PAPER TIGER

THE AMAZING LIFE OF YOUR GRANDFATHER
LOREN V. FORMAN

BY RICHARD LOREN FORMAN

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OCTOBER 24, 1912 - DECEMBER 9, 1977

PREFACE

On the 100th anniversary of the birth of Grandfather Forman (October 24, 2012) this story is presented to Bartholomew John Forman, Marcy Renae Forman, Solomon Paul Forman, Valerie Lynn Hoffman, Jay William Forman, Cheri Elizabeth Forman, Rebecca Ann Judd, David James Forman, Carlos Andrew Forman, James Lee Forman, Peter Loren Davidson, Dawn Ann Davidson and in loving memory of Andrew Loren Forman.

Your grandfather, Loren Verne Forman, lived an incredible life of true adventure. I asked myself while researching his story, "How did your grandfather do all this in one lifetime?" a lifetime ending much too soon in 1977 at 65 years of age. I know you wish you had known him or known more about him and I hope the gift of his story will help.

So why choose the title, "Paper Tiger"? Grandfather brings a whole new meaning to the term. You will see that his keen analytic mind and sure hands producing the right kinds of paper created a war time tiger, an industrial tiger and a scientific tiger. Loren made a huge impact on his profession, on his community and on the family he loved. Here are just a few of the major life accomplishments of Loren V. Forman.

Loren received a BS in Chemical Engineering from Iowa State College in 1934 at the height of the Great Depression. He was able to gain acceptance with a full scholarship into a doctoral program at The Institute of Paper Chemistry. He received his MS in 1936 and his PhD in 1940.

He was awarded the 1939 Swedish-American Foundation's one year scholarship to study papermaking in Stockholm,Sweden.

He married Miriam Baily Richardson on August 4, 1939. They raised four children; George Lee (1942), Richard Loren (1943) Phillip Robert (1949) and Lori Martha (1958).

He performed unbelievable secret war time work for the O.S.S. (1942-1944)

He built a remarkable career with Scott Paper Company-1950-1977 (research, development, management, ecological). He retired as Vice President.

Iowa State University named him Outstanding Engineering Alumnus in 1970.

He helped establish the now 28,000 student Delaware County Community College as a founding trustee.

He served as Environmental Chair of the Philadelphia Chamber of Commerce and Member, Board of Directors, United States Chamber of Commerce.

He was appointed by President Nixon to the President's Environmental Task Force

Tough Beginning

At one forty-five Thursday morning, October 24, 1912, Lee and Martha Forman's first born son struggled into this world in a bedroom of their home at 400 Ash Avenue in Ames, Iowa. The attending midwife-nurse, Miss Candace Carr, understood all too well that eight week premature babies like this one often survived only a few days. The six pound baby boy made gasping noises each time he tried to draw a breath for his first two days.

At week's end, his little body slipped down to just five and one-quarter pounds. Candace rarely left the baby's side "Lest the shadows start to creep over the tiny face". Baby Loren's Mother and Father were hoping for the best and prayed for their child. Lee took off his wedding ring and could place it on the baby's tiny wrist like a bracelet.

Gradually the three hour feedings began to strengthen Loren, though it took four months for him to reach more normal size and weight. At four and one-half months, Lee borrowed a horse and buggy to take Martha and Loren to a photographer's studio for Loren's first professional photograph.

Many scary moments followed Loren for those first 12 months, so what a celebration Martha planned! There were 15 babies and their mothers at Loren's first birthday party. He had so many presents and good wishes that his parents never forgot that happy gathering.

By two years old, a remarkable mind began to show itself. Loren could remember the words to numerous songs and nursery rhymes. At three years old, he read the newspaper and in a matter of fact voice, he announced to his parent's that, "Poncho Villa has ruined Mexico. It says so in the paper and that the fifth and sixth wards are both acting up".

At three and one-half Loren helped Lee jack up the family's Ford Model T and could name seven parts of the car and all the tools.

Loren entered kindergarten at a house on the Iowa State campus. It was a Montessori School. He learned to identify all the leaves of local trees and placed specimens in a little booklet.

When Loren was four years old, his little sister, Mary Gail was born.

At five, Loren was interested in reading everything including farm implement catalogs. He told his parents that, "The legislature makes our laws".

Loren's fight to maintain good health was not over by a long shot. He was a very thin child and grew tired easily. In third grade, Loren missed school for weeks at a time. He had a total of four operations on his tonsils and adenoids. He often had a temperature of 103 or even 104 degrees; missing many school days throughout the elementary grades.

At the end of fifth grade Loren was five feet tall and weighed 89 pounds. It was as if his body was attacking itself, making hives and throat trouble a constant. To make matters worse, he was fitted with braces for his uneven teeth.

In sixth grade, Loren could drive the farm truck at the experimental farm where, Lee taught agronomy. He was 11 years old and celebrated Christmas at home with 18 cousins, aunts and uncles. On Valentine's Day a baby brother, Wallace Rex - called "Buddy" by the family had arrived. Loren was in charge of taking Buddy for daily walks in his carriage.

As a reward for taking a year's worth of piano lessons, Loren received a Ranger Bicycle and he called it "hard earned". He also asked to join the Congregational Church with his bible classmates and did so.

JUNIOR HIGH

Loren's seventh grade started with a month of influenza, He missed three weeks of the beginning of the school year.

Loren then joined the Boy Scouts and enjoyed a two night camping trip. He soon was a second class scout and moving quickly through merit badges toward first class. On the farm, he was trusted to drive a team of horses.

Around the house, Loren grew the garden, painted the porches and fixed numerous items about the property. The summer brought a lake and a farm vacation with improvements in swimming, rowing, riding and more gardening.

At age 14, Loren got his first job for the U.S. Department of Agriculture. He counted oat kernels in the field to determine the ratio of blighted kernels to normal kernels. He made $.35 per hour and earned $45.00 from the position.

Now in ninth grade, Loren was strong enough to go out for football and played 16 quarters which won him a letter. That fall, his Grandpa Forman who lived with them passed away. Loren said, "There never could have been a better grandfather".

HIGH SCHOOL

The summer between ninth and tenth grade was very busy with a conference of Congregational youth at Grinnell College, visits to relatives, working on their farms and mowing many lawns. The family camping trip to Minnesota and Michigan allowed Loren a chance to drive the family Chevrolet more than 1,000 miles (at 14 years of age!).

He loved everything about flight and airplanes. That summer at the Iowa State Fair, he saw Charles Lindbergh who had flown solo across the Atlantic Ocean in the "Spirit of St. Louis" the preceding May.

The tenth grade started well, but on December 12th a stubborn kidney infection put Loren in bed for three full months! It was remarkable that he kept up with his studies and passed all his course work to enter 11th grade with his classmates.

12th grade provided excellent chemistry courses and Loren ranked first or second in chemistry and physics all year. He played a prison chaplain in a school play and sang baritone in the chorus for the operetta "The Belle of Barcelona". Loren was also stage manager for the dramatics club, treasurer of the Christian Endeavor Club, took dance lessons and was active in DeMolay.

Encouraged by his science teachers, Loren entered the University of Iowa's scholastic competition in physics for high school seniors. He won first place in the local contest, first place in the district contest and 9th place in the state contest!

Commencement in June 1930 was followed by a summer at Uncle George's farm and a chance meeting of a young lady aptly named Georgia Fox. She also matriculated to Iowa State College, so they saw each other there too. Loren again went to Grinnell for the Congregational Conference and met an "interesting friend" named Muriel Salisbury from Waterloo.

IOWA STATE COLLEGE

Loren planned to work a year before entering college, but the Depression suddenly hit hard and there were no jobs He began freshman year at Iowa State College in Chemical Engineering receiving grade averages of 94 and 92 for the first two quarters. In the spring he pledged the Theta Delta Chi Fraternity. Loren remembers going through a stop sign that summer and receiving his first traffic ticket costing him two dollars.

By sophomore year, Loren was earning two thirds of his college expenses through summer work on the farm and for the scheduling office of the College. Two of his cousins, Ronald Wells and Alan Leffler started college at Iowa State in the Agriculture Department where they were taught by their uncle and your great grandfather, Lee Forman.

Loren began a close relationship with Hilde Kronshage who, it was said came from a wealthy Milwaukee newspaper family. Hilde is described as, “tall with light brown hair, quiet, a very good dancer and a girl of fine tastes and faultless manners”. They dated three times a week all year attending various events from bobsled rides to formal parties.

In the summer of 1932, Loren was sent to the national meeting of his fraternity at a resort on the Hudson River. It was a memorable trip in an old Chevrolet that kept breaking down. There was sightseeing in New York City and on the return trip, stops at Harvard College, Cornell University, Hobart College and Niagara Falls. He endured a rough weather ferry trip across Lake Michigan to Milwaukee; visited with Hilde and then drove back to Ames.

Junior year was off to a rocky start as things seemed different with Hilde. Loren wrote in his diary,

> "The explanation of which I have never known. By Thanksgiving it was all over and I was left in a condition where I found it hard to concentrate on my studies and impossible to find a social partner".

Despite his social set back, Loren was inducted in the spring to Tau Beta Pi, honorary engineering society and Phi Lambda Upsilon, honorary chemistry society .Very few juniors made it into one of these honorary societies, let alone both of them!

That summer Loren went to Chicago as a student delegate to the American Society of Chemical Engineers Convention. He attended the Chicago World's Fair in the evenings. At the Fair, he was thrilled when he was able to go up in the twin motored duralumin Goodyear blimp, Pilgrim.

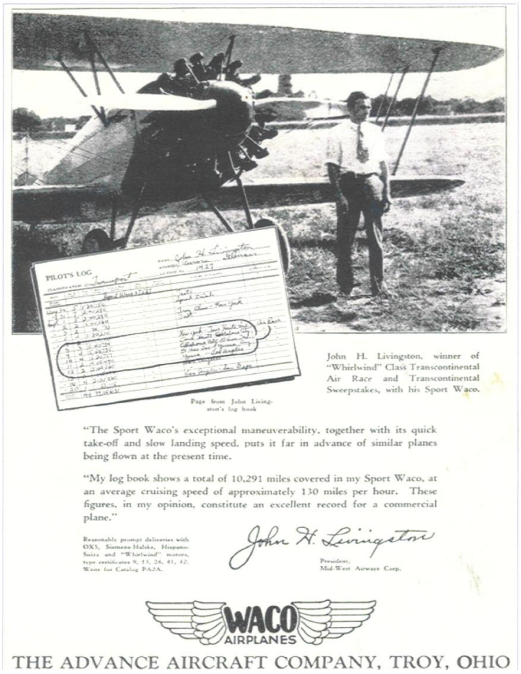
HISTORICAL PHOTOS

Goodyear's Pilgrim, built in 1925, was the first commercial non-rigid airship flown using helium. With a landing wheel replacing bumper bags and the first passenger car held flush against its bag by internal cables, Pilgrim's contributions to aeronautics were recognized by the Smithsonian Institution, which exhibited the airship as a milestone in aviation progress. The mast, called a belly mooring, was an experimental portable design developed in 1930 to enable cross-country operations independent of permanent hangars.

Loren also had been up that year in a Travel-Air biplane that broke a tail skid when landing. He and a girlfriend had an amazing ride in a Waco tapered wing high performance biplane piloted by A.B. Livingston, brother of the famous racer and barnstormer, John Livingston.

"A.B. gave us quite a thriller!"

Below is the full-page Waco ad from which the images above were extracted and enlarged. See this link for a brief biography of John Livingston.



Note: John Livingston was the "muse" for uJonathan Livingston Seagull

Senior year brought even more honors in chemical engineering for Loren and another action packed week in Chicago visiting numerous chemical plants with his class.

Loren's love life took an interesting turn (to all of us) as in his words,

> "Last summer I had started going some with Miriam Richardson who was a senior in high school when I was a senior in college. She and I got along very well together, and it was evident that a very deep friendship was waiting to be formed as fast as we permit it to. However because of the difference in our ages, I limited myself to seeing her once a week and seldom took her into a college crowd."

At the end of senior year, Loren was interviewing with the Eastman Kodak Company and felt there was a good chance for a research job. Then Professor Sweeney offered a $60 per month fellowship for graduate study. Loren was assured that the loose rule against two family members working for the College would not apply to fellowships. However, the day after graduation Dr. Sweeney said that the fellowship had been denied because of the rule.

Loren began writing scholarship applications and Dr. Sweeney arranged for him to interview at the Institute of Paper Chemistry in Appleton, Wisconsin. Loren was accepted and his papermaking career began in September of 1934. That summer he took Miriam as his guest to the Hearth and Heather gathering.

Institute of paper Chemistry

Loren entered a unique educational institution. The Institute was sponsored by the various pulp and paper companies in the United States . Students were accorded full scholarships and all were entered into doctoral studies with work positions available in the summers at member companies. He excelled in the classroom and was especially taken with pulping technology with its challenges in bleaching, cleaning, by products and composition. He soon became an expert in the study of lignin (the substance that helps hold together the cellulose fibers). His assignment for summer work took him to the upper peninsula of Michigan and the Munising Paper Company. The owner of the Company took a personal interest in this young researcher and gave Loren a wide berth to explore ways to improve the papermaking processes and mechanical systems in the Munising mill.

In fact, Loren was asked to stay and take a year off from his doctoral studies to continue improving the mill's systems full time. Loren wrote a letter to Dean Lewis at the Institute and was granted a year's leave of absence.

Loren wrote to his parents and headlining the letter, he wrote down his thoughts on how he wanted to comport himself:

> *"I have learned to incorporate perspective with my thinking,*
>
> *To speak with reserve and caution under all circumstances,*
>
> *And, to apply pressure without provoking antagonism.*
>
> *These things I believe are the foundation on which intellect and ability build to success."*

One of first problems to tackle at the Munising Paper Company was to make a better quality pulp. This would demand a cleaner sheet. Loren had an idea. He decided to design a process with hydraulic action to separate dirt, bark and any foreign objects from the cellulose by directing the water in a certain direction and collecting foreign material falling out with gravity into collectors.

This process worked so well that the mill's products became sought after and Loren patented the process in 1937. What an accomplishment for a young engineer!

Patented July 9, 1940 2,207,218

UNITED STATES PATENT OFFICE

2,207,218

PROCESS FOR REMOVAL OF DIRT FROM PULP

Loren V. Forman, Munising, Mich., assignor of one-half to The Munising Paper Company, Munising, Mich., a corporation of Ohio

Application August 6, 1937, Serial No. 157,767

1 Claim. (Cl. 92—28)

This invention relates to a process for the removal of dirt from pulp for making paper.

It is the object of this invention to provide a novel process for the separation of dirt from paper pulp by hydraulic classification. In the definition of "dirt" there is included rust, scale, sand, mineral dirt, particles of digester lining, lime particles, knots, uncooked chips, bark specks, shives and fiber bundles. All suspended material except the individual pulp fibers is classified as "dirt."

It is an object of this invention to utilize low consistencies of paper pulp in which sufficient differentials in settling rates are secured between dirt and pulp to provide a basis for separation.

It is an object of the invention to utilize a uniform velocity of a rising water column at such speed as to prevent fibers from passing downwardly into a receiver, yet permitting dirt to fall into the receiver so that by a carefully controlled rising current in the sorting column and by using very low consistencies, an efficient removal of fine dirt is obtained.

It is a further object to provide for using this process with classifiers and riffers using the riffler as the primary settling chamber and equipping the riffler lines with hopper bottoms and sorting columns for continual separation and removal of knots and dirt to settling chambers either with or without continuous means for discharge therefrom.

It is an object of this process to dilute the pulp to the proper consistency followed by a combination of riffling sedimentation and hydraulic classification to secure separation of all foreign bodies from the cellulosic fibers.

It is an object to provide this process so that it is applicable to all types of pulp and at any points in the system from the digesters to the paper machines.

It is a further object to provide for the addition to the foregoing a process of the use of secondary water and means of giving stepwise classification prior to the final classification in the sorting column in which the foregoing process is utilized.

It is the object of this invention to apply the discovery that for each type of dirt there is a maximum consistency above which no settling is possible and no removal can be accomplished.

It is an object of this invention to employ consistencies that are relatively low so that foreign materials heretofore not commonly classified as dirt and not considered removable by hydraulic classification can be removed. It has been found, when practicing the teachings of this invention, that pulp can be supplied to the classifier at consistencies in the range of 0.1 per cent to 0.25 per cent and from 0.02 per cent up. Consistency is defined as pounds of fiber in one hundred pounds of the suspension consisting of water, fibers and/or other material suspended in it.

It is an object of this invention to provide for actual separation of dirt from fibers in the classifier at consistencies from zero to that at which the pulp is introduced into the classifier.

It is a further object to reduce the cost of wood as hereinafter explained.

Referring to the drawings:

Figure 1 is a diagrammatic view in side elevation of the apparatus for the practice of this invention as applied to a riffler channel.

Figure 2 is a section on the line 2—2 of Figure 1, looking in the direction of the arrows.

Figure 3 is a view similar to Figure 1 showing a modified form for the introduction of secondary water and for the practice of stepwise classification in the hopper prior to final classification in the sorting column.

Figure 4 is a top plan view thereof.

Referring to the drawings in detail, 1 designates the inlet of stock pulp and dirt passing through the horizontally disposed channel 2 of a riffler. 3 indicates the level of the stock. The bottom of this riffler channel 2 is provided with one or more hoppers 4. The region of entry of the dirty stock is in the zone designated generally at 5. At this point the dirty stock enters in the pyramidal or conical hopper 4. As the dirty stock passes from the channel 2 into this region 5, its forward velocity decreases due to an enlarging cross section of the body of stock as it passes over and into the hopper 4. At the same time the heavier particles settle toward the bottom of the hopper 4 and then enter the sorting column 6 which is of restricted cylindrical area and communicates with the bottom of the hopper 4.

In this sorting column 6 is introduced a rising current of water through the pipe 7 which is equipped with a suitable control valve. This water is introduced preferably tangentially to secure enough spiral motion to produce a uniform rising current across the cross section of the sorting column 6. Its motion is relatively very slow and does not produce any separation by centrifugal force. The amount of water added is carefully regulated so that no good fibers will settle, yet any material having a higher settling velocity than the good fibers will settle through to the water filled receiver 8 below. Such material is introduced through the hopper 9 and past the valve control 10. The dirt so deposited in the receiver 8 may be intermittently or continuously conveyed away. There are no currents below 10 except as water is displaced by dirt in the receiver 8.

The settling rates of the dirt materials are determined as a function of the consistency of the

July 9, 1940. L. V. FORMAN 2,207,218

PROCESS FOR REMOVAL OF DIRT FROM PULP

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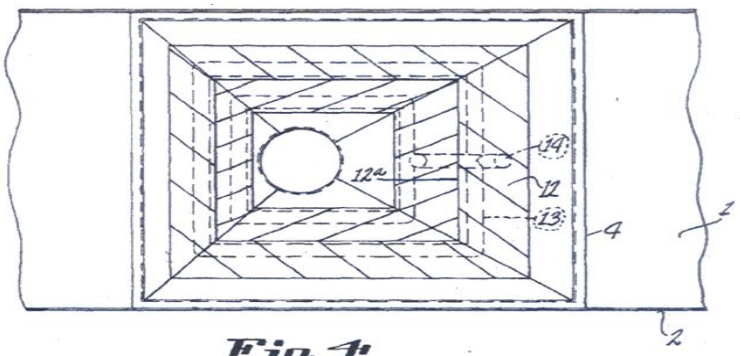


Fig. 4

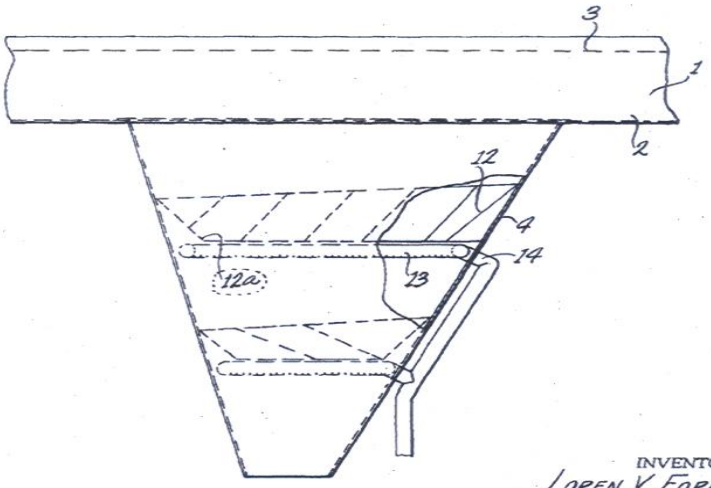
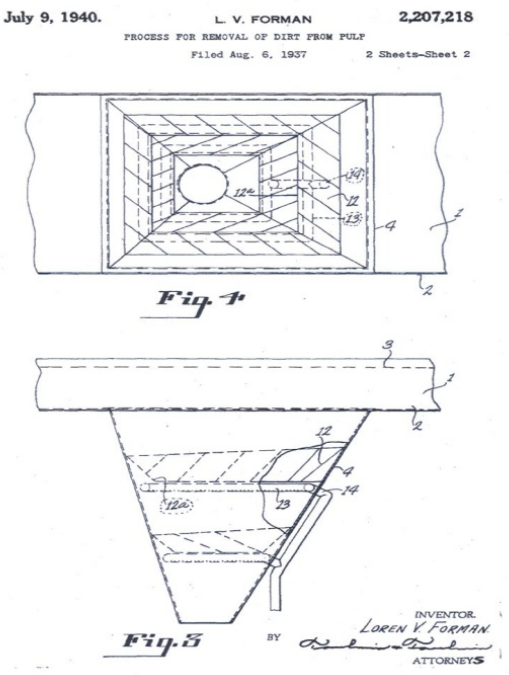


Fig. 3

INVENTOR.
LOREN V. FORMAN.
BY
ATTORNEYS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PROCESS FOR REMOVAL OF DIRT FROM PULP

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Fig. 4

Fig. 5

INVENTOR.
LOREN V. FORMAN.
BY
ATTORNEYS

In 1938, Miriam Richardson graduated from Iowa State with a degree in journalism. She had pulled off a major coup in her senior year when she was elected editor of the Iowa State Yearbook, "The Bomb". She was one of the first women editors for that massive yearbook.

1939 was a truly momentous year for Loren and Miriam. On August fourth, they were married in Ames with family and friends gathered around them. Then off they motored to New York City to board the SS Kungsholm for their voyage to a year of study and adventure in Stockholm, Sweden. The crossing was very pleasant and they were met by officials of the Swedish-American Scholarship organization who helped them settle in Stockholm. The newlyweds set up housekeeping in a small flat with only a hot plate for cooking, but with an undaunted desire to learn as much as they could about this amazing city and country.

There were occasional parties at the American Embassy and outings with a group of ex pats. Miriam grew close to two young Swedish girls who lived in the apartment building. She taught them English and they taught her Swedish. The year was moving swiftly. They had already been there four months when everything changed in an instant.

War brought Nazi Germany to Norway's doorstep and Sweden was working hard to proclaim neutrality. The American embassy began immediate arrangements to accommodate U.S. citizens who needed to leave. Loren and Miriam were ordered to pack and were driven immediately to Trondheim, Norway where they would make a night boarding onto an American freighter-passenger ship called the Scanpenn bound for New York. The tension all around them on the ship was palpable. The few passengers on this vessel were all aware of the rumors of German U-boat submarine activity in the North Atlantic.

The first night out, there suddenly appeared a huge spotlight shining through the fog onto the Scanpenn's deck and a bull horn boomed commands in English over the water. A light cruiser in his Majesty's British Navy hailed the Scanpenn, and then circled her to make sure they were flying the United States of America flag. Satisfied, the cruiser moved on. You can imagine how glad your grandparents were to see the Statue of Liberty welcoming them back to New York Harbor! (Aunt Sandi's expert research of the Scanpenn turned up scary news. Two years after Loren and Miriam made their escape from the Nazis aboard her; the Scanpenn was torpedoed and sunk by the German Submarine U, 432 off Cape Hatteras on January 2, 1942!)

MEAD CORPORATION -KINGSPORT,TENNESSEE 1940

MEAD PAPER COMPANY

The adventures continue as Loren secures a research position with the large and successful Mead Corporation. His first assignment was to a headquarters mill in Chillicothe, Ohio. The next move with Mead was to also cover and live near the mill in Kingsport, Tennessee.

Social opportunities were a bit different in Tennessee than in Iowa or Wisconsin! Kingsport and the county it was in were dry (no liquor sold), so to stock up for a party, one proceeded down a dirt road one mile to the third stump past the creek and placed two dollars in an envelope on the north side of the stump. Then one proceeded another mile up the road and waited for ten minutes before going back. The stump now magically contained a mason jar full of Tennessee moonshine. We are not sure Grandfather followed this custom, but he is the one who described it to me…

On May 11, 1942, Loren and Miriam's first born son, George Lee, came into the world in Kingsport bearing both of his grandfathers' names. George Lee was a curly headed, handsome smiling baby. He had his parent's full attention for the next 18 months.

Bristol, Tennessee was a favorite destination for shopping and for going to the movies. Miriam loved the movies with happy endings and lavish sets. Recent movies in 1941 included such classics as Wizard of Oz, Gone with the Wind, Citizen Kane, Casablanca and several starring Katherine Hepburn. Ida Lupino was another favorite while Clark Gable and Adolf Monjou were popular male leads. The Mills Brothers had many top ten songs out and the big bands such as Tommy Dorsey's were touring the country. Soldiers were everywhere as they trained and were shipped out in staggering numbers. Ration cards, victory gardens and war bonds were a part of everyday life

Here is one of my favorite pictures of the young married couple facing an uncertain future together, taken by a professional photographer in Bristol, Tennessee in 1942.

WORLD WAR II – DUTY CALLS

The next move brought one of the greatest adventures for Loren imaginable. No, I don't think we could even imagine what he did for the United States for the next few years of his life!

An urgent call came from Westbrook Steele, President of the Institute in Appleton. President Steele implored Loren to take an immediate leave of absence from the Mead Corporation. He was to return to the Institute for a very important secret war time government contract that needed his special skills. One can only imagine the thoughts going through Loren's head. Here he was working for a highly respected corporation, already responsible for technical matters at two Mead locations and with a new baby. Loren and Miriam did not hesitate. They were off to Appleton wondering what in the world awaited them there.

The Institute's cover job description for Loren would now be "Research Associate-Group Leader in charge of pulp and paper technology".

From Chemical and Engineering News Nov 10, 1942

Loren V. Forman

Loren V. Forman has been appointed a research associate at The Institute of Paper Chemistry, Appleton, Wis. He will be instructor in pulp and paper technology and in charge of pulp and paper testing. Since 1940 Dr. Forman has been associated with The Mead Corp., dividing his time between the Chillicothe, Ohio, and the Kingsport, Tenn., mills.

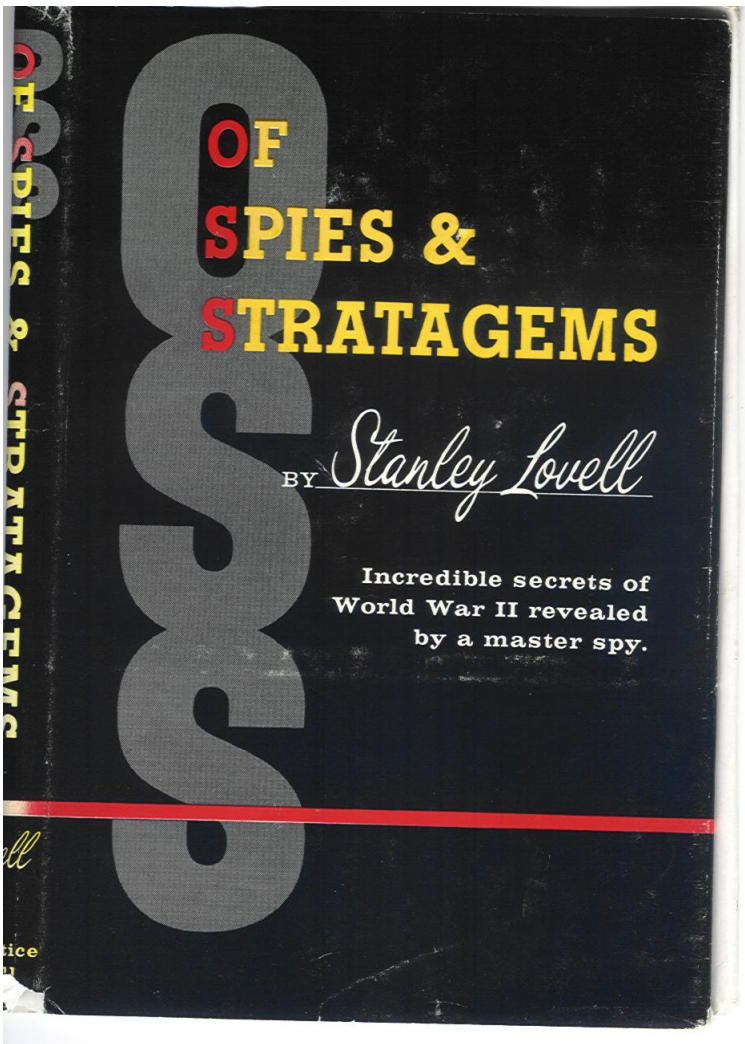
I think you all know what happened next.

Loren was recruited by Colonel (later General) "Wild Bill" Donovan, head of the Office of Strategic Services-precursor of the CIA. The assignment was to make pulp and paper for manufacturing Japanese occupation currency to be distributed in the Philippines to the resistance fighters and spies. Loren was also to make the paper for both occidental and oriental countries' identity papers and in some cases, currency for spies. Finally, he had to make all this paper undetectable as counterfeit by the enemies of the United States.

Loren's life was now as a gifted academic instructor by day and war project scientist in his secret laboratory by night. He went to clandestine meetings where everyone used fictitious names and he was often accompanied by an Army lieutenant. The lieutenant would show up at Loren and Miriam's front door and whisk him away for days at a time. Loren could not say where he had been even to Miriam when he returned home.

Indeed, Grandfather never told anyone what he had been doing until 1969 when a book called Of Spies and Stratagems was published by Stanley Lovell, Director of Research and Development for the O.S.S., during World War II.

Below are Mr. Lovell's words describing the project Loren contributed so much to and what it meant to General McArthur and the entire United States war effort.



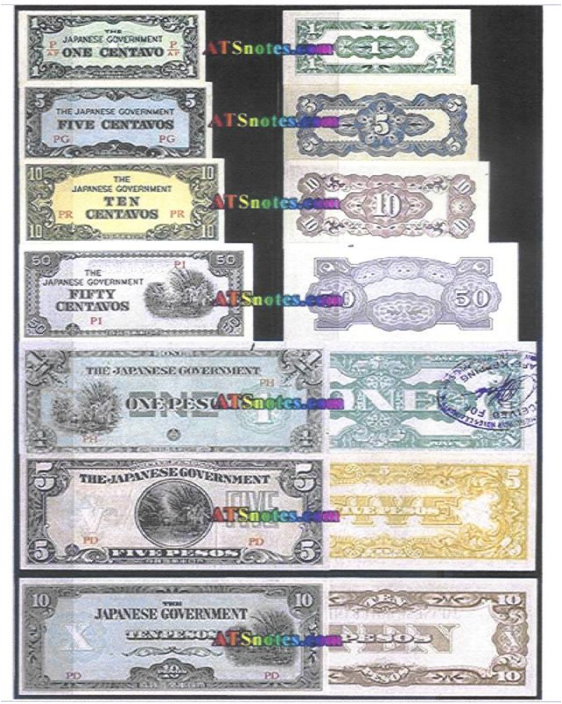
"It was obvious that any spies or saboteurs O.S.S. placed behind enemy lines lives' would depend on having perfect passports, worker's identification papers, ration books, money and letters. Such papers were made of special fibers, trick watermarks and special chemicals in the paper. Permission to counterfeit these papers was needed from the very top. President Roosevelt was asked by the Treasury Secretary if the project could proceed. The President gave his go-ahead and Treasury Secretary Morganthau sent a coded message to me.

General MacArthur sent word to the Joints Chiefs of Staff that

Japanese occupational currency was vital to the resistance in the Philippines."

(Explanation: The Japanese used the occupation currency with names of provinces stamped on it to freeze the population in place. The resistance fighters would be killed if they were caught with the wrong provincial currency. Loren made enough currency to give the fighters all they needed). Mr. Lovell goes on:

"We engraved a quantity of money sufficient to fill a large cargo plane and it was distributed to the Philippine underground fighters. We were justly proud of the job. There were fibers of crisp kudsu and mitsumata that were put in our currency paper too. General MacArthur wrote General Donovan that the work our experts had accomplished made the reoccupation of the Philippines a reality. The Japanese never realized that the O.S.S. had utterly destroyed their population currency control schemes."



What more can be said about Grandfather's ability to analyze a problem and produce a fool proof solution. No wonder George and I found paper lamp shades in our attic in Appleton made out of very strange oriental looking paper…

1943 was well into November when Loren and Miriam announced the birth of their second son, Richard Loren. Born at 11 pounds 3 ounces, I would not be surprised if I resembled their Thanksgiving turkey on that November 26th!

After the War, In the later 1940's, Loren and his family spent many happy summer vacations at their little cottage on Post Lake near Elcho, Wisconsin. Loren was prospering in his research and teaching at the Institute. Miriam was enjoying close friendships with many Appleton mothers with small children.

Then, a major operation reared its head-or in this case, its neck. Loren had major disc trouble at the top of his back and the operation to hopefully relieve the pressure and constant pain had a survival rate that was scary. He opted to go ahead. After the operation, the recovery period included constant very loud hiccups for days and other serious side effects. Once again Loren fought hard to keep his body from betraying his active life.

In 1947, Loren was recognized by the Institute for the most significant research advance of the year when he discovered a way to bleach Southern White Pine to make a quality product. This brought the Southeast forests into more productive use as time went on.

Early in 1949, yet another male offspring joined the family. Phillip Robert. His middle name honored Loren's favorite uncle, Robert Leffler, "Uncle Bob". Now the growing family size and Loren's steady ambition led him to accept a research position with Scott Paper Company in Chester, Pennsylvania.

SCOTT PAPER COMPANY

Scott was an old line formal paper company. There would be many challenges for your Iowa born and bred Grandfather to overcome as he moved up the tight knit corporate ladder over the next 26 years.

One of the best work opportunities to open up for Loren was the purchase by Scott Paper of Soundview Pulp Company in 1951. By 1953, Loren was moving his family west to Everett, Washington as he took charge of the research department in the world's largest pulp operation.

Loren loved Washington State with its salmon fishing in Puget Sound, winter steel heading on mountain rivers, hunting opportunities in Eastern Washington and scenery that just took your breath away! He liked the friendly north westerners and they liked him.

About this time there was a routine annual checkup, but we know nothing related to health was routine for Loren. Sure enough a lung x-ray showed a dark spot the size of a dime on the left lung. The Doctor at Seattle's famous Hutchinson Cancer Center showed Loren a similar x-ray of another patient who had died six months later having refused an operation.

It was a huge operation as the surgeon had to be ready to remove the lung if the biopsy confirmed the doctor's fears. Thankfully, it was discovered that the dark spot was some sort

of corn spore common to the lungs of those working long hours in corn fields. Nothing like that was recognized on sight in Seattle, but it would have been in Des Moines. Loren came home and when able, he and Miriam flew off to Phoenix, Arizona to recuperate faster in the clear air and warm weather.

By 1957, Loren was managing not only the Everett facility, but the entire west coast operations of Scott. His duties included making sure all four papermaking mills in Oregon, Washington and British Columbia were running efficiently; that the vast timber holdings and their logging operations were productive and safe; that the International Papermakers' Union contract negotiations were conducted in a fair and mutually beneficial manner; and that those Scott executives he was promoted over on his way up remained loyal to the Company and worked amiably with him. Loren and family now lived in a beautiful view home provided by Scott Paper for its west coast manager.

Loren enjoyed his strong community involvement including serving on the board of the United Way charity, the trustees of the First Presbyterian Church, the board of Providence Catholic Hospital and the Governor's trade delegation.

The trade delegation members were invited as VIP's to sail on the Aircraft Carrier, USS Kearsarge from San Diego to Everett and you can imagine how Grandfather loved that voyage. Two years later, the delegation had a trip to Hawaii too. That was one great group to be a part of.

Miriam soon found herself in the community spotlight too. She began serving on the Board of the Everett YMCA, worked in the PEO Organization and entertained as only she could when Scott's Board of Directors came to meet in Everett. She was even instrumental in obtaining a new kitchen for the Presbyterian manse which won the sincere gratitude of Myrtle Stocker, the minister, Mortimer Stocker's wife. (Mortimer grew up here in Honesdale, Pa.)

By mid-summer of 1958, we finally had a female addition to the family in the person of our little sister, Lori Martha. Loren loved spending time with baby Lori and so did the family pet, Scuppers, a golden retriever. Loren later wrote a poem for Lori titled "Lori is Fancy" :

Our Lori is fancy, as everyone knows.
She loves to dress up in elegant clothes
She likes rustly silks and satin that glows,
And billowy scarves bedecked with a rose.
She likes dangly pearls, spangles and charms,
And bracelets so thin they jangle on arms.
A butterfly ribbon is perched on a curl.
Oh, you've never seen a girlier girl!

Yet another amazing adventure found its way to Loren when the Rockefellers began to consider how to better develop their vast holdings in South America. David Rockefeller reached out to the papermaking community to find someone who could survey the forests of Brazil with a view to establishing pulp and paper mills.

Loren was soon on a jet plane for Sao Paolo, the huge bustling business center of Brazil. Rockefeller's men met the plane and transported Loren to a rural airfield. A "bush" pilot took over from there as a twin engine Piper Apache was put at Grandfather's disposal.

He flew over hundreds of miles of jungle and forest with a special interest in a species of indigenous Piranha pine trees. These towering giants appeared ideal for papermaking as they had few branches except at their upper reaches and there certainly were plenty of them on Rockefeller land!

There was so much beauty! Loren was dazzled by the height giant Andean Condors could reach. The world's largest birds would apparently become curious about the Piper Apache and swoop closer to see what this other "huge bird" was about (Andean Condors reach a wingspan of 10.5 feet and can cruise at an altitude of 16,000 ft!)

I have seen the slides taken from the cockpit and I can't imagine experiencing the closeness of those birds knowing that just hitting one of them would surely end this adventure in a very bad way.

After much consideration, Loren reported back to David Rockefeller that the problem was the logistics of harvesting and transporting the trees. They grew at the top of huge cliffs, so getting them down to rivers or salt water for transport by water to a mill would not be economically feasible.

A souvenir of this amazing trip was a pair of "Gaucho Boots" with their accordion sides presented to Loren when he left Brazil.

By 1960, a new corporate headquarters dubbed "Uncle Tom's Cabin" (after the Chairman of Scott Paper, Thomas B. McCabe) was erected next to the fast growing Philadelphia International Airport. A sizable wing of that impressive structure had been dedicated for research and development. Loren was now asked to return to headquarters to be the Assistant to Executive Vice President Paul Baldwin. This was a great opportunity to help develop the practical research needed to bring new products to the marketplace. Loren couldn't wait to start his new position.

The auto trip moving us across America was a wonderful family adventure and Loren thoroughly enjoyed showing his boys the National Parks and historic sites. It probably

reminded him of his family vacations as a youth, although we did not camp as Loren's parents had. This was because Miriam and Lori took the train to meet us in Iowa and none of we men folk could cook!

(Phil, George and Dick at Earthquake Lake, Wyoming – Summer move East in 1960)

With their oldest son headed off to Lawrence College in Appleton and the other two boys enrolled in Swarthmore, Pennsylvania schools, Loren and Miriam began adjusting to becoming "Easterners" again.

It was not too long before Loren was promoted to Vice President of Research, Development and Engineering. Many of his colleagues were duly impressed and he was often addressed as Dr. Forman.

Loren was very involved in planning a stunning pavilion for the New York World's Fair in 1964. The Scott Paper exhibits were educational and interesting as one would expect from Loren's input. (I visited the World's Fair and the Scott Pavilion was second only to the Lowenbrau Beer Garden Pavilion in my opinion).

The Scott Pavilion offered a 15 minute tour through an indoor "Enchanted Forest" complete with a bubbling spring, real trees and a ceiling of stylized leaves (just like Grandfather's first

scrap book). Pictures showed how trees were grown, cut and floated to mills. Other photos showed how they were barked, chipped, pulped and bleached.

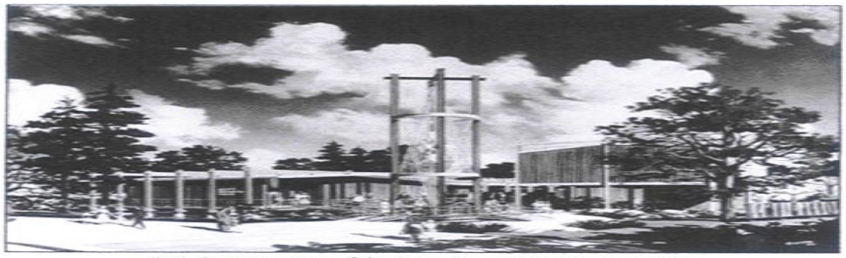
SCOTT PAPER COMPANY

For Immediate Release:

FLUSHING MEADOW N.Y. -- The American housewife -- the Golden Goddess of the Market Place -- will find herself in the spotlight at a major exhibit in the New York World's Fair opening next April 22.

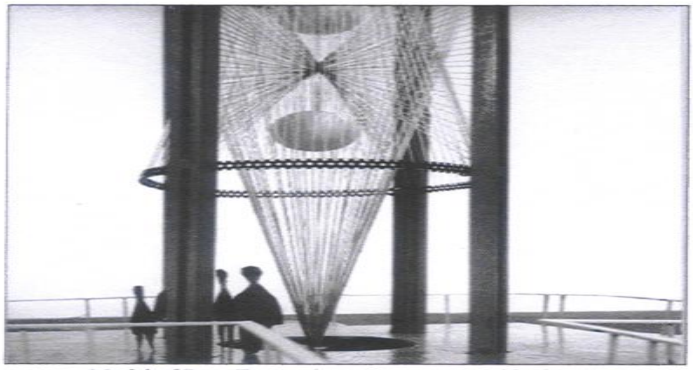
Scott Paper Company, producer of a wide range of products for household and industrial use, says that its exhibit, "The Scott Enchanted Forest," has been designed primarily to pay tribute to the housewife-shoppers "whose confidence in the quality and value of the company's products is a treasured asset."

The exhibit buildings will be located on a 25,000-square-foot site, landscaped and wooded lot to provide visitors with a tranquil respite from the busier sites and sounds of the Fair. Evergreen and deciduous trees, a flowing stream and attractive covered benches for those who wish to pause and rest will surround buildings patterned after the California "mountain lodge" style.



Artist's conception of the Scott Paper Company Pavilion

A 50-foot tower of two intersecting cones formed by gold cables and supported by thick, stained wooden beams will symbolize the growth and progress of Scott, of paper, and of the free enterprise system.



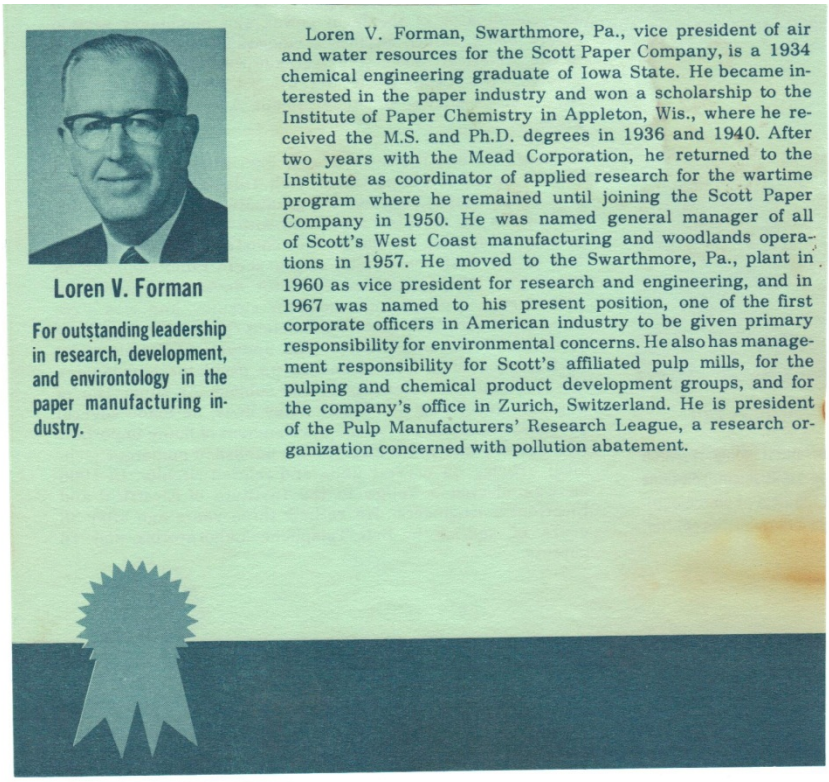
Model of Scott Tower showing intricate cable design

On April 22, 1970, the first Earth Day was held. University of Pennsylvania students and faculty headed the Philadelphia celebration. Loren was one of the main Earth Day speakers representing the Philadelphia Chamber of Commerce. As one of the first corporate officers in America assigned full time to water and air resources for a major company, Loren began to get international requests for speaking engagements. One session was a global multi-day conference in Helsinki, Finland.

His common sense advocacy of ecological principles based on good science brought him to the attention of the United States Chamber of Commerce and he was asked to join its board of directors. I remember your Grandmother's excitement at attending a Washington, D.C. Chamber meeting where the spouses visited the Iranian Embassy and were received by the Iranian Ambassador and the brother of the Shah. At another such meeting she was able to

have tea with Mrs. Happy Rockefeller at the Vice President's residence on the grounds of the Naval Observatory in Washington (Nelson Rockefeller was Vice President at that time).

In 1970, Loren was honored by his alma mater, Iowa State University. He proudly traveled to Ames and attended the two day ceremony with Miriam, his mother Martha and Lori Martha



Loren V. Forman

For outstanding leadership in research, development, and environtology in the paper manufacturing industry.

Loren V. Forman, Swarthmore, Pa., vice president of air and water resources for the Scott Paper Company, is a 1934 chemical engineering graduate of Iowa State. He became interested in the paper industry and won a scholarship to the Institute of Paper Chemistry in Appleton, Wis., where he received the M.S. and Ph.D. degrees in 1936 and 1940. After two years with the Mead Corporation, he returned to the Institute as coordinator of applied research for the wartime program where he remained until joining the Scott Paper Company in 1950. He was named general manager of all of Scott's West Coast manufacturing and woodlands operations in 1957. He moved to the Swarthmore, Pa., plant in 1960 as vice president for research and engineering, and in 1967 was named to his present position, one of the first corporate officers in American industry to be given primary responsibility for environmental concerns. He also has management responsibility for Scott's affiliated pulp mills, for the pulping and chemical product development groups, and for the company's office in Zurich, Switzerland. He is president of the Pulp Manufacturers' Research League, a research organization concerned with pollution abatement.

Fun and adventure during these years included several stays at Scott's hunting lodge in Georgia's Okefenokee Swamp. There, hunters were guided by a legally blind man with very sensitive hearing capability. This guide would take them out before dawn into the swamp and wait for the wild turkeys to awaken and come down out of the forest canopy to feed. Miriam was not too thrilled when some buckshot filled wild turkeys made it home to be cooked for the Forman family Thanksgiving dinner!

There was an exciting fishing trip to the teeming streams in Finland, several salmon fishing cruises on the 110 foot yacht, Thea Foss in British Columbia, Canada and a northern plains grouse hunting expedition sponsored by executives of the Monsanto Chemical Company in Saint Louis. A friend from the Dupont Chemical Company had a wonderful Eastern Shore of Maryland farm where the Forman's were regular guests during duck hunting season.

The Thea Foss, at the entrance to Princess Louisa Inlet, British Columbia, Canada.

Uncle Phil sent the following e-mail regarding the owner of this vessel, Henry Foss. Henry owned the Foss Tugboat Company. He was Grandfather's business associate and fishing friend:

"Somehow One day I found myself entertaining Henry Foss and his friend in our Guernsey living room for 2 hours before the parents got home. All he talked about was his friendship with Dad-- how LVF had brought him to tears of joy on his recent birthday-- seems our father had rewritten the words to the "Whiffinpoof" song. Bah, bah, bah had been replaced with Foss, Foss, Foss. And Dad led the group in singing it to Henry. Two icons bonding I guess. A Norwegian mariner and an Iowa farm boy! The Foss saga was always mythical to me. His mother, Thea Foss, was the inspiration for "Tugboat Annie". The Yacht itself was built for John Barrymore and used in WWII as a patrol boat. Henry was like a Damon Runyon character to me. Maybe the readers would find that cool too?? "

The city of Tacoma, Washington named a high school after Henry Foss and its shipping channel is named the "Thea Foss Channel"

(Loren on left with friends Bob Bird and Henry Froehling in the Bahamas)

All the while, Loren was working to improve Scott products and bring fancier paper napkins on line as well as paper diapers and stronger paper towels. He enjoyed administering the international Scott office in Zurich, Switzerland where technical experts reported on new papermaking developments throughout Europe and Asia.

Loren even helped recruit promising graduate students from top universities. He once came to Cornell University to speak to the Chemical Engineering Society and he asked me to run the slide projector for his presentation. The graduate students thought I worked with him and asked me lots of questions after the session. I was just a sophomore studying Government at that time, but I had little trouble with their questions since I had absorbed so much Scott information by osmosis from my father.

In 1967, Loren was asked to serve as a founding trustee of the Delaware County Community College. His knowledge of the community college system in Washington State was invaluable in countering the snobbery that showed itself in local academic and community circles. Many leaders were opposed to two year colleges being located in suburban Philadelphia.

The College trustees established a brand new $19 million campus in 1971. Loren found himself presenting the architect's model of the new campus at a community meeting. Suddenly, an angry woman resident of Marple - Newtown where the campus was to be built came striding down the aisle, picked up a handful of the model's fake grass and threw it at his head!

Today, Delaware County Community College is hugely successful with 28,000 students at five locations in Delaware and Chester counties.

Miriam became very active in church committee work and hospital volunteering in the intensive care unit. They both enjoyed belonging to a bridge club that met frequently, but often did not get around to playing bridge.

Loren and Miriam loved to dance. They enjoyed the cultural activities such as a subscription to the famous Philadelphia Orchestra.

In 1977, Loren turned 65 on October 24th and the mandatory retirement rules in vogue at that time kicked in. Sadly your Grandfather passed away of cancer in early December with no time to implement his retirement plans. We can be sure it would have been as his life was - an adventurous and interesting retirement.

Loren and Miriam's sons and daughter are very blessed to have had such dedicated and talented parents. We are proud of them and we certainly are so very proud of all you grandchildren.

Happy 100th Birthday Loren V. Forman, our PAPER TIGER

Loren with Andrew Loren circa 1973

Post Script - 7/27/12- e-mail from Jay Forman to Richard Forman

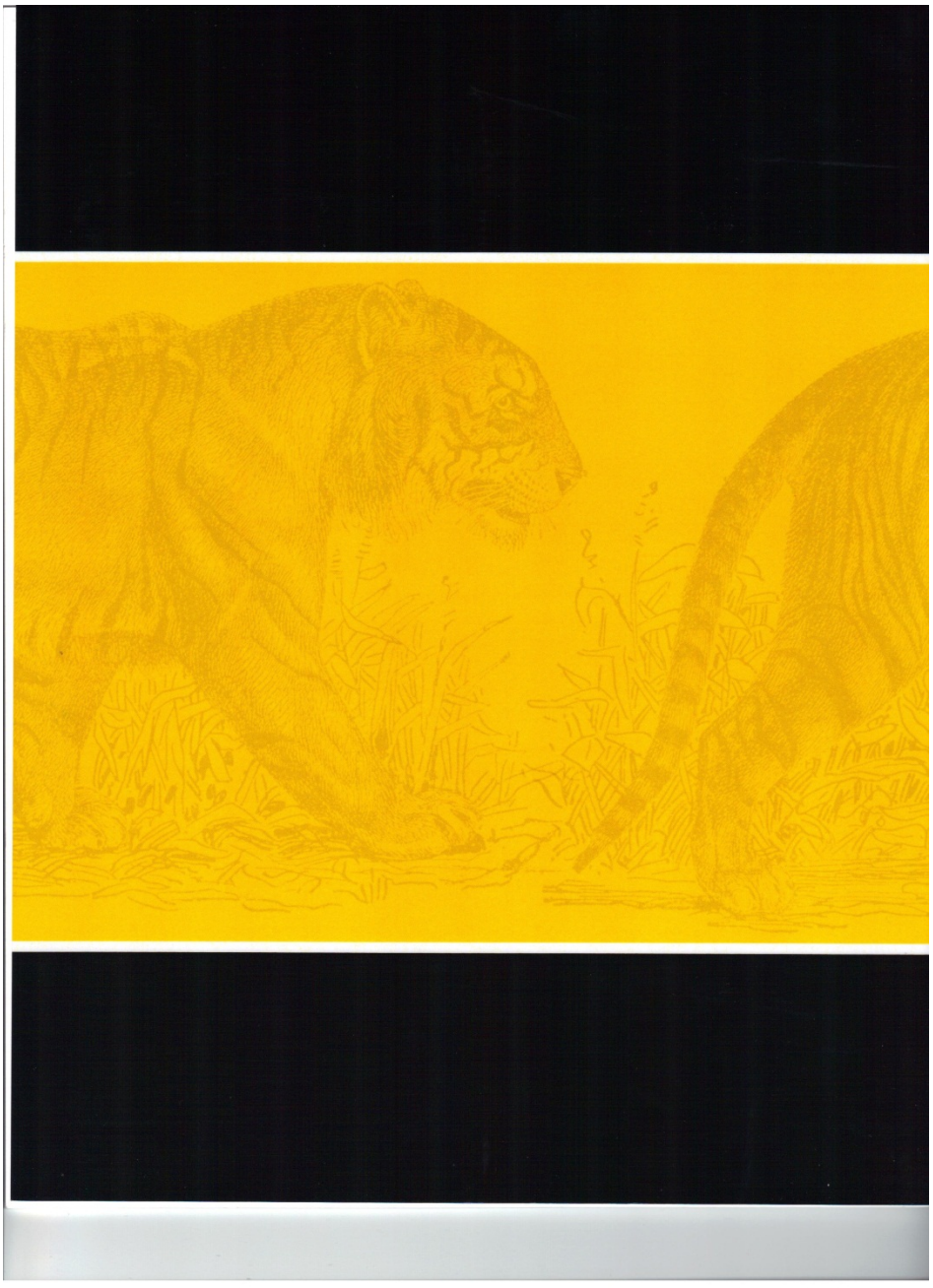
(Jay Forman orders large quantities of paper for the Seattle area printing concern where he is responsible for the supply chain. The paper companies offer an orientation course for customers on how quality papers are manufactured)

"I had that papermaking class today, and earlier this week I shared Grandfather's patent with our sales representative from International Paper Company, along with a quick summary of his career. Bob was really interested in the invention, and he shared the story with his contacts at New Page Company, from whom we purchase most of our fine printing paper. I spoke with a couple of those guys and they all were really impressed!

Today during class, they explained, "We have a celebrity in the class". They stopped talking about the debarking machines and pulpers and talked about Grandfather's process in front of the class. They explained about today's pulp cleaners, and how the concepts in his patent are in use to this day!

Another highlight was after the class. We had learned about how lignin removal from fine paper was essential for archival ability, and how paper such as newsprint does not have the lignin removed during manufacturing, which is why the paper fades with sunlight because of the effect it has on lignin. I remembered reading the title of Grandfather's dissertation about the effect of UV light on lignin, and shared that with the instructors as well. They explained that Grandfather's work likely advanced the paper industry's understanding and technology when it comes to the subject.

When I returned home, I googled Grandfather again to refresh my memory on the subject and was amazed at how many people have referenced his research in their documents. I've had so much fun learning about this subject and feel so proud of my Grandfather.



COMMENTS ON "PAPER TIGER"

March, 2013

Thank You all for reading "PAPER TIGER" and for your comments. Family and friends are important. Let's make it a high priority to keep in touch and to learn each other's stories.

Bartholomew Forman

Just got "Paper Tiger" today; all I can say is WOW. Thank you for taking the time to write it. It really is amazing. I hope I can see you at some point in the future. I think we would have a lot to talk about.

Valerie Forman Hoffman

Just wanted to tell you that I really LOVED "Paper Tiger" and am so thankful you put that together. It really meant a lot to me and I'm sure it meant a lot to the other grandkids. I asked Grandmother if you had interviewed her about all of Pop Pop's old girlfriends he had prior to dating Grandmother. Grandmother was younger than he and not allowed to really date until she was older, so it makes sense, but how did you know their names? Did he talk about them growing up? All of the amazing things Pop Pop did and I am asking about his love life. Ha Ha

We are all great out here in Iowa. The girls are absolutely amazing!

David Forman

I received the "Paper Tiger" book from my folks. Wow! Thank you so much for putting that together. It's really amazing to see what my Grandfather accomplished in his lifetime. I've heard a great deal about him over the years and I was lucky to receive a scrapbook from Grandmother 10 years ago with assorted articles and pictures about him and his work. Until now I have had a perspective on him not unlike one I would have about someone I've read about in a history book. Mostly just facts and anecdotes. The book you put together paints such a good picture about him as a person. I'm grateful to have this perspective on him now. Of course I mostly have my parents to thank for who I am as a person, but there is no doubt that I am Loren's Grandson. I can't believe he had his first patent at 25! I have some catching up to do!

Marcy Forman

Hi Uncle Dick,

I just wanted to let you know I really enjoyed reading "Paper Tiger" and learning so much about Forman family history. All the pictures were great as well. I really do appreciate all the time and effort you put in making the book.

Peter Davidson

I got the bound copy and have read it. I loved it. There was so much I did not know about Papa and now I do. And can pass that on to my kids. Thanks so much

Kae Mack Serubin (Grandfather's niece)

What a fascinating and accomplished life your father enjoyed. I was not aware how little I knew about him. I sent "Paper Tiger" on to my brother Dick and my son Danny also requested it be forwarded to him. Last week at my

brother's 75th birthday party we spent a good deal of time talking about "Paper Tiger" with each other, our kids and our grandkids. I wish you still had one of the paper lampshades stowed away! What a wonderful gift you have given to your family and your extended family, I'm proud of you! Thank you again. You done good cuz.

Mary McKee Benton (Her dad was Loren's good friend at the Institute)

I am forwarding this book to my siblings. Like I did, they should find this article on your father very interesting. I will also forward it to my son who graduated from the Institute too. One of his courses was called the "McKee Formula". I knew Dad was involved in analyzing and creating paper for the war effort. He must have worked closely with your father. That is when they became good friends. My understanding is they were able to collect and analyze paper samples from the flotsam and garbage tossed by Japanese and German ships. My niece's wedding was last weekend and one of her bridesmaids told me she lived in the Forman's house on Bellair Court and her family kept those white benches on the front step.

Mary Lee Coe Fowler (an author and my high school friend)

What impressive parents! Your father really seized opportunities in his life. I note the word "Environmentology" in his Iowa State award. Your father was forward looking, again by the natural order of things; in this case, sustainable forests. This is a wonderful gift to your extended family, particularly younger generations. Your WWII research is impressive. I've never come across that information on how currency was used by Japanese to hold occupied populations in place. Your mother is beautiful in the pictures; she had such wide set eyes. Altogether a wonderful tribute. Thanks for sharing it with me.

Raymond Toto (Chairman of the Board, Delaware County Community College)

Thank you for sharing your father's story with us! It is a wonderful biography and an inspiration for me as DCCC Board Chair. I read with particular interest about how he became a fellow Chemical Engineer during very challenging economic times in our country. I am a degreed Chemical Engineer myself, (Drexel 1980) and reveled in his experiences with course work, laboratory sessions, and early internships as a student. He certainly accomplished much in his very active 65 years on this earth. His legacy of family and professional accomplishments must make you very proud.

We at DCCC are grateful to you for sharing his story with us, and are inspired as the successors to his vision and hard work for the school that he helped to build. I'm sure he continues to look down upon us with great pride and satisfaction as DCCC flourishes as a model for Community Colleges in our great nation.