he would definitely not include the building in his request and that the matter was closed.

At the end of the first term of summer school Florence and I left for Bozeman, Montana, where I attended a six week Institute for college chemistry teachers at the Montana State College. This experience proved. to be very stimulating and afforded me an opportunity to update my knowledge of chemistry. On week ends we used to take short trips into the virgin mountain country of Montana where we could commune with nature and clearly meditate on some of the unsolved problems. The problem of housing our rapidly growing departments in my Division of Physical Sciences kept recurring in my mind. I decided to write President Gammage on the "forbidden subject" and much study and time was spent in the formulation of a letter which pin pointed the reasons why the construction of the new Physical Science Center was so urgent.

On the way home we took the long road into southern Alberta where we visited Waterton Park with its beautiful lakes, mountains, and sunsets. We toured the Mormon Temple grounds at Cardston and were impressed by the serenity of that dedicated institution and its surroundings. Our trip south took us through Glacier, Yellowstone and Grand Teton National Parks. We were enthralled by the natural wonders which have been reserved for pleasure of all Americans.

On the shores of Bear Lake we enjoyed a short reunion with my father, mother, brothers, sisters and the grandchildren. John was now 82 years old and Clara had reached her 80th year and they had been married over 61 years. At the reunion they were surrounded by eight healthy children, and many siblings of the second and third generations. They looked very happy and. contented at this last reunion at which all of us would attend.

When we arrived home a note was in my mail box from President Gammage which requested me to come to his office as soon as convenient. I was a little worried because I was not sure how he would react after reading my letter on the "forbidden subject". My

fears were soon allayed because he seemed to be in one of his happiest moods. I was thrilled when he said, “I have decided to request sufficient funds from the 1957 Legislature for the construction of both the Life Science and Physical Science Centers.”

As previously stated the years ending in seven had always been my lucky years and this was certainly true for the year, 1957, for the Legislature appropriated funds for the construction of both science centers. A planning committee consisting of myself, Dr. A. T. Wager, Chairman of the Physics Department, and Dr. Clyde Crowley, Chairman of the Chemistry Department, worked for almost 14 months in the development of plans before the building was ready for bid. More than a year was required for the construction of the new science center.

The expansion of the campus finally reached out and gulped our place on 1106 Van Ness Avenue where we had lived for more than twenty two years, and had developed into one of the most attractive homes in Tempe. It was producing all of the grapefruit, oranges, lemons, tangerines, pecans and dates that we could use. More than this, our children had grown up here and it was their symbol of home and all that it means. Many tears were shed when we left the “old place” for the last time and moved to our new home on 515 Broadmor Drive in April 1957.

Later in the same month I made a trip to Miami, Florida, to attend a meeting of the American Chemical Society, and at the same time to present our petition to the Committee on Professional Education for the accreditation of our Department of Chemistry. On the return trip several days were spent with the Engineering Department of the Keewaunee Manufacturing of Statesville, North Carolina, for the purpose of designing and working out details for the laboratory furniture to be installed in the new physical science center. At this time I enjoyed a short tour which included interesting and scenic points in both North and South Carolina. The scenery in the Smokie National Park was especially beautiful because the azaleas and dogwood were in full bloom on the hillsides.

During the summer of 1957 we went to Provo, Utah, where we enjoyed the beautiful campus of the Brigham Young University and its ideal weather at that time of the year. In June it snowed in the mountains and old Timpanogos was covered by a pure white mantle of snow. While there I served as a visiting professor of chemistry for the first term of summer school. On our return to Tempe we found that our old home along with all of the landscaping had disappeared and nothing remained except the bare ground and our pleasant memories.

In September 1957 Lehi received an appointment for a National Science Foundation Academic Year Institute and. the young family moved to Stanford Village, California. In the same month I received a very welcome letter from the American Chemical Society, which placed Arizona State on the Approved List for professional chemical education and included this statement, “Dr. Bateman is to be commend for the contribution he has made in the development of the chemistry program and the selection of staff.” A short time after this favorable action, Dr. Clyde Crowley became the second chairman of the chemistry department. I was also released from my long time assignment as advisor of the

nursing program with the establishment of a College of Nursing in the fall of 1957.

This was indeed a full and fruitful period in my life which included the approval of the new Physical Science Center and the College of Nursing, the trips to Miami and Provo, moving into a new home, accreditation of our chemistry department, and the birth of our first granddaughter, Julie Curry, on December 27, 1957. In my opinion the year 1957 represented the summit of my life and I felt somewhat like the psalmist who wrote, “My cup runneth over. Surely goodness and mercy shall follow me all of the days of my life.”

The year, 1958, opened early with the birth of a grandson on January 10, 1958, in Redwood City, California, and his parents, Lehi and Georgia, named him Lehi David Smith. His grandmother was kept busy for over a month with Julie in Tempe and then with David in Stanford Village, California.

Our home phone rang rather early on the morning of March 12, 1958, and suddenly aroused me from my deep sleep. On the other end of the line was my sister, Lucille, who sobbed out the sad news that our dear mother had. passed away. Several days later I boarded a twin engine plane for Salt Lake City and on the way north we ran into a rather bad winter storm that was raging over the Rockies. At times the plane was tossed like a feather in the wind, and as a result the passenger area was in shambles with almost everyone suffering from air sickness. I did all I could to help some of the mothers with their young babies. The sky was completely overcast when we approached the Salt Lake Airport, so that it was necessary to fly around until a hole appeared in the clouds and. the plane landed safely. It certainly felt good to be on the ground again in spite of the bad weather conditions that greeted us. Because of icy roads it required more than three hours for the bus to reach Logan.

I walked directly to the Mortuary and was greeted by a large number of relatives and old friends, who had gathered to pay their last respects to Mother. My poor old father was sitting on a divan flanked by two daughters and in spite of their efforts to bring cheer and encouragement, he looked confused and helpless. My heart went out to him because more than anyone else, he was the real loser. Clara had been his childhood sweetheart, his constant companion and their marriage had lasted more than 63 years. It made me sad to realize that life would never be the same for John. Up to the time of her fatal time of her stroke, her mind and body had been active as ever, and during their last moments together, they had been enjoying life.

Mother looked younger and relaxed as she lay in her coffin, she had a slight smile on her face, and as I gazed at her through my tears, it seems that the first feeling of peace that I had known in several days came over me, and this prayer came to me, “Thank you dear Mother for the unselfish life you have led, so full of sacrifice and love for the children that you brought into the world. May God bless you and may all of your loved ones be worthy of you.” It seemed that when mother passed away, a little of me also died, for it was she who brought me into this world, it was at her breast that I learned to smile, it was on her lap that I learned to talk and it was at her side that I learned how to walk. Our great debt to our mothers can only be repaid by passing on to the next generation their gifts to us. The funeral was crowded with friends and relatives and was very inspirational and

mother was buried in Wellsville, Utah, in a spot that she loved so much which overlooked the beautiful Cache Valley and the everlasting Wasatch Mountains.

After summer school, August 1958, we accepted an invitation to attend a Chemistry Teacher's Conference at Asilomar, California. On the way we passed through Los Angeles, and then north until we reached San Luis Obispo, then we took the coast highway (Number 1) to Carmel. This proved to be an exciting experience since the road was rather narrow and followed the mountainous coastline. At times when the fog came in I had the feeling that I was flying along the edge of a high mountain range with the rocky shore and. ocean a few hundred feet below. We were very happy when we reached Carmel with its many unique shops. Asilomar Beach proved to be an ideal place for a conference, since the air was cool and relaxing, the accommodations good and the program was excellent. After a very profitable week at this ideal haven we went to Stanford, where we spent two pleasant days with Lehi, Georgia and their infant son, David.

After leaving Stanford we began one of the most beautiful and inspirational trips of my life--a trip across the Golden Gate Bridge, through the redwood forests of northern California and along the heavily wooded coastline of Oregon. The eternal redwoods with their lofty branches reaching into the clouds and the blue sky were living testimonies to me of the Greatness of God and of the indestructibility of his Works. These living giants have for more than a thousand years withstood fires, lightening, storms and all of the other mighty forces of nature. Their enormous size, their infinite age and their intense silence made me feel humble and insignificant, and the words of Joyce Kilmer came to me.

> I think that I shall never see
> A tree that may in Summer wear
> A poem as lovely as a tree.
> A nest of robins in her hair;
> A tree whose hungry mouth is pressed
> Upon whose bosom snow has lain;
> Against the earth's sweet flowing breast;
> Who intimately lives with rain.
> A tree that looks at God all day
> Poems are made by fools like me,
> And lifts her leafy arms to pray;
>
> But only God can make a tree

The trip across Oregon was a fitting sequel to that through the redwood forests, since more than three hundred miles of coast line furnish one of the most scenic drives of our country. Here the mountains and their green cloak of pine forests meet the white surf of the deep blue Pacific Ocean. At places wide sandy beaches are inter-dispersed by mountainous cliffs and caves carved by the boundless energy of the unceasing waves. We finally reached Astoria and looked longingly across the wide Columbia River to the State of Washington, but our time was rapidly running out, so we turned east. We passed

through the city of Portland and along the beautiful Columbia River Highway until we reached the turnoff which lead north to the twin cities of Richland and Pascoe, Washington. East of the Dalles the landscape took on the aspect of a very dry desert, because of the desiccated air which resulted by passing over the high Cascade Range. We passed near the giant Hanford Atomic Energy Reservation near Richland, and then traveled to Pullman where we visited the ample and well developed campus of Washington State University. The University of Idaho at Moscow was reached by a short distance of about seven miles. While there we were treated very cordially by the officials and were conducted on a tour of their fine campus. It was hard for me to realize why these Universities were located in such remote places in their respective states. As a native of Idaho it had been my desire to attend the state university, but Moscow was separated from southern Idaho by high mountains which were not passable for more than six months of each year. In fact, it would have required more time to travel by train from my home town in southeastern Idaho to Moscow, than to Chicago.

Our trip south took us over high mountains and into deep canyons of indescribable beauty to Boise where we visited the state Capitol Building. This city, which is the largest in the state, seemed to be small but neat and well, planned. We then traveled to Logan and finally to Tempe.

In our absence the construction of the Physical Science Center had moved along quite rapidly and was ready for occupancy by the end of the year, and we began to move into it during the latter part of December 1958.

Almost from the date of its beginning up to 1958, the "Old Normal" had waged an intermittent battle for a suitable name and status. It had started as the Arizona Territorial Normal School in 1886 with a broad charter which included the training of teachers, instruction in the arts, commerce, industrial arts and agricultural science, and even a state museum. By 1920 its program had been limited solely to a two year curriculum for the training of elementary teachers, and its name officially had become The Normal School. This restriction of name and function had largely resulted from the continuous efforts of the friends of the University of Arizona who maintained that Arizona did not have sufficient resources to support two major universities. Another Important factor that aided in the deve1opment of this public image was the faculty under President Matthews who were mostly normal school graduates with two or three year certificates. These were dedicated instructors who felt that any expansion beyond teacher training would detract from the major function of the Normal School. As late as 1929 I was called up on the green carpet for encouraging the attendance of several liberal arts students. At that time President Matthews said he had a verbal agreement with Phoenix Junior College officials to the effect that all prospective teacher education students would be encouraged to attend "Tempe State Teachers College" while all others would be advised to attend Phoenix Junior Col1ege. At that time the Phoenix institution was superior to Tempe in its Liberal Arts offering which included Biology, English, Chemistry, Physics and Mathematics, and a move was being started to make it a four year college.

Under President Gammage's administration efforts were increased to expand "Old Normal" so that it would be capable of meeting the needs of the growing Phoenix area

and also that of the state. These efforts were especially accelerated after World War II when Arizona State experienced rapid growth in student enrollment. After several unsuccessful attempts to gain the necessary changes from the Board of Regents and the State Legislature, President Gammage decided to let the people decide the issue at the next election. In spite of the superhuman efforts of Pima County to defeat the measure, the vote was 151,135 to 78,693 in favor of the change. The “Old Tempe Normal” officially received its final name, Arizona State University on December 5, 1958.

CHAPTER XV: SUMMIT YEARS 1959-1962

In January 1959, the first two units of the new Physical Sciences Center were officially turned over to the University and it required over three weeks to complete the complicated task of moving the equipment and supplies of the Departments of Chemistry and Physics. Mathematics was also given a temporary home in the new building. At that time, we had sufficient space to house all of the instructional and research activities of Physics and Chemistry. However, it was necessary to hold many of the mathematics classes in other campus buildings.

In May of 1959, Florence and I were very happy to receive an invitation to attend the commencement exercises at Stanford University where Lehi, our son-in-law, was scheduled to receive his doctorate degree. This event represented a very successful conclusion of his graduate work. After graduation, he accepted a position as Assistant Professor of Mathematics at Arizona State University and began his college teaching career in September. During the summer of 1959, the Smith family constructed a home at 514 East Broadmore Drive, which was located directly across the street from our residence. In late November, the young family moved into their new home and on December 11, 1959, they were blessed with a second son and named him Mark Bateman Smith.

During the first week of September, I went to Washington, D.C., and participated in a National Science Foundation panel which had the responsibility of reviewing proposals of many colleges for Summer Institutes for high school science teachers. While there, I enjoyed a short visit with Dr. Alan T. Wager, head of our Physics Department, who was on a years leave with the Foundation.

On September 21, 1959, Dr. Clyde Crowley and I had a conference with the President regarding the problems of the Chemistry Department, after which we spent a very pleasant hour at lunch in the Faculty Dining Room. I noted that he had difficulty keeping up with me, as we left the Physical Sciences Center on the way to the Presidents office, and during lunch he chain smoked and drank at least five cups of black coffee. When it was suggested that he be more temperate in the consumption of tobacco, alcohol and coffee, he laughed jovially and said,

> “Eat, drink and be merry for tomorrow we die. Who wants to live forever? While I live, I want to enjoy life to the fullest extent. One of these days the newspaper will have an obituary which will read - Clyde Crowley died suddenly from a massive heart attack - and about 30 years later there will be another which will read, 'George Bateman was pushed off a cliff by his friends, as an act of mercy.'”

The above quotation was included in full, because I learned later that day that this kindly man had died as he had predicted, at one of the fraternities where he was the evening speaker. In my opinion, Professor Crowley was primarily a chemical engineer. For many

years he was head of a consulting service in Chicago. He was also on the consulting staff of *Popular Mechanics* and had written a number of articles for that journal. He was also outstanding as an efficiency engineer, and in his ability to write.

The Dean appointed me acting chairman of the Chemistry Department that I had guided for so many years. The Physics Department had already established a strong research and instructional program in solid state physics in response to the needs of the rapidly expending electronic industry, and I felt that we also needed a program which supplemented this from the chemical standpoint. Therefore, we searched for a man who was interested in the development of solid state chemistry at Arizona State. Our attention was finally centered on Dr. LeRoy Eyring, who had a very active research project at the University of Iowa. We communicated with him both by mail and telephone for nearly three months, before we could win his acceptance of our offer. During the past eight years, he has experienced a very distinguished record as a teacher, chairman, and as a leader in research.

Early in December, I visited Dr. Gammage's office and found him studying a preliminary set of drawings for an auditorium that was being planned by the great architect, Frank Lloyd Wright and his associates. The President seemed to be in a very happy and optimistic mood, especially concerning the increasing status of Arizona State as a multiple-purpose university. One project that seemed nearest to his heart was the beautification of the campus. This also had been Dr. Matthews ideal until the time of his death, but the campus was still cut up by city streets and surrounded on two sides by Tempe slums.

December 22, when everyone was preparing for the Christmas season, we were all shocked by the news that our University President had suddenly died as a result of a heart attack. His passing at this time was a great loss to the University and to the State. It was my privilege to serve under Dr. Gammage during his entire tenure at Arizona State University, a total of nearly 26 years. These were difficult times for they included the depression years, when we attempted to survive on a starvation budget and an increasing enrollment. They also included the World War II period when the student body almost decreased to zero, and finally the post-war years when our rate of growth was greater than almost any other university in the country. In spite of the diversity of these problems, our President seemed capable of adapting himself to the prevailing conditions. He was able to maintain a consistent and patient administration which promoted a steady and consistent growth, especially during the last ten years of his life. I had always found him to be a wise counselor and a capable leader. I am certain that both his first wife, Dixie, and later his second wife, Kathryn, were great sources of inspiration to him. On January 7, 1960, very impressive memorial services were held, and the speakers included the Governor of the State, the Mayor of Phoenix, and one representative each from the Board of Regents, the Alumni, the University Administration, the Faculty and the Student Body. It was my privilege and honor to represent the Faculty as a speaker for these services. Near the circle where Apache Trail meets Mill Avenue, a beautiful memorial, the Gammage Auditorium, was constructed and, like a giant bird with its wings outstretched, continues to extend a welcome to all who come for enlightenment, relaxation and culture. It was the final creation of two men--Frank Lloyd Wright, the great architect who added new

dimensions to architecture, and Grady Gammage, the capable University President who guided the development of a large multi-purpose institution of higher learning.

During the year 1960, Dr. H. D. Richardson, Academic Vice President, was appointed Acting President and, under his able leadership, we experienced a period of steady growth. At this time, the University celebrated its Diamond Jubilee with the motto, "A Tradition of Growth and a Commitment to Quality." March 12, was Founders Day and we were honored by a visit from Edward Teller, one of the worlds foremost authorities on atomic energy. He spoke at a convocation in the morning and dedicated the new Biological and Physical Sciences Centers in the afternoon.

In August, Florence and I made a trip to Utah and Idaho. While in Salt Late City, we enjoyed a luncheon with Dr. G. Homer Durham, the newly appointed President of Arizona State, and his wife. I had read a number of his published articles on political science and other subjects in the past, but this was my first meeting with him. I was very favorably impressed by his striking personality, his keen wit, and his fluent command of English.

As the year of 1960 ended, I found myself rather heavily loaded. In addition to teaching a chemistry class with nearly 200 students and my responsibilities as Head of the Division of Physical Science and Mathematics, I was also Chairman of the Athletic Board and a faculty senator. Also, I was a member of two committees which were preparing important Founders Day programs to be held during the week of March 5-10, 1961. The University had just acquired a very large collection of meteorites, and one of these committees was involved in the planning of a National Meteorite Symposium. The other committee worked on the formulation of the Inauguration Program for the new University President, Dr. G. Homer Durham.

On the morning of March 8, I was awakened from my sleep by the persistent ringing of the phone. My sister, Thelma, on the other end of the line at Wellsville, Utah, brought me the sad news that Father had died on March 7, 1961, and that the funeral would be held on Saturday of the same week. This made it necessary for me to cancel all of my assignments at the University. We flew to Salt Lake City and arrived in Logan on Friday night. The mortuary was filled with friends and relatives and I greeted many that I had not seen for years. The funeral was held Saturday afternoon and the church was crowded. One of the most touching parts of the services was the reading of a paper by Lyman Rich, an old family friend who was unable to be present. This took us back to the time when the family was young and father was at his best. I felt a deep nostalgia because these were days when boys, dogs, and horses worked and lived together as inseparable companions and represented a kind of life that was gone forever - a life in the great outdoors.

Quoting from Mr. Richs tribute:

> The curfew tolls the knell of the parting day
> The lowing herd winds slowly o'er the lea
> The plowman homeward plods his weary way
> And leaves the world to you and me.

And so it was, not only in the village of Thomas Gray in old England, but it was so in the little village of Paris, Idaho, where the Batemans, the Riches, and others lived on Canyon Road. The milk cows were turned on their way in the early morn to the pastures, and the neighbors found friendliness over the backyard fences.

Yes, it was a good life, for John and Clara raised a healthy and successful family of eight children - five boys and three girls. To the end of their lives, this achievement contributed to their happiness and satisfaction. Father was a large and healthy man who loved horses and had a sense of humor. With a grin on his face, he used to tell his boys that one should never take himself too seriously, and that humor in life was like springs on a wagon traveling over a rough road taking the bumps out of life. We learned that there was a sunny side to every event in life, no matter how tragic it may seem. A lesson that I will never forget was when father and his youthful sons were walking along a street in a wild, open town in Wyoming, where the cowboys and sheepherders used to visit for entertainment. We passed a saloon where men were fondling lewd women and drinking 1iquor, accompanied by a medley of noises from drunken humans and a loud calliope.

When I stopped at the entrance to look inside father said, “If any of my sons enter this kind of place, I want to be with him, for we must always stand together.” Father was never an extremist in his living or his ideals, and always stressed the need of moderation in all things. I learned early that there was a “gray zone” between the extremes of “black and white.” This concept has helped me to appreciate and get along with all types of people and to adjust more readily to a rapidly changing society.

After the funeral we traveled over snowy roads to the Wellsville Cemetery and, upon arrival, I dedicated the grave site. As they lowered his remains into the ground at this beautiful spot near Mother, I felt a deep emotion arising within me and I was thankful that we had such dedicated parents.

That night we visited with the Leathams and the next morning when we arose, the earth was coated with a layer of pure, white snow. The sun was shining brightly and the high mountains, with their mantle of white, helped me to appreciate the beauty of Gods creations.

During the summer of 1961, a teaching assignment kept me busy until the middle of August. At that time, we escaped from the hot Tempe furnace and enjoyed two weeks on the cool beach at San Diego. For the next two months, Florence was kept busy helping Georgia, who gave birth to a third son. His parents named him Thane Harris Smith.

In the spring of 1962, President Durham decided to reorganize the Liberal Arts College by abolishing the Divisions and by putting emphasis on academic departments. In the past, the Division offices were involved in the development of strong departments. This action released me from my original assignment, which began as “Head of Sciences” in 1927 and continued for 35 years. Dr. Matthews had directed me to initiate the development of the science program at the College. It was almost necessary to start from

“scratch.” With the help of a dedicated faculty and the loyal support of five presidents, the Division of Agriculture, and the departments of Botany, Chemistry, Geography, Geology, Physics, and Zoology were developed. In addition, the Agriculture building, and the Life Sciences and Physical Sciences Centers were added to the campus.

It was a source of great satisfaction that of the eight departments first authorized to offer the highest academic degree of Ph.D., four of these were Botany, Chemistry, Physics and Zoology. In his letter of release, President Durham wrote, “I wish to acknowledge my sincere appreciation for your distinguished service as Head of the Division of Physical Sciences and Mathematics. Under your direction, the departments of that area have acquired admirable physical quarters and assumed the dimensions of true university disciplines.” Since I had now reached the age of 65, I was released from all faculty committees, including the Chairmanship of the Athletic Board, and my full time was to be devoted to teaching and advising students.

After teaching in summer school in August of 1962, we left for an extended vacation in the great Pacific Northwest and the World's Fair at Seattle. Our route included Las Vegas, Nevada, where we visited my Brother, Alfred, and his wife. We crossed the dry, hot state of Nevada, visited Carson City, Lake Tahoe, a beautiful, blue lake in an emerald setting, Virginia City and Reno. In Oregon, we attempted to see Crater Lake, but a heavy overcast and rain completely covered it, so we traveled north to Portland where we enjoyed the Rose Gardens. Two days were spent at the World's Fair at Seattle and the outstanding features were the Science Hall and the Needle, which consisted of a rotating restaurant on top of a high tower. While in Seattle, we paid a short visit to my boyhood pal and uncle, R.A. “Quill” Hess, and we used this brief opportunity to review the many happy experiences that we shared in our youth.

We crossed the Puget Sound and arrived in the interesting city of Victoria, which is located on Vancouver Island. This city seemed to have retained the flavor of old England, to some extent, and the Parliament House and hotel were very interesting. The flower gardens were very beautiful. We scoured the city for accommodations, but the city was saturated with tourists. About the time we were ready to give up the search, a compassionate lady invited us to use her vacant bed. We followed her for about ten miles and finally passed through a rain forest to a beautiful point overlooking the endless expanse of the blue Pacific Ocean. While our hostess and Florence prepared dinner, I went on a hike with her two children and we explored the heavily wooded countryside that extended to the ocean. The next day we drove to Nanaimo, where we took a ferry to Vancouver City via Horseshoe Bay. This was a very pleasant trip over sea water and the air was very stimulating. As we approached the mainland, we were thrilled by the majestic mountains crowned by heavy, black clouds, and at their base, pounded ceaseless, white-crested ocean waves. We were impressed with the natural beauty of Vancouver City. With its strategic location and the potential resources of the great Province of British Columbia, it was destined to become one of the worlds great and most desirable cities.

The next day we traveled east and north along the Fraser River through heavy forests and virgin country. The first night was spent at Salmon Arm near a beautiful lake. The place

was so serene and relaxing that we had the desire to remain. However, a shortage of time forced us to move on. We followed the Trans-Canada Highway to Revelstoke. At this point, we entered a highway that had just been opened to the public and we passed through virgin country again, just as God created it, indescribably beautiful. It was so new that even the bears looked dazed and unhappy as the tourists began to ruin this wildly, beautiful country with noise, gas fumes, beer cans and all of the other pollutants of civilized man.

We arrived at Lake Louise late in the afternoon and the sun was already sinking into the western horizon. As I gazed at this majestic scene, an overwhelming feeling convinced me that here, God had created one of His greatest masterpieces by taking a beautiful lake and framing it with high mountains which were crowned with perpetual snow. Fleecy clouds floated in the blue sky above us and all was mirrored on the calm surface of the lake. This beautiful scene inspired me and seemed to lift me into the clouds. Some of the problems of retirement and old age passed through my mind and resulted in an intense longing to be young again, yet I knew that this was impossible because we pass this way but once. At the age of 65, when the retirement process from the University Faculty began, I had been released from all administrative and committee assignments and was no longer eligible for promotion except to that of emeritus rank. During these fleeting moments, the realization came that I had reached the “summit” of my life and shortly I would join “Black Beauty” and all of the other senior citizens in the pasture of the golden years of retirement. I was truly happy that at least, for the next five years, most of my time would be devoted to the work that I loved most, that of teaching and serving the students.

FINIS