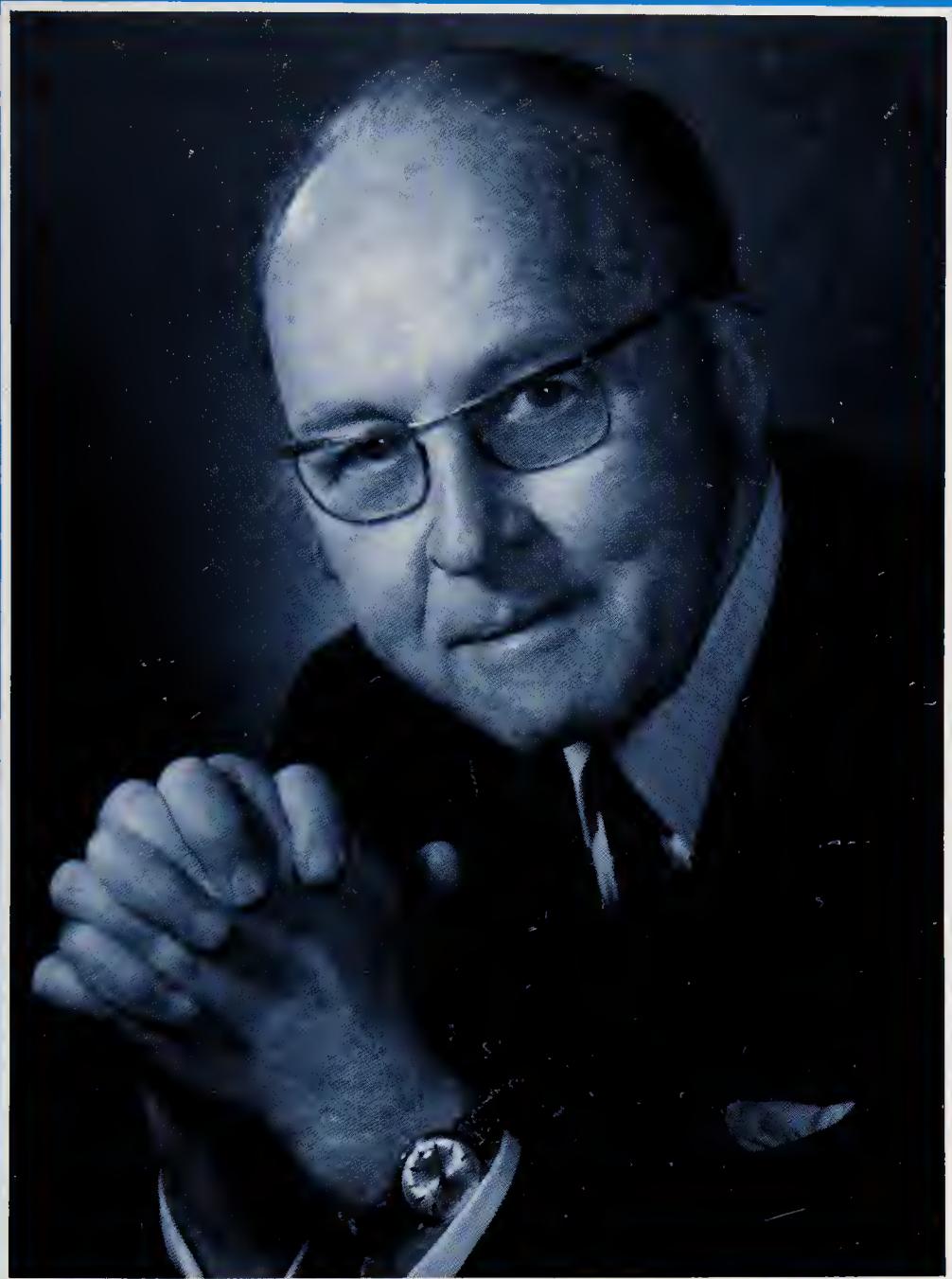


The Medical Memoirs of Evan Shute



THE VITAMIN E STORY

Evan Shute

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The Medical Memoirs of Evan Shute

Evan Shute

Edited and Introduced by
Dr. James C.M. Shute

Preface by Dr. E. Desaulniers
Foreword by Dr. Linus Pauling

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Preface

The story of Vitamin E dates back to the 1920's and early 1930's, when researchers discovered a substance which appeared to have beneficial effects in pregnant animals. Dr. Evan Shute, an obstetrician/gynecologist, intuitively felt that this substance, d-alpha tocopherol, might be of benefit in his own obstetrical and gynecological practice. Within a short time, Dr. Shute realized that the use of this substance extended far beyond obstetrics and gynecology to encompass treatment for burns, phlebitis, rheumatic heart disease, kidney disease, diabetes, and coronary artery disease. These observations were made by an astute, inquisitive physician who felt bound to explore the potential of this unusual material.

The material, of course, is Vitamin E, which remains to this day one of the most widely studied and reported substances. There is more Vitamin E used by both health professionals and the public today than ever before. Biochemists are analyzing and dissecting it with greater enthusiasm each passing year. It is important that we give tribute to Dr. Evan Shute, a medical pioneer, whose supreme efforts brought Vitamin E from the research laboratory to the vital role it plays in medicine today. Dr. Shute would be proud to know that the clinic he and his brother Wilfrid established in 1948 continues to thrive and remains to this day a major force in the clinical use of Vitamin E.

Dr. G.E. Desaulniers,
Medical Director,
Shute Medical Clinic

Foreword

The Vitamin E Story is an engrossing account of the life of a precocious, brilliant, and innovative Canadian physician. It is clear that Dr. Shute believed he was responsible for a great medical discovery, the recognition of the value of a high intake of Vitamin E for the prevention and treatment of cardiovascular disease. I agree with his assessment, and I think that he is justified in comparing himself with the Canadian discoverers of insulin and in comparing the treatment that he received from the medical establishment in Canada and the United States with the treatment of Pasteur by the French Academy of Medicine. I agree with Dr. Shute that the failure of the medical establishment during the last forty years to recognize the value of Vitamin E in controlling heart disease is responsible for a tremendous amount of unnecessary suffering and for many early deaths. The interesting story of the efforts to suppress the Shute discoveries about Vitamin E illustrates the shocking bias of organized medicine against nutritional measures for achieving improved health.

Linus Pauling

For Marion

Introduction

It is ten years since my father drafted his memoirs, six years since his death and time that his story was told in his own words and the record of his contributions to medicine and health set down from his point of view. Other and fuller accounts may well appear in the future but what follows here is his personal account of his life, particularly in connection with vitamin E. In so many ways this is a quintessentially Canadian memoir—humble origins, early promise, hard work, innovation met with frustration, indifference and near defeat, then reluctant and gradual recognition and acceptance, mostly from outside Canada. Always one step back for every two steps forward. Doubtless his experience accounts for the wry and bitterly ironic tone of many of his observations and the tongue-in-cheek manner he occasionally adopted in the face of the enmity and scorn consistently shown him by his profession. Being consigned to what he called “the deep freeze” was one of the manifestations of medical hostility that he felt most keenly.

For refuge my father turned to his family, his home, his strong faith, his books, his tennis and to physical labour around home. Of these, little is mentioned in his memoirs, except for his wife, his parents and two brothers, all of whom figure in the medical narrative. It was his medical life which he wanted to chronicle rather than his private world. Perhaps most revealing of his innermost reflections is his verse. Each chapter begins with a poem taken from the several volumes of verse which he published as Vere Jameson, a *nom de plume* derived from his second name and his father's second name. He had a remarkable range of interests, as all who knew him were aware. But this is almost exclusively a medical recollection, mostly about the dramatic development of Vitamin E. Here, too, are accounts of other facets of his medical life, including his training and later practice, some bizarre medical incidents, and portraits of some medical innovators and characters, like DeLee, Hertzberg, his brothers Wilfrid and Wallace. In passing, the reader will catch glimpses of Frederick Banting, Hans Selye, Adele Davis, Linus Pauling, Abram Hoffer, Charles Best,

J.R.R. Macleod, Christiaan Barnard, J.B. Collip, Murray Barr and dozens of other medical and scientific luminaries and lesser lights. As well, academics, politicians, journalists, tycoons and royalty appear in the following pages usually either encouraging or blocking advances in the application of Vitamin E to human and animal health. One of the most important of all of these personalities is his younger brother and co-worker for many years, Wilfrid. In large measure this is his story, too.

The Vitamin E Story is presented chronologically, for the most part, moving from family origins through early academic achievement, original medical observations and the difficult years of battling for Vitamin E through to the gradual acceptance of his work by elements of the medical establishment. A glossary is appended to help the reader decode unfamiliar medical terms.

In many ways these memoirs were written for family and friends who already know fragments of this story. He also had hoped that they would be read by those whose interest might be more detached or even exclusively medical, including neophyte scientists and medical adversaries. Those in some way touched by the events recounted here, whether friends or foes, patients or acquaintances, participants or onlookers, number in the thousands. In a very real sense they, too, are part of this tale and are inevitably associated with its ultimate outcome.

James C.M. Shute

Preamble

How to tell the story of one's life? Since my life spans the tremendous transition from the world of 1905 to now, a complete alteration of both milieu and thought, the chronological approach seemed best. I wanted to detail the account of how Vitamin E studies developed, since they are my principal reason for being and writing. *The Double Helix* has shown that the public is deeply interested in the mechanism by which science really works, its disappointments and triumphs, its human aspects and frailties. It is of great importance for struggling scientists to understand what can happen to them in a world that has crushed many a promising idea. Science, notably medicine, is not always for the kindly or the modest.

Other topics also warranted discussion here, such as my parents, my brothers and the stranger items in my medical practice. Many of my reminiscences may seem fatuous or irrelevant, for the twenties and thirties are no longer here. Those decades must already seem incredible to our children and they certainly will be to our grandchildren. Who can decide what was significant in those times? So before future generations make up their minds, I will recount the facts as I lived them.

The story of Vitamin E is unique. It illustrates the good and bad features of medicine and it could happen all over again to someone else under new circumstances. I have lived, eaten and breathed it for nearly 40 years. It is a long story and may be more tedious to read about than to live. But the details which follow illustrate better than any mere summary the trials of an investigator and the responses they occasioned.

Evan V. Shute

Chapter One

FAMILY PORTRAITS: ONTARIO GOTHIC

The terrible anonymity of a name
Shared with the fools and rogues wet with your blood
Within the misalliance of their veins!
A name that fits no key-hole in your skull
Nor signs the clef whereon whose tensed lines
Your secret spirits sit in rows like birds,
Radars nor pain nor pleasure to the soul.
The jammed insensitivity of a name!

The matchless incongruity of name
Summing a new man in a dog-eared word,
Subtracting rarest movements of his soul,
Dividing so much to its coarsest parts,
A logarithm no one understands,
An exponential curve a moron drew,
Progression infinite, no terms defined,
Life's idiotic prefix, scrawled a name!

The strange haphazard syntax of a name
In speech the gods have hid the lexicon,
A bit of order in supreme disorder,
Patch of coagulum on pot of chaos,
A formula of dotard alchemy,
A curious clotting of the alphabet,
A bridge to cross the stream unbridgeable
Between No-light and Dark without a name!

Who wins that careless epithet, a name,
Earns it in generations spilt at night
In a swift kiss below the walls of dream.
An amateur pours out the potent flask
Wherein the silt of ages is suspect
And tilts it up with drunken, lavish hand.
Death laughing at his shoulder, at his name,
The tender, mortal magic of his name!

Vere Jameson, *Moths After Midnight*, 1945

It is of some interest to recall family beginnings, if only because they do give us clues to what the family has done since, and why. Doubtless we would seem as strangers if we suddenly dropped in on our great-grandfathers; there might be only a moment's rapport or feeling of kinship after the first introduction. What could one talk about? What have we in common? Our inheritance from each grandparent cannot be more than one-eighth, and what is one-eighth of our physical and mental traits? There seems little point in poring over parish registers to find forgotten ancestors, whose names we still share by franchise of genes, but whom we might have heartily disliked if we had met them.

My paternal grandfather, James Shute, was born in 1844 into a large family which emigrated from County Fermanagh in Northern Ireland in 1856 into the Bruce Peninsula of Ontario, an area of largely Scottish settlement. In 1969, we traced the surviving Irish Shutes in the area of Lough Erne to a village called Letter. Irish Shutes had founded the city of Taunton, Massachusetts in about 1637. A Samuel Shute was Governor of Massachusetts in 1717, and his coat of arms is apparently seen in the State House in Boston. We know little else of the family's origins.

Grandfather's father was Anthony, his mother, Elizabeth. My grandfather taught school all day, farmed in the evening and often read until dawn. He was very well-informed, and in his area of Bruce County he served as a local Justice of the Peace. Shute Point, on Lake Huron, still commemorates the family name.

It was my grandfather's custom to have my father and his brothers read aloud to him Macaulay's or Greene's histories of England and Sir Walter Scott's novels, partly because my father and one of his brothers stammered a little. All the long words they came across they would be asked to "derive" from their Latin roots.

When clearing his farm, Grandfather Shute had to cut down pine logs that were so large he could not girdle them with his two arms. These had almost no value and were left beside the river to rot, since it did not pay to send them down to the sawmill. Wages for such work were \$1.50 per day, even when my father was a young man.

My father and his brothers slept in the loft of the log house where they were born. The chinks between the logs often let in

cold and snow. The lads stuffed their mattresses each fall with meadow grass for the long winter ahead. My Uncle John once emptied his straw tick in the spring only to have a lazy rattlesnake drop out. He had kept it warm all winter.

My grandmother Shute had been Anne Daley of Cork. Her brother Michael, though otherwise qualified, was never allowed to join an Orange Lodge in Ontario as it was felt that no one could be a good Protestant if he were Michael from Cork. My maternal grandmother was born Elizabeth Bradley in Armagh. Grandfather Carey Treadgold came from a family in Foxhall, Northhamptonshire, near the battlefield of Naseby.

I can still see my grandmother peeling apples into a dish on her lap while I had to stand on tiptoe to look at her across the table. I can recall her funeral day when I was allowed to watch the cortège pass our house on its way to the cemetery in Berkeley, Ontario. It's odd what incidents etch themselves on the clear pages of a child's mind.

When inn-keeper George Treadgold, perhaps converted to temperance by the Methodists, brought his brood of sons and daughters to Canada in 1849, it took them seven weeks and three days to cross the Atlantic by sail. Strangely enough, his son's future wife, Elizabeth Bradley, was on the same ship. This was never mentioned in all the years of their marriage and came to light accidentally a few days after her death as her sisters were discussing with my grandfather incidents in their early lives. She was two years old and her future husband was eight when they emigrated.

Grandfather was a slim man, 6 feet 2 inches tall, with a jutting chin beard. He was quiet, had deep convictions, was well read in his Bible, and liked nothing better than to spend Sunday afternoon critically reviewing the Methodist minister's sermon or debating doctrine with visiting missionaries. As a staunch Conservative he extended to Liberals the old opinion held about Catholics by their Protestant neighbours, namely, that they were Catholics because they were inferior and inferior because they were Catholics.

When teaching school in his younger days, my grandfather Treadgold would walk home for the holiday—68 miles one way. He might get an occasional lift on the way, but usually he reckoned on walking two days continuously, without sleep.

My mother boarded in Owen Sound in order to attend high school. When a girl of seventeen, she attended a revival meeting

at the Scopes Street Methodist Church with a friend. At the end of the service the preacher asked everyone to stand. Then he asked all those who were "saved" to be seated. Many did. Next he asked all those who wanted to be saved to sit. My mother was the only one in the church left standing. This nonplussed the evangelist considerably. He paused for a few minutes, then asked: "Will the dear sister sit down?" She regarded this as a wonderful prank, and often told it pridefully, her eyes sparkling.

After attending the so-called Model School in Durham, Ontario, she obtained a school post for which 28 teachers applied because she played the organ and excelled in the handwriting on her application. A teacher at this time taught for about \$150 per year. Teachers were so numerous that the local inspector refused to rehire mother after she taught for a couple of years. His comment was that she was "not one of his household," but from another township. Since it was too late to apply for another school, she went off to Normal School in Toronto in 1899. After graduation she taught at a school at Swan Lake in Bruce County, and there she met my father. My father proposed to her at Christmas. After that she taught at her home school in Berkeley, Grey County, for one year for a salary of \$275.

When mother was young, square dancing and Scottish dancing were the main winter entertainments. Everyone danced, old and young. There were plenty of kissing games, too. It was the only way the neighbours could get together or families have reunions. When mother attended any of these dances she shocked her Methodist friends in the community, who, of course, had "Methodist feet."

My mother and father were married on the first day of the twentieth century, January 1, 1900. Grandfather Shute sold them his 100 acre farm at Stokes Bay on the Bruce Peninsula for \$2,800 as its barn had just been blown down and grandfather was sick at heart over the setback. Father rebuilt the barn in his first year there and this time put it on a good foundation. There was a run of suckers up its creek each spring. It is hard to realize this now when one sees that stream, which one can easily jump across, but at that time local farmers drove down in the spring with wagons and pitched the suckers out of the stream with forks, smoked them, and thought them good eating. Otters even had slides on the river. My father and mother spent six

years on this farm, leaving it in the spring of 1907, a year and a half after I was born.

In those days the main roads in Bruce County were corduroy. The roads were tremendously bumpy and horses couldn't run on them. In the spring the roads were often submerged or perhaps obstructed by fallen trees. Horses became very astute. They knew they would never be whipped on such roads, and would hold their pace down to just the proper rate to save the jolting wagons behind them.

There were bears and wildcats in the bush, many deer, and massassauga rattlers. There were so many rattlers, indeed, that people wore knee-high leather boots in the raspberry patches. As it was, many people were bitten, but no one ever seemed to die of it. The cure was always whisky, and the cure was taken enthusiastically by the victim and any friends who were nearby.

When people were ill they treated each other. Doctors were rare and not too helpful. For instance, grandmother Shute had no doctor when her children were born and thought that my mother was "soft" when she employed one. The nearest doctor to mother was miles away at Lion's Head, and there was only one there. There was only one telephone in the neighbourhood and it was inaccessible. Mother had reported to her doctor early in pregnancy. He said, "That's fine, Jenny. You look well. Just call me when the pains start." He saw her no more during the pregnancy.

She sent a buggy for the doctor as labour began, and hoped that she would be lucky enough to find him at his office when he was called. Everyone had babies at home. Asepsis was unknown and transfusion unthought of. Fortunately, it is difficult to infect a woman in her own home, and in any case, doctors interfered with labour little, if at all.

Edward Treadgold Shute, my older brother, was a big blue-eyed baby who died of diphteria at two before I was born. His younger sister Jane died at nine days of age of spina bifida. Grandmother Shute blamed this on mother being too active during her pregnancy. In that day congenital anomalies of this type were regarded as God's punishment on offences of the parents.

Sore throats and chest colds were cured by rubbing "goose oil" on the chest. Fevers were treated with onions pounded and used as a poultice on the soles of the feet. Sore throats would also be treated with a mixture of honey and powdered alum

burnt on top of the stove, the fumes filling the room. Stubborn coughs could well be treated by a few drops of "electric" oil poured on sugar. The usual purges were senna, epsom salts, or castor oil. Every spring one "purified the blood" by swallowing a fearful mixture of cream of tartar added to sulphur. This, stirred up with molasses, was taken every morning. It was difficult to live in a house with people treated in this fashion as the flatus became so sulphurous.

My mother devoted herself to her family and had no outside interests. Her desire for us to succeed was almost a monomania with her. She kept dinging into us that we could each be prime minister if we chose to be. She used to quote that passage in the Bible which says: "Seest thou a man diligent in business. He shall stand before kings. He shall not stand before mean men." She always approved highly of me because I was diligent in my studies. She gave us all our haircuts, and did it well. I never had a barber cut until I went to university.

My father spent most of his winters away from home as an assessor in order to earn a little cash. This left mother at home at the farm with 25 to 30 cattle to look after. She later would tell us that she worked in the barn in terror because she feared finding tramps in the hay mow.

Every Christmas our family would go down to Berkeley, seventy miles away in Grey County, in a box sleigh to visit the Treadgolds. We would leave Stokes Bay in Bruce County early in the morning and get down to Clavering, where we would stay overnight. Then after a long cold drive all the next day, we would finally reach Berkeley that night, more than half frozen, but still happy.

On the Bruce Peninsula no one seemed to have been affected by the Boer War. Scarcely anyone in that neighbourhood ever went out into the province beyond Owen Sound. Of course, no one ever thought of going as far away as Toronto. No one had even heard of a person who had actually seen Niagara Falls. The first telephone came into the area shortly before my folks left in 1907.

After my father had been assessor and collector in the district for about five years, the job was taken from him and was given to another man. The new assessor assessed our farm property high, and Dad's appeal against this was denied. He decided to leave and sold the farm. He probably would have stayed if it had been assessed moderately. It is interesting to

reflect on the small turns of fate that have momentous consequences. The farm was sold to a brother of the assessor who became the first to pay the higher taxes. Our little family moved to Berkeley, where Dad looked around for a place to establish a store. My mother was then about five months pregnant with Wilfrid, and Etta, mother's sister, suggested that Dad try school teaching, something he had never thought of. At that time he had only passed Grade eleven, but he was able to attend Model School and he immediately got a chance to teach. He taught at Newmarket for a year but he still wasn't satisfied that he had found his vocation. In the meantime he had bought a house at Berkeley and decided that he would put in a basement. One day, while digging this cellar, he sat down to discuss with mother the same old problem of what he should do. Suddenly she suggested: "Why not be a doctor?" He decided to try it, and since she had passed Grade twelve she thought she could help him with his high school work. He gave notice that he would not return to teaching. His own family was speechless.

When father applied to the University of Toronto, he was refused, but was admitted to Queen's University in 1908 on condition that he would first pass the necessary French and Latin examinations, which he did. He spent three years there but in his last year he studied at the University of Western Ontario because hospital facilities were better in London. He graduated in medicine in 1912 at the age of 38. When he graduated I was in kindergarten; my youngest brother, Wallace, was born while my father was in his final year.

After we sold the farm and my father had left for Queen's, my mother, Wilfrid and I lived with my grandfather Treadgold on his farm at Holland Centre. On Sundays, my mother used to take us for long walks into the nearby cedar swamps. As very young children, for I would be seven or eight and Wilfrid two years younger, we learned to hop from hummock to hummock, to enjoy the small dark stream running through the swamp, to walk across it on fallen trees or stones, to recognize the wild flowers, to watch small fish and to breathe nature into every boyish pore. Those Sunday mornings still lie in my memory as pleasant beyond belief, and I think that they were the beginning of my interest in science.

Chapter Two

POPLAR HILL AND WINDSOR (1913-1919)

When God made people of two kinds
He concentrated on behinds,
Then finishing one type with zest
He hid a fountain in her breast.
This further differentiated sex
And made our mothers more convex.

On fruitful bust the world depends.
It makes dear lovers of mere friends.
It starts the fleet that razes Troy.
It differentiates the man from boy.
The puzzle of the day is this—
What two will venture for a kiss.

I do not know what God would do
If He redid creation now.
I wonder if He'd sex us thus
Foreseeing what the cost to us,
Or if He'd accent brains and brawn
In shapes less fair to look upon.

Vere Jameson, *Half In Jest*, 1971

I know little of father's three years at Queen's University medical school, but I know he enjoyed his later training at the University of Western Ontario. He remembered teachers such as Hadley Williams in surgery, a wonderful anatomist who drew with both hands as he talked. Lectures were given in the old London Medical School, which then stood on the northeast corner of Waterloo and York streets, a white brick building which was pulled down in 1950 to make room for a fire station. It was lying derelict for 17 years after I came to London. I never had occasion to go through it, which I have since regretted very much. Of the twenty-three men in his class, my father was the only one who had children when he graduated. Before my father graduated I was in the "first book" in public school and

brother Wilfrid had just begun to attend kindergarten.

When my father was a student in medical school at Western he used me for his study of anatomy. He and his fellow students marked out with blue pencil my liver, heart, spleen and such, in order to make the location of such viscera clearer to embryo medical minds. They toured my landscape like surveyors.

My father used to go to lectures and concerts in London sponsored by the Y.M.C.A. and he often took me with him. These were held in the present Grand Theatre, usually on Sundays. It was there that I heard a lecture by Ernest Thompson Seton, the great American naturalist and author.

After graduation my father served a year's internship at the St. Catharines General and Marine Hospital, something that was very rare in that day. But my mother was not yet content as she wanted him to excel. We were still living off the proceeds of the sale of the farm on the Bruce Peninsula and staying with grandfather Treadgold in Berkeley. She persuaded father to undertake another year of hospital training. He spent this year at the hospital on Blackwell's Island in New York harbour and one wonderful day mother took Wilfrid and me to Niagara Falls. Everyone thought she was extravagant and aspiring to be a world traveller, but we loved it and mother needed that moment of exhilaration and freedom.

When dad came back home in 1913 (singing such popular songs of the day as "I Wonder Who's Kissing Her Now!") he began to practice in Poplar Hill, about fifteen miles to the west of London. He enjoyed a country practice there for the next two and a half years.

He bought a fine clapboard house on one of the main corners in the village from his predecessor, Dr. Glass. The whole west wing of it had been converted into a dispensary, with a consulting room and a waiting room. Outside stood a giant maple tree, which served as a hitching post for those who were lucky enough to catch the doctor in, or unlucky enough to have to wait two or three hours for him to return. No one made appointments in those days. If you wanted to see a doctor you called at his office and hoped that eventually he would see you tomorrow if not today. He might be out making calls all day, miles away, and of course telephones were rare. It was almost impossible to track him down once he got started. A sick person was lucky to be called on twice a week, and many were lucky to have a doctor come in once a week. A woman who was just

delivered was lucky if the doctor ever went back to see her afterwards.

The first medical job I ever had was in that dispensary. My father asked me to hold a basin of water while he amputated the end of a child's finger. In the middle of this, which was done with a bit of local anaesthetic, I turned pale, dropped the basin and fled. At the time I must have been about 9 years of age. Even then it was obvious that all three of the boys were going to be doctors. Nothing else was even considered. My mother thought that perhaps being prime minister or teaching school were alternatives which could be considered but fundamentally everyone agreed there was only one task in the world supremely worthy, and that was medicine. We never thought of any other vocation. We ate, drank, and slept medicine as soon as we were able to toddle.

My father had a patient, a Mr. Zavitz, who came in one time for a tonic. Father gave him one and in due time the patient returned, praising the tonic he had been given and asking for another bottle. My father said to him: "I'll give you almost the same thing but I will put a few more ingredients in it." The patient took the new bottle with him and after a time returned to report further. He said: "Doc, that last medicine wasn't really as good as the first bottle you gave me. I wonder if you could make up a bottle much like the first. Just leave out them ingredients.

Then Mr. Zavitz noticed my father's medical diploma hanging on the wall. In it his name was recorded in Latin as Ricardum Jacobum Shute (for Richard James Shute). The old man studied this for some time and finally asked my father: "Is your name really Ricardum Jacobum?"

My father's days at Poplar Hill were the happiest period of his life and certainly a happy time for us all. I enjoyed public school where the teacher was Earl McInroy. When he found that one of his pupils was not paying attention he would throw a well-aimed blackboard brush at the erring one to indicate that more concentration was desirable. I am sure this practice helped Earl, who was the catcher on our local baseball team, to catch many a man off second base. Years later, when I came to practise in London, his wife became a patient of mine.

I always had difficulty in school as I was consistently far ahead of my schoolmates of comparable ages. My only way of

diverting their jealousy was to succeed at games. Since no one wanted to be catcher on our little ball diamond, I took over the job, and still bear one scar for it. A hard pitched ball struck my right hand between the two middle fingers, splitting the web for half an inch.

I went to Strathroy for my high school entrance examination at nine years of age and passed it. I was allowed to try the examination only on the supposition that I was eleven, and those in charge debated a good while whether they should allow an eleven-year-old child to try the examination. My family then decided that I was too young to go to high school twenty miles away, so I stayed an extra year in public school in Poplar Hill, taking what purported to be preparatory work for the first year of high school. Actually it was a hodge-podge and I learned nothing. Either the teacher had no idea what my curriculum would be or made no attempt to discover it. The beatings that I regularly took from Willie Campbell made me promise myself that I would learn boxing and wrestling when I went to college.

Christmas was always a wonderful time in our home, although we never had a Christmas tree. Mother disapproved of such wasteful cutting of young trees. This was long before trees were planted for that purpose alone. I never had a Christmas tree until I was married. Our stockings were filled principally with oranges, nuts and apples, but there were always small surprises in them. And somewhere near lay the annual gift of a book on animals, one among the three of us.

At Poplar Hill I became interested in collecting insects and used to wander miles along the highways and through the pasture fields with my collecting net. This was the only thing which could lure me away from my books and get me out into the open. Wilfrid's hobby was to fish in our tiny creek. My parents were profoundly interested in my hobby and almost anything they were doing would be dropped if a strange butterfly flew by. Someone kept watch on it while others ran for the net and killing bottle. The family would scatter like magic until we had caught or missed him. What remarkable occasions we had chasing butterflies or dragonflies through corn or wheat, over streams, up hill and down dale, through cattails and swamps!

What made it even more fun was that in our neighbourhood were two excellent amateur naturalists. One was a tailor in Coldstream, Albert (Ally) Wood. The other was a

farm boy, Walter Campbell. They had long been interested in birds, birds' eggs, insects and taxidermy. For instance, they collected the last passenger pigeon in Ontario, one that probably still is exhibited in the Royal Ontario Museum in Toronto. They thought nothing of scaling the tallest tree for herons or owls, even eaglets. Ally was a fine cornet player, a good tailor, and a marvellous taxidermist, who had one of the finest collections of moths and butterflies, beetles, birds' eggs, stuffed birds and mammals that one could find, apart from a museum like the R.O.M. in Toronto, where eventually his collection went. His consultant, in turn, was the famous naturalist, W. E. Saunders of London, a brother of that Sir Charles Saunders responsible for Marquis wheat. Although W. E. Saunders' real vocation was the wholesale drug business, he was Canada's leading ornithologist in his day.

At one time with Ally Wood's help, I owned a collection of about 300 moths which I exhibited at local school fairs. My father made me a wonderful parasite-proof box to house this collection, but, as always happens, the persistent parasites eventually got in, and the glories of my collection turned to dust, as all glories do. Father was an expert carpenter when he chose to drive nails. He worked on the principle that you should never use one nail where two would do.

Ally Wood later entered the service of the Ontario Department of Agriculture and was stationed at Chatham. He became expert at making wax models of fruit designed to show plant and fruit diseases, and his collection of these wax models was exhibited at fairs all across Canada. In 1958 he wrote a book, *Preparing Insect Displays*, for the Canada Department of Agriculture, filled with illustrations of his specimens and methods, a remarkable little manual. He finally developed a heart problem with hypertension and became a patient of ours at the Institute, decades after our entomological days.

My father made all his medical visits by horse and buggy or cutter, and our family sometimes would go off on a Sunday afternoon for a drive of ten miles one way and ten miles back, with father and mother and the three of us sitting in the bulging buggy. I sat between my parents, Wilfrid sat on the floor of the buggy between my father's feet, and baby Wallace was held in mother's arms. In our last year in Poplar Hill (1915), father had one of the first Buicks in the country (secondhand). It was a one-seater into which we all crowded somehow or other. But the

car was pretty asthmatic and when we came to steep hills we all got out while Dad tried to drive the car to the top of the hill alone, talking to it as if it were a horse, and trying to jerk it forward the last wheezy yards to the crest while we trudged slowly up to rejoin him. My father did not live to hear the philosophical remark made by Premier W. A. C. Bennett of British Columbia many years later. "You don't travel faster by pushing on the reins."

When I was ten years old I began to take violin lessons from Professor Pasquale Venuta, an excellent clarinetist who lived in London and had as pupils the Niosi and Lombardo brothers who later became renowned for their orchestras. He came out to Poplar Hill once a week to teach various instruments to musical innocents like me. I wasn't wearing glasses at that time, and my astigmatism could never let me decide for sure whether a note was on a line or in a space. How I used to get rapped over the knuckles for flatting or sharpening a note. I was never a very good fiddler and certainly I must have tried his patience. He is mentioned affectionately by Max Ferguson in *And Now Here's Max*.

When I lived at Poplar Hill, the nearest circulating library was at Coldstream, a mile and a half to the east. I was a great reader by the time I was eight. By the time I was twelve I had read the greater part of Dicken's novels. Two other books stand out in memory. One was an Australian highwayman's story called *Jack Salathial*. I wish I could find a copy of it again, after more than fifty years. The other was *The Frozen Pirate*, a book my mother found me reading and snatched away from me. It took me 40 years or more to discover another copy and learn what had happened on that instant-frozen pirate vessel. That book is one of my dear treasures now.

Finally it became obvious that we weren't going to make an adequate living in Poplar Hill and my father sold his practice to Dr. Jeffrey, who in turn in a year's time, gave up and moved to Paris, Ontario. The only thing that I remember about Dr. Jeffrey is that he had a wife who boasted how "modern" she was. Her mother had left her a barrel of fine old Canadian and American glass. As soon as she inherited it she took an axe and smashed every piece in the barrel. This is one reason why old glass is so difficult to find in Ontario now.

My mother urged my father to improve his skills by spending a year at Harper Hospital in Detroit. My father readily con-

sented to go to Harper Hospital although at that time he must have been 41 years of age, and I, his oldest son, 10 years old. He was always interested in improving his medical knowledge, enjoyed hospital life, and enjoyed Detroit. His great ambition was to see me graduate in medicine and practice as a specialist in the David Whitney Building, which was then *the* posh medical address in Detroit. Meanwhile we moved to a little cement block house at the edge of Poplar Hill and waited until his last internship was completed. Once during his year at Harper the family went down from Poplar Hill to see him, and all his friends were surprised to see his three "big" children. No other intern had a family like it.

In my first year in Strathroy Collegiate I had to drive in every week from Poplar Hill with Stewart Campbell, who lived about a mile and a half up the road toward Strathroy. I would walk this mile and a half every Monday morning and Friday evening, while I was boarding in Strathroy with a Mrs. Rowe, who lived near the standpipe. In the winter my mother would get me up at 5 o'clock on Monday mornings, would put on a pair of my father's trousers, and would walk through the snow drifts ahead of me so that I could set my feet in her tracks. I was still taking violin lessons from Professor Venuta and would take my violin to Strathroy. Since Mr. Rowe worked at night and slept by day I couldn't practice in his house, but I got permission from a Mrs. Sabine next door to practice in her cow stable. I would get up early in the morning during the week, go into the cow stable, which was always as warm as it was odorous since it had been closed up all night, and practice there until it was time to go to school. Those cows must have learned to despise scales and études.

My year in Strathroy was a happy one on the whole. The principal of the high school was a Mr. Sexton, who taught us science as well. He was a very good teacher, but one time embarrassed me profoundly by turning to the class and saying: "I wish all of you paid the same attention Shute does. Look at him back there with his mouth open, drinking in every word." I sat up near the front of the class in front of a boy called Rex Prangley. Prangley spent much of his time snapping the lobes of my ears, first one and then the other, a very unpleasant pastime. I stood first in my form that year. For this I received a \$2 prize which I was supposed to use for books.

A militia company whose headquarters was at Strathroy occasionally made a combined recruiting and route march to Poplar Hill in 1914 and 1915. The whole village watched the stiff parade, the schoolchildren sang patriotic songs for them in the Disciple Church, the village ladies fed them in the church basement and then they marched away. This was our war effort. No more was needed, for in that day the British armies and navy could never be defeated and we still sang Boer war songs such as the one whose chorus ran:

And when they ask you how it's done
And why it is we've always won
We'll proudly answer, everyone,
That we're the soldiers of the Queen.

It never occurred to anyone in Poplar Hill that World War I was a peril, that it needed more than schoolchildren singing chauvinistic songs to arouse decent enthusiasm and persuade a few young fools to enlist. We were sure that we would hear of the Kaiser's capitulation any moment if he knew that "Bobs" (Lord Roberts) might decide to return to active duty.

When I am in my office trying hard to keep my appointments every working day of the week, finding that the occasional patient is tense because she has had to wait too long or because I am called away to deliver a baby, I think of the difference in temperament of the patients in my father's day. They were willing to wait for him half a day, or all day, or come back the next day if he missed them because he was making rounds and was quite out of communication with my mother at home. I think of how a patient would feel now, post-operatively or after delivery, if I didn't visit her regularly and faithfully. In contrast, the "old time" patient was flattered and delighted beyond words if she had a single post-partum visit or one call after an operation.

I went back to Poplar Hill for the 1965 reunion of the alumni of our public school just prior to the sale of the old building. It seemed strange to stand in the schoolroom beside the old seat where I had sat exactly fifty years before. How I had changed in the interim. Then I went out on the grounds and met some of my old schoolmates. How old they all looked! Only I had withstood the passage of time! How much our lives had diverged in those fifty years, and how vastly different our interests and relationships were now.

I have often driven past a building with my family and remembered that the last time I had seen the building or passed along that stretch of road was fifty years before when I could not possibly have predicted what I would do, where I would do it, what my family would be like, and what my thoughts would be so many years later. One day I turned off Highway 22 at Poplar Hill and went down the sideroad by our stream. It had shrunk to the tiniest trickle. It was hard to recapture the enthusiasm with which Wilfrid used to dabble in it for minnows and I would walk along its banks trying to raise a colourful butterfly. With adult eyes I have looked at our old swimming hole at Poplar Hill and wondered why I could not regain the magic of the days when I had envied the boys who could swim the 20 feet across that muddy puddle.

We moved to Windsor in 1916. My father took charge of emergency medical work on the afternoon shift at the Highland Park plant of the Ford Motor Company in Detroit. In the mornings he practiced medicine from an office in his house in Windsor. He took most of his hospital work to the nearby Grace Hospital, an old brick house added to gradually by the Salvation Army.

My principal after-school task soon became taking care of the chaps who bullied Wilfrid at school. Bigger boys who were jealous of him thumped him regularly to teach him lessons in humility not on the curriculum. When these situations got too serious I used to waylay these bullies on the way home and thump them in their turn. We usually had interfering neighbours who would lean out of their windows during such affairs, making loud and discourteous remarks to the belligerents. One time on the lawn of the United Church, directly across the street from our house, I fought a doctor's son for bullying Wilfrid.

The minister came out to interfere, for some reason regarding this as a sacrilegious use of the church lawn. We paid no attention, except for a few succinct remarks, and went on with the war. My foe on holy ground was afterwards a basketball star for the University of Western Ontario and became a good doctor.

It is hard to imagine how single-minded our household was as we grew up. We boys thought of nothing but medicine, my

father's practice, books to read, music to learn, and studies to pore over. There never seemed any future ahead but medicine. Sometimes we went out to throw a ball around. One glorious winter there was an open-air ice rink on Ouellette Avenue, near the corner of London Street on the site of what is now a large theatre. Sometimes we were allowed to skate on little frozen ponds in the fields near the Michigan Central station, but these occasions were rare since the winters in Windsor were so mild.

Only once did we get over to Detroit to see a professional baseball game. We saw the Chicago White Sox play the Detroit Tigers. And who were the White Sox but the great team that is now known to baseball history as the Black Sox. Cicotte pitched, Gandil was at first base and Shoeless Joe Jackson was in the outfield. Many years later Cicotte's son came to us as a patient. When I recalled seeing his father play he gave me a souvenir, an old baseball his father had autographed.

My father and mother were strong and determined characters and disagreed heartily all their married lives. Neither would give in to the other. I remember vowing to myself that at least I would have more peace in any home that I ever established. I suppose the warfare was of some value to the three boys because we all made this resolution quietly and carried it out. But since we heard so much debating we all became debaters ourselves. Curiously enough, after the boys left home, my father and mother became great chums and were lost without each other. She missed him enormously after he was gone.

My father truly loved medicine. After he graduated, I don't think he ever read anything but newspapers, medical books and medical journals. Nothing could have induced him to read a novel or biography. He just wasn't interested in anything but current events and medicine. It would be hard to recreate the atmosphere, saturated in medicine, in which we were raised.

He liked obstetrics best, and was a good obstetrician of the conservative type. I think in all the years that I went with him to deliver patients, I never saw him use gloves. Almost all his deliveries were home deliveries. He was very careful with all his patients, and very skilful in taking them through their labours. He was a kindly physician with enormous personal interest in people. I don't think he was ever fully appreciated, perhaps because he was so quick to refer patients to specialists when he thought there was the least difficulty developing. People took this for ignorance or lack of self-confidence, but actually he was

taking prudent and sensitive precautions for their welfare. In his view the specialist was the preferred character in medicine, and he vowed that none of his sons would be general practitioners. As it turned out we all did specialize. But I think that there is a great deal to be said for doing general practice rather than a specialty. There is much less jealousy among general practitioners than among specialists, and the generalists become true friends of patients.

My father's best friend in Detroit was Dr. James E. Davis, Professor of Pathology at the Detroit College of Medicine and Surgery, now the Medical School of Wayne State University. He was very deliberate and had a slow, measured way of speaking. He was always extremely pleasant, extremely helpful and courteous but had a will of steel underneath his quiet exterior. He was famous for his summations at clinico-pathological conferences at Receiving Hospital. The first year after I graduated from medical school in Toronto I had a fellowship under him at the college and did a lot of pathological studies, post-mortems and slide reading in St. Mary's Hospital and Receiving Hospital. Dr. Davis became as good a friend of mine as he had been of my father. He later nominated me for membership in the American Society of Obstetricians, Gynaecologists and Abdominal Surgeons (it got nowhere because of vitamin E), and was as kind to me as if he had been my own father. After he was superannuated he did general practice at Dexter, Michigan. His first wife was a cardiac invalid all the years that I knew her, and his second wife, Toni Ochs, a teacher of languages, became one of the closest friends of our family.

In 1928, my father had a hernia repair done by his old friend, Dr. Henry McClure of Detroit. I assisted at the operation. My father stopped breathing on the operating table and I remember standing across from Dr. McClure while we pumped my father's chest and wondered if he would ever breathe again. Many years afterwards, my father, who had been remarkably well all his life, developed acute appendicitis when he was 63. He diagnosed his own case and immediately had Dr. Wilbert Brier operate on it. He did extremely well until the fifth day. That day he was talking to Wallace who was the only one of us living at home at the time, laughing and joking with him—and then suddenly he died, presumably from an embolism.

One of the strangest things about this was that on a visit to Windsor two weeks before, as my wife and I were leaving to

come back to London, my mother surprisingly said to me: "Kiss your father. You may never see him again." I hadn't kissed him for 15 years but I did. He looked at me in some surprise, both at her remark and my response. But she was right. I never did see him again alive.

I think my father had a happy life. He felt badly about the long interrogations at U.S. Immigration that he so frequently faced in going across to Detroit. But he enjoyed medicine and he enjoyed his practice. He was proud of his boys. He enjoyed good health. On the whole he had many satisfactions.

It is odd to record that both my father-in-law and my father died from pulmonary embolism, exactly two years apart. To add to the poignancy of this, both of them probably could have been saved by vitamin E.

Several years after my father died we moved mother to London. She always felt uprooted and never did feel at home with London people or with London things. She regularly refused to take buses downtown and would walk a mile and a half by preference, even after she had her attacks of heart failure.

In 1955 she finally developed uremia and died after several days of coma. This was a great blessing as she had always had a great fear of death. We thought this would have been overcome by the fact that she had "died" once before. About three or four years before her demise she had her one and only attack of acute pancreatitis and was admitted to St. Joseph's Hospital, London. While my brother Wallace was visiting her there one evening she apparently expired. She stopped breathing, her heart stopped beating and her eyes rolled up. Wallace immediately gave her artificial respiration and she recovered. We thought this might reassure her about the ease of dying, but it had no influence upon her at all. She promptly forgot the experience.

Chapter Three

TORONTO: COLLEGE DAZE (1919-1927)

O straggler of the armies fled with Death,
O clanking armour of a skulking ghost,
O fugitive from mildew and the dust
O chandelier of bone bereft of light
Why do you grin at all the students here?

How barren of all modesties you stand,
A stranded chip upon the edge of Time,
Denominator small of towering fraction,
The cage of beauty till a beast came by
Far hungrier than any creature moves!

Was courage in those sockets, or a dream,
Or glances coy or even prophetic fire?
Did babies pat a face spun on those bones,
Held taut across that mandible and brow,
Set velvet on that mouth? Dear Lord, that mouth!

And was the spiky hand inert in mine,
This rummage sale of bones, this dog's delight,
This chiropractor's dream, a thing of might,
Skilful to pound a pulpit, beat a dough,
Model a dryad, steer a Flying Fort?

If I were proud my pride is shrunk to naught
Such tenant hold I in my vivid flesh!
This is the jagged buttress of my thought!
This is the platform of my potent loins,
My singing nerves and every ruddy vein!

God comfort him who once has looked inside
Or searched his muscles or has scanned his blood.
The gown was lovely till I raised its hem.
The hat was artful till I pulled a pin.
O Life, that must be hung—and hung on this!

Vere Jameson, *Anatomy Class, 1953.*

At the age of 14 I went to the University of Toronto on a Carter Scholarship given for the highest marks in the upper school examinations in the County of Essex. I found when I wanted to register in the pre-medical course that I had little science and even less mathematics. I tried to plug trigonometry and analytical geometry during the summer before I went to university and took tutorial work in those subjects. I was finally allowed to enter the pre-medical course on probation because my general scholastic standing was so high.

I have wonderful memories of my seven years at the University of Toronto. At the beginning I roomed downtown. There I met Dr. Richard Island, a lonely old arthritic who had a room next to mine in a house on Ann Street. I heard many an interesting anecdote from his medical practice. Once Dr. Island and a consultant were driving along a hilly road in a buggy on a pitch dark night. As they crept along, chatting casually, they met another buggy and had to pause and pass carefully. The other driver called out: "Who's that?" They replied: "Dr. Jones and Dr. Island." "Good night gentlemen," called the other cheerfully. "I'm Dr. Wilson. I thought you sounded like Doctorial fellows." (Whenever we hear of a sweeping medical conclusion based on the flimsiest evidence we are reminded of "doctorial fellows.")

Our professors, except for one or two, were fairly nondescript. In physics we had lectures in our first year from Dr. John Satterlee, a real character. He had a very high pitched voice, spoke fast, wrote his equations on the board quickly and rubbed them off rapidly, and had us thoroughly scared most of the time. One morning he bellowed out: "Who used desk 24 yesterday?" Bob Thompson and I stood up. "Well," he said, "You left the taps running and water spilled down over the floor, ruined ten experiments, leaked through the ceiling below, spoiled \$2,400 worth of apparatus and set back the careers of two junior professors." We were really quaking by this time. "So," he said, "You're both fined 74 cents. Pay it today." We nearly fainted.

At the end of the year's classes he came into the lecture room in a gown covered with cabalistic symbols, gave us half an hour of incredible hoopla, and finished off by making carbon dioxide snow and pelting us with the snowballs.

We had another equally exciting lecturer toward the end of our seven years—Dr. Gideon Silverthorne in Medical

Juriprudence and Toxicology. He taught us a little, told us courtroom yarns and laughed like a fat old Santa Claus at his own reminiscences. He knew that we paid him little heed since there was no examination on his course. He told us he had failed only one student in his life, a fellow who wrote: "I don't know a damn thing about this subject," but misspelled "damn." He, too, came on stage in his last lecture in a gown covered with the symbols of the alchemist and such, threw rabbits and roosters at us and generally performed uproariously. It is unfortunate that some of our stodgy and serious professors had so little of his irreverence.

I rarely missed the lectures held on Saturday evenings by the Royal Canadian Institute in Convocation Hall. There I heard Dr. Roy Chapman Andrews who had explored the Gobi and first found dinosaur eggs. Among others I heard Dr. Sylvanus Morley, the great American archaeologist, talk about the old civilizations of Latin America. That began my interest in American pre-history. Vilhjalmur Stefansson spoke on the air route he hoped would some day be established between England and Japan across the North Pole. I heard Fridhjof Nansen, the great explorer who had nearly reached the North Pole and was then High Commissioner of the League of Nations for the Relief of Refugees, speak on modern Europe's conditions. Mrs. Emmeline Pankhurst, the famous suffragette then living in Victoria, British Columbia, spoke on "Social Hygiene." She was a sharp, pretty, pithy, well-preserved old lady, who spoke very clearly and knew her subject well. That same month I heard Dr. (later Sir) Wilfred Grenfell of the Labrador Mission, preach. He was a very poor speaker, dull, disconnected and apparently very nervous. I also heard a five minute talk by Lord Byng, commander of the Canadians at Vimy Ridge during the First World War. He was a tall soldier, dour and uncompromising.

Many other famous persons came to Toronto in those years. I heard Judge Rutherford, the "Russellite" who changed the name of his sect to Jehovah's Witnesses, talk on his favourite theme "Millions Now living Will Never Die." In November, 1922, I heard Professor J. J. R. Macleod lecture on the sources of insulin with a thick Scottish burr. This was just after Banting and he had received the Nobel Prize and had quarrelled bitterly about it. I heard the Nobel laureate, Dr. August Krogh of Copenhagen, lecture on the circulation of the blood.

In 1923, George McManus, the great cartoonist, spoke at Hart House very humorously. He drew Jiggs, Maggie, Dinty Moore, Miss Jiggs and the family's crest. I also heard that month a lecture by Sir Henry Newbolt, the famous poet, on "Education and Life." I heard Count Byron de Prorok talk about his recent excavations at Carthage. I heard the first Balfour oration, delivered by Dr. William Mayo. He was a little, dark, dapper, clean-shaven man, very unassuming, plain and a clear speaker. I heard Paul Martin, who later became Minister of External Affairs, take part in a debate against an imperial team that included Malcolm McDonald. Even then Paul spoke in a sententious, sonorous style which has scarcely changed through the years since.

That year I saw Viscount Allenby, the Field Marshall who took Jerusalem, get his LL.D from Chancellor Sir William Mulock and President Sir Robert Falconer. Allenby made a typical jerky, soldierly, flagwaving speech. What these men did for a hero-worshipper like me is hard to overestimate.

I heard great gobs of music too, and went to the theatre frequently. Also, I was determined to be an athlete and earn my "T". I was only 14 when I went to university and I had much strength to earn, much muscle to build, many skills to learn. I began boxing as soon as I got to Toronto and kept at it doggedly in my early evenings, day after day and month after month. I hated it much of the time, but I decided it was what I wanted most to do in sports.

I had my first intercollegiate boxing match in Guelph in December, 1921. I was entered in the last bout with a lean, tall fellow by the name of Claus. In the second round he knocked me blind, the only time that ever happened to me. I boxed automatically after that, guessing where he was and hitting at a spectre. My sight didn't clear until the end of the third and final round. I won but I'm not sure how.

About this time, in spite of my desperate attempts to train for the Interfaculty Assault-At-Arms, I became more and more tired, lost weight and developed a hearty cough. Finally my chest was examined and it was found that I had pneumonia. I was accordingly sent home for ten days and could not box after I returned. It was a great disappointment to me. In January, 1923, I boxed and won at West Point on Toronto's first visit to the U.S. Army Academy. In February, at Queen's University, I beat Obenovitch of McGill, almost knocking him

out. The next night I won my bout and my first "T" by beating Hannah of Queen's; I was seventeen. On our intercollegiate boxing team there were some good fellows. Goldie Gray was our champion lightweight. He lost out in the Olympic Trials of 1924 to Danny MacDonald, who enjoyed quite a career in the professional ring afterwards. Goldie, an ex-soldier, was a jolly little fellow with a great punch; he was great fun. Later he practiced medicine at Sarnia and Markdale. Joe Mahon, a heavyweight boxer, was always a special friend. He was very determined and self-reliant, and became one of the best walkers Canada ever produced. He coached Canadian Olympic walkers for many years in the intervals of practicing law in Toronto. Joe and I used to go to New York and Philadelphia and places of that sort on our way home from American boxing trips, since he was also interested in museums, art galleries, and theatres.

The star of our team was Leslie Black, who later became a leading orthopedist and Surgeon-in-Chief at Toronto East General Hospital. Leslie was a year ahead of me in medical school and just as I arrived in Toronto he had won the city championship in decisive fashion. He later boxed for Canada at the Olympics at Amsterdam in 1924 and became third in the world at 160 lbs. When you consider that he was a pre-diabetic, was usually infected with boils and was so myopic that he could scarcely see his opponent, one can appreciate how quick his reflexes were and how effective he was. He was a very hard man to hit and had a devastating left hook which used to rip my upper lip constantly on account of my prominent canine teeth. All winter long in the boxing season I used to have ulcers on my upper gums from those left hooks of his.

In 1923, I boxed at Annapolis and lost on points to Mickey O'Regan, the collegiate champion of the United States. He was very fast, an excellent fellow, and we became friends on the spot. O'Regan afterwards became a Rear Admiral in the United States Navy. Garrulous sergeants would meet us as we got off the train and quickly pour into our attentive ears on the way to our rooms stories of the horrible things that had happened to the last teams that had visited their schools, how visitors had hit the floor of the ring with a sound that could be heard all over the gymnasium and yarns of that order.

In 1924, on the way home from a boxing trip Joe Mahon and I stopped in Washington and New York, my first visit to either city. As we were walking along Fifth Avenue we

missed seeing, by about fifteen minutes, a "human fly" drop five stories from a hotel to his death on the pavement below. Climbing the sides of buildings was by no means a rare event at that time.

I saw my first drunken girl at a dance at Annapolis—women did not drink then—and my first smoking woman on a visit to New York. I can remember the shock of it still.

That same year I boxed Leslie Black for the "Championship of Medicine," and lost a close decision to him, partly because I had a nose bleed from the beginning of the bout. After the bout, Frank Carroll came down to the dressing room and offered to come up regularly to train me for the Olympic Trials, but I wasn't interested and he seemed pretty disgusted with me.

In April of that year, I lost the Ontario 175 lb. boxing championship final to Harry Henning, a local bricklayer. He beat me because I was worn out in the last round. I was scarcely in shape for such a match as I had had no training in the six weeks prior to the fight. I merely had done some running around the stadium as training. Henning went on to the Olympics a few months later.

In 1926 I saw a great hockey game, the final for the Allan Cup between Varsity and Port Arthur. The game was tied at the end of sixty minutes. In overtime our fellows were so exhausted that they would shoot the puck up to the other end of the rink, then sit on the ice until it came back.

In October, 1926, I won the half-mile walk at the Meds track meet. Little Danny Webster, the 125 lb. wrestler in my year, competed in this, *running* and then walking. Dr. Bill Brown, the anesthetist and judge, yelled at Danny: "Don't let that big bugger beat you. Run if you like. I'm judging this race." Great applause.

I won the discus and javelin, but lost the overall championship to a miler named Morrison Mitchell, who years later was my malicious judge at a hearing before the Ontario College of Physicians and Surgeons.

I got a stack card in the University Library and began to read intensively the whole shelf of the *American Anthropologist* and *American Antiquarian*. I managed to get about six feet along the shelf before I left Toronto. I began at the year 1900 and worked onward, taking extensive notes when I read

anything that had to do with American pre-history. I was greatly interested in evolution in my early years in college and had the privilege of taking a course in comparative zoology given by Dr. Horne Craigie. He never answered a question directly but referred us to our text. "Look in the book," he always replied.

My two best friends were Israel Chaikoff who later became professor of physiology at the University of California in Berkeley and one of the greatest authorities on carbohydrate metabolism, and a wonderful fellow, Bill Ririe, who was much older than the rest of us. Bill's father was one of the early missionaries of the China Inland Mission and was the only one of the missionaries who refused to leave his post at the time of the Boxer Rebellion. One of Bill's earliest memories was going down the Yangtze on a raft with the rest of his family and other missionaries' families as they fled before the Boxers. Bill was educated at the famous school at Chee Foo where Thornton Wilder and others went, and where they taught lads to swim by taking them out three miles in the China Sea and throwing them overboard. He was a war veteran when he entered our class and must have been twelve or thirteen years older than I, perhaps even more. He entered the United States later on the Chinese quota which was almost non-existent. My father got him a job at the Ford factory, and he simply stayed in Michigan. I remember smuggling him his overcoat, which was many sizes too small for me, as he couldn't get it into the States any other way. He later went out to do medical work for the Kennacott Copper Company in Nevada and has spent most of his life there.

While at Toronto I met Kemal Khan, a Gurkha who had twice been recommended for the Victoria Cross and held nearly every major war decoration. He had on two occasions crept into German trenches in World War I and returned with a bag of noses, his tally for the night's work. Kemal's hands were scarred where he had cut himself to blood his kukri.

The best college yell I ever heard at Toronto was out of the 1924 dentistry class.

Larynx, pharynx, epidermis, gall,
Hen's teeth, men's teeth, any teeth at all,
We'll lacerate; they'll masticate.
We'll cut and blast and bore,
For we're Dentals, Dentals, Dentals '24.

In 1925 I wrote to the Committee on Selection for the Rhodes Scholarship but received no reply. I never troubled my head about it again.

Five of us in 1926 developed a literary coterie, which used to meet with Professor Davis of the English Department and talk about current writing. I never made the least contribution and have no idea why I was invited. Some of the other people were Norman Endicott, who later became a Rhodes Scholar and Professor of English at University College, and Donald Creighton who made his name as Professor of History at the University of Toronto. The other members of the group were Douglas Noble of my class and a chap called Wilson. That's where I first heard of D. H. Lawrence, who I always thought was a better poet than novelist.

On November 29, 1925, I tried my hand at original rhymes for the first time and was more fluent than I had ever anticipated. I could scarcely have foreseen then all the verse and worse that I would pour out in the next 40 years as Vere Jameson.

We had many happy days at South House. That is where I met my friend Dr. Charles Sankey, who became one of the world's greatest pulp and paper chemists. He is a musician, a literateur, and a person of enormous variety and talents. He was the Gold Medalist in his class in engineering. He was made first Chancellor of Brock University and wrote a history on the pulp and paper industry in Canada.

When Wilfrid and I lived at South House together it was always a great sport for any gang to put us in the shower, since our reputations in boxing and wrestling were well-known, and every once in a while a crowd would burst into our rooms and proceed to lug us off after a desperate struggle.

There was a good deal of feuding between the adjacent houses. One of our North House foes at that time was Willson Woodside, later a famous journalist, news commentator and a professor at the University of Guelph. Our house was always the leading pugilistic house as long as the Shutes were there. We got into more trouble than any other house, breaking down oak doors and causing damage of various kinds. A favourite sport was to crawl through the heating tunnel very early on a Sunday morning and wire closed the doors of rows of rooms of sleeping East House or North House men. If this were done thoroughly it took almost half a day for them to escape.

I was a very earnest and persistent student. Dr. Marian Hilliard was in my class. She later became a prominent gynecologist and obstetrician in Toronto and wrote her two best-selling popular books on the problems of women.

Anatomy dissections were a necessary evil. For a whole school year one's hands smelled of pickled fat and formalin at every meal. Towards the end of our third year only fragments of liver, kidney and extremities were left of our cadaver. One day in spring, when we were weary of it all, we took sides in our small anatomy laboratory and began hurling bits of our men at each other. At that moment, Professor "Smiling Jimmy" Watt entered. As he opened the door, we froze in our various belligerent attitudes. He looked us over carefully, said nothing and closed the door as he went out. We gathered up our instruments, put away the once human debris and went home. Nothing was ever said of it again.

At my physiology oral in 1924, I had ten minutes with Professor J. J. R. Macleod and the same period of time with Dr. N. B. Taylor. I stuttered so badly that it soon became obvious that I couldn't talk and Dr. Macleod began suggesting the right answers. Finally I was reduced to shaking my head to negate the wrong answer or nod assent to the right one. I always failed my orals in medical school. It happened, however, that I led the whole of our class in the written physiology examination and that saved my hide.

On March 13, 1926, I had a rare experience. Leslie Black took me up to Pharmacology to have a sty on my right eye lanced. This was done under a new general anaesthetic, ethylene, which Dr. Bill Brown was working on. It had just been discovered at either Wisconsin or Toronto. The first operation it had been used for in Toronto was lancing a boil on Franklin Farnsworth, a medical student. He felt no pain, was completely anaesthetized in a few seconds and felt no after effects. Then I tried it; then Les Black tried it. Dr. Brown hoped to use it for dressings, minor operations, and childbirth. When I went to Chicago afterwards it was used routinely on the delivery floor at the Lying-In Hospital. I may have been the second person in Canada it was ever used on.

A jolly old clinician who taught us at the Western Hospital was Dr. Arnold Clarkson. One of his many stories was of an old time doctor who converted all his cases to "the typhoid state" with sedatives, antipyrene and such, then cured them, because,

as he boasted, he was "hell on typhoid."

My father kept his job at the Ford plant in Detroit until the week he died. I worked two summers with him at Highland Park. In the plant emergency hospital we saw all kinds of minor infections, lesser complaints, and some big and interesting ones. All the big and challenging patients were sent to the Ford Hospital at once, but at least we had the chance to make a diagnosis first. I did my first operations there. For instance, the extirpation of ganglia was, by common consent, left to me. Here I lanced my first abscesses and treated my first severe infections of the hand and feet. I still remember Jimmy Lewis who used to box with me in the operating room any time there was a spare moment in the evening. This also was where I learned to bandage. We would do forty or fifty bandaging jobs every day.

The assistant to the Surgeon-in-Chief, Dr. Woodry, gave me some of the best advice I ever had about my stammering which was quite severe at that time. He said: "Evan, when you stand up to talk to somebody, you are always asking yourself: 'What does he think of me and am I making a fool of myself?' Instead, just say to yourself when you start talking to anybody: 'I don't give a damn; I don't give a damn!'" I did manage to cultivate this point of view years afterward, and I still quote this to other stammerers as being one of the most useful pieces of advice they can receive. Almost all stammerers are very sensitive people and care profoundly that they are making fools of themselves.

Sometimes we had to run through the plant with a stretcher, especially in the heat of summer and especially to the blazing "heat treat" to pick up a sick or injured workman. These were stimulating breaks in our bandaging routines, and we ran fast through the awed and gaping workers in a great show of emergency care. But older men always urged us to take our time. "If it's a real emergency you're too late. If it isn't, why hurry?"

Once we came on an interesting study of male vanity. A group of men of various colours and races and nationalities had paused to assay their virility by objective measurement. At a long metal lathe a row of men stood close, with penises laid on the steel table while a bystander measured the equipment each man presented.

In 1926, I began writing around to people who had been in India inquiring about a medical mission job in India. I had no success, however.

In the spring of 1927, as I was leaving my final medical oral, Professor Duncan Graham buttonholed me to ask what I was doing that year. I told him I intended to go to Detroit and have a stab at pathology. He noticed my defective speech and talked to me about it. He surprised me tremendously as he had always been so dour and cold. He referred me to the only speech therapist in Toronto, a Mrs. Naismith, and she saw me a couple of times before I left Toronto for good. She gave me some helpful hints about breathing before I spoke. It was strange that I should almost graduate in medicine before anybody did anything about my obvious problem.

Chapter Four

MONTRÉAL AND CHICAGO: SIX POST-GRADUATE YEARS (1927-1933)

If I had life to live again
Would I brandish knife or pen
Or be a sergeant cursing men?

It's strange the choices we have made,
The detours tried, the prices paid,
And what alternatives were weighed.

Once I had prayed to search the East
And dig out Pharaoh and winged beast
Or goblets from Belshazzar's feast;

Again I hoped to tour the veldt
To study egg and beak and pelt,
And collect flowers where glaciers melt.

Perhaps it still is for the best
That pelvic tumours are my quest
And I help mothers fill their nest.

But sometimes on a sleepless night
Before an infant sees the light
I wonder if I chose aright.

Vere Jameson, *Pirate*, 1965

My first post-graduate year was on an \$1800 pathology scholarship with Dr. James E. Davis at the Detroit College of Medicine and Surgery on the corner of St. Antoine and Mullet Streets. Since I had some class presentations to make in the spring of 1928, I began to lose my stammering perforce.

We did a great many post-mortems, and many were on senile dementias with a good deal of atrophy of the cerebral cor-

tex, or on patients with tuberculous peritonitis. I got used to plunging my gloved hands into the opalescent fluid of these tuberculous abdominal cavities, but I couldn't eat onion soup for years afterwards, as it looked and smelled so much like that dreadful fluid. Our little attendant was a near-moron who was very apprehensive of infection. Dr. Beaver suggested that he inhale some of the fumes from the pure formaldehyde bottle as a prophylactic, and this he used to do faithfully as we looked on in amused horror, fearing he would burn out his lungs.

I will forever remember one autopsy I did alone at St. Mary's Hospital (where they had no ice box for the bodies) on a hot June afternoon. The man had had an extensive gangrene involving half of his body area, so obviously the smell was terrific and the tissue pretty rotten. I never knew why I had to do that post-mortem anyhow. When I think of the dangers involved I shudder still. One break in a glove or in my skin could have finished me with gas gangrene.

Some of my work in Detroit was on kidney pathology, but it was aimless and nothing came of it. I learned, however, to study the literature and read surgical slides, and I did about 80 autopsies myself. I was also home at nights and weekends and helped my father with some of his cases.

I invested all I made that year in a piece of real estate which Dad picked up. He lost it in the depression, and of course I lost my small share in the investment too.

I disliked Detroit heartily and always have, but my father was very anxious that I should practice there. When I was ready to leave my appointment, Dean McCracken asked me to stay on the College staff in Pathology, but I cheerily declined. I could not see Pathology as a way of life and I hated autopsies. Dr. Davis was a wonderful mentor and always treated me well, but I was very glad to leave his department and subject.

Dr. Clarence Maguire, who was a year ahead of me in medical school, had served a year's internship at the Peking Union Medical School. I was anxious to follow him there, but when I applied, their policy had changed to allow only natives of China to be taken on as interns. I couldn't go to Peking, therefore, and on that account had gone down to Detroit.

I went to the Montreal General Hospital in the summer of 1928 for a rotating internship, mostly in surgery. My first service involved taking bloods every morning for Dr. I. M. Rabinovitch, the clinical pathologist, metabolism expert and

diabetic specialist. He was small, energetic, fast-talking, respected by everybody, but his scientific work did not stand up very well.

We worked in the old hospital on Dorchester and DeBouillon Streets. The front entrance and some of the older wards were parts of the hospital that Sir William Osler had known when he worked at McGill University and "The General." It was a tough area, although the nurses were never molested as far as I knew. The interns' quarters were directly across the street from several houses of prostitution and glancing out of one's window one could, at times, see naked women and other remarkable sights. First year interns worked for no salary. The second year interns got \$75 twice a year.

The old hospital had an excellent staff and was the most pleasant hospital in which I ever worked. There was a great deal of quiet rivalry, of course, between the General's interns and the counterparts at the Royal Victoria Hospital. For instance, they had an annual hockey game when the players went all out for each other's blood. I had never seen so much beer drunk as in our interns' quarters.

Some of the group who were there with me later achieved something in the field of medicine. The best of them turned out to be Allan Fowler in metabolism; Joe Brown who became head of the Regina Clinic and was an excellent gynecologist; Alan Ross who became Professor of Pediatrics at McGill and later established a Department in the University of Nairobi; Jimmy Martin who eventually became a Professor of Surgery at McGill; Gurth Pretty who was later one of the senior surgeons at McGill; and Bert Scott who became Professor of Ear, Nose and Throat at the University of Chicago.

Brian Michener, a skinny little Quaker from the University of Kansas, interned with me and was an interesting fellow. He taught me to ski and on that score we used to make periodic trips up to Mount Royal. As a rule, the Montreal boys didn't bother skiing. They left that to the "foreigners." However, before I left Montreal in 1929 I had managed the "Gully Run" which was the "graduation exercise" for skiers on the mountain, and had even made one trip up to the Laurentians at Ste. Nazaire for a bumpy weekend on the slopes. I never did learn to turn, however, and I usually stopped by sitting down, hoping that there were no tree trunks in the wrong spot. Michener afterwards went to Kenya as a missionary for the

Friends and served there many years. He was the fifth man to scale Mount Kilimanjaro by the "hard route," and was always interested in mountaineering.

One of the duties of the intern was to ride the ambulance for emergency calls, and try to reach the victim before the ambulance crew from "Vic" or Notre Dame or St. Luc. An undertaker supplied the hospital ambulances, sometimes lacking a front door, and we drove through the streets on these wild emergencies, turning corners recklessly and with gusto in those somewhat rickety cars. It was a great relief from the routine of hospital work. I remember three cases particularly. In one of the narrow little streets quite close to the hospital a man had jumped out of a second story window, apparently in an effort to commit suicide, and had landed on his head. Picking up his head was like picking up a bag of sticks. I had never had such a tactile sensation before. Another time I was called to the docks to treat a man who had been caught in the hold of a ship which was being fumigated with cyanide. He was dead long before I got there. Another impressive case was at the Woolworth's store at the corner of St. Catherine and St. Lawrence Main. A woman looking down an elevator shaft to see if the elevator was coming *up* was caught and pinioned there by the heavy freight elevator as it came *down*. She lay there with the elevator pinning her exactly as the accident had occurred, with a crowd of distraught people standing around. The first thing to do, which apparently had not been thought of until I got there, was to lift the elevator off her head. Now there was an ancient understanding among the interns that if you brought a patient into the emergency department and the patient died before being admitted to the ward, the unlucky young doctor who brought the patient in had to provide beer for all the interns. I was in no mood to do that, and couldn't afford to do it anyhow, so I wasted as much time as I could examining the patient on the spot, expecting her to die at any moment. Obstinate, she refused to die. So I finally rushed her into the emergency and booked her into a hospital ward rapidly. She walked out of the hospital three days later, none the worse for her experience.

Our fellows at the Western Hospital were just across St. Catherine Street from the Montreal Forum and so they regularly provided the medical coverage for its hockey games. One night the Maroons were playing the Canadiens, their arch rivals, when a woman in the stands fainted. Donald Grant was there on duty.

What to do? Then he remembered an old lecture on resuscitation and lifted her dress to do a rectal examination on her in full view of the fans. History records nothing further, mercifully.

I had an interesting surgical service on Ward L under Dr. C. K. P. Henry. Dr. Alfred Bazin was the outstanding surgeon on the hospital staff at the time and Dr. C.P. (Moose) Howard, Dr. Charlie Peters and Dr. Alva Gordon were the shining lights in medicine. Dr. Gordon was known for his strict rectitude, modesty, extraordinary memory and equally extraordinary diagnostic skill. I don't think I have ever seen a medical man with quite his clinical abilities. Once on a ward round he asked an intern to pour water over his cupped hands. The intern was Cameron Gardner, later a well-known Montreal surgeon. He was far away in thought but rallied, poured a bottle of picric acid over Dr. Gordon's hands, then realized what he had done as he looked at the bright yellow horror. Alva Gordon merely held up his hands and remarked: "Guess I got hit by a yellow cab."

We had several typhoid cases in the hospital much of the time, with no antibiotics, of course. Bathtubs were set by the patients' beds; when their fevers rose, into the ice-cold baths they were dumped, day and night.

I was assigned in the fall months to the Shriners' Hospital on the mountain where the orthopedist-in-chief was Dr. Robertson Forbes and the chief attending medical man was Dr. Cushing. Both were outstanding doctors, but I found time up there very dull as almost all the children were in months old casts and the hospital clientele consisted of only 75 patients. I finally became somewhat desperate and took to the McGill library to study what had been done to accelerate the healing of fractures. I had an idea that perhaps one might achieve something in this respect by administering large doses of vitamin D and injecting bone marrow cells locally into the fracture site. I tried to get permission to do something in this field with animals and pestered old Dr. "Pop" Rhea, the pathologist at the hospital, and his assistant, Dr. Joe Pritchard, for some animals for this experiment. They looked at me in consternation. Apparently no intern had ever done an experiment of any kind at the Montreal General, and they couldn't understand one who wanted to do an experiment, especially one involving animals. They temporized and temporized and finally moved me away from Shriners' and put me into Emergency Outdoor

Surgery to keep me busy and get me out of their hair.

The night superintendent of nurses was Miss Jenny Webster who was well into her seventies. She loved all the interns and was politeness itself to them, but she was a tough martinet with the nurses under her. She prided herself on her skill with enemas and was always delighted when some intern ordered one, which we took care to do at appropriate times. Once she was in a crowded street car and a man asked her if she recognized him. He reminded her: "I was in the third bed on the right hand side in Ward L, Miss Webster." "Oh" she said, in a loud voice, to the astonishment of the whole street car, "I didn't recognize you with your clothes on." She carried on a running feud with Shea, the old elderly who was assigned to the interns' quarters and whose business it was to awaken us for night calls. Since she was superior to him he couldn't talk back, but he felt inclined to do it and he used to walk along the corridor grumbling to himself: "Damned old woman, damned old woman."

Whenever she wanted to cross a street in Montreal she paid no heed to the traffic at all. She merely held out a white gloved hand and marched across the street, holding up the traffic as if she were an inspector of police. She had such flat feet and such bunions that her feet turned out like Charlie Chaplin's. It was amusing to see her march indomitably across the street in this way.

I made my acquaintance with gynecology on old War O. At that time Harold "Butch" Little was in charge. He was a Johns Hopkins-trained man, irascible, crusty, ribald, energetic and he loved to work in a puddle of blood. His first assistant was A.D. Campbell, who later co-authored a text on vaginal hysterectomy, but "A.D." was not allowed to do anything. Eleanor Percival was on his staff and was responsible for all the radiation cases. It was from her that I got my bias toward inducing the radiation menopause in women in their forties. In Gynecological Outpatients we routinely catheterized every outpatient before we did a pelvic examination. I shiver when I remember this. I never saw a vaginal hysterectomy done there, I should add, and of course, radiation removed the need for as many abdominal hysterectomies as are done nowadays.

The Assistant Superintendent was Basil MacLean, a tremendous wag and practical joker. At one time, when he knew that two of the lads were assigned to do post-mortems at night, he

had himself sewn into a shroud and put in the icebox in the morgue. He arranged this with just enough time for the interns on pathology to be notified and pull him out of the icebox before he would freeze. When he was pulled out of the icebox he began to groan. The interns who were about to cut him out of the shroud were thunderstruck. He groaned again. They hurriedly departed for help. As they left he laughed out loud. They came back, undid the shroud and saw what had happened. I am sure they were prompted to continue with the initial incision right there.

Another one of Basil's stunts was played on an intern, Touzel. One afternoon he went up to wrestle with his old McGill team-mates, came back very weary, and lay down for a nap in the Outpatients' Department. While he was there Basil and a friend painted him red with mercurochrome, then called the ambulance for a case of "scarlet fever" and had him trundled into it and was taken out to the Infectious Hospital at Verdun. Touzel couldn't understand what was going on when he awakened from his deep sleep, and reached the Isolation Hospital before he realized his problem was not scarlet fever but mercurochrome.

I expect a much more dignified race of interns has followed in the footsteps of men like MacLean and Martin. Basil MacLean later left Montreal to become superintendent at the Touro Infirmary in New Orleans, and from there went to Rochester where he was superintendent of Strong Hospital. Finally, he went to New York to be Commissioner of Health, a position he held until he died in 1962.

I applied for a senior internship in Medicine about Christmastime and since my academic record had always been quite good it never occurred to me that I wouldn't get it. There were two such jobs and I thought I would land one of the two. Unfortunately, two good fellows who had been there for two years to my one applied for the same jobs. I quickly realized that I had no second year job at Montreal General Hospital and had looked for one nowhere else. I sought the advice of Dr. C. P. Howard, one of the Chiefs of Medicine. He suggested the Ford Hospital, Detroit. I disliked Detroit so much that I nonchalantly decided to pass that up. He then suggested Strong Memorial Hospital, Rochester, New York. For some vague reason that didn't appeal to me. His third suggestion was Billings Hospital, Chicago, which was then just a year old. On a

passing whim I thought that might be interesting and asked him if he would write a letter there for me. He did, and I got on as Assistant Resident in Medicine. On that baseless and fantastic whim my professional future was decided.

The most important single thing that happened to me in Montreal was meeting Marion Miller. I didn't see her until I was back at the General from my term of duty at the Shriners' Hospital. Then I found that she was Assistant Superintendent on nights and in charge of Outdoor and Emergency. She was everybody's friend, sewing on all the interns' buttons, and arranging dates for their dances. She was happy and cordial with everybody, was very extroverted, was never fatigued, and was the essence of efficiency when an emergency developed, and blood, beer and profanity filled the Outdoor. I was instantly impressed with her, but she had so many attractive friends among the interns that I never thought that I would have a chance to date her. One of the things that impressed me most was her wonderful sense of humour. She told me the story one night of looking through the cupboards in the Outdoor, when a mouse jumped out. She had a great fear of mice and promptly clutched the arm of an intern who happened to be beside her. He soothed her momentary alarm, then held up his hands in the attitude of prayer, saying: "Dear God, please send another mouse."

Early one morning when she was on duty, a man was rushed in by ambulance. He had had a "V" cut of his lower lip (by a bite). It bled profusely. As the suturing was well under way a female voice phoned in to tell him seductively: "Mr. T__ can come back now. I found the missing piece of lip behind the sofa." The message was duly passed on to the wounded man, who burst out: "Hell, No!" Primly, Marion reported his decision. "Your friend does not desire to go back and is now being looked after by the surgeon."

On another evening a French-Canadian was brought in to the Outdoor with the last joint of an index finger bitten off. Then the police brought in another man and the two took up their fight where it had left off. They were separated and pacified, and the missing bit of fingertip was recovered from the second visitor's pocket.

One night I made a bet with Marion. I don't remember what the wager was about but the penalty was that I would get a kiss if she lost. By accident (or design) she lost—and my future was settled. While wandering back to the interns' quarters I met

a fellow intern, Ed Bartram, and he began worrying as to what was wrong with me. He told some of the lads that he had met me wandering down the corridor with a glazed look in my eye. There was—Marion had bowled me over. Thereafter we had many a chat in the dim recesses of the Outdoor, with Marion always on the alert for a visit from Miss Webster or the police or an ambulance call or for phone calls. However, we did manage to have strawberries together and long visits which left me sleepy the next morning. When I left Montreal she gave me as a parting gift an argillite totem pole ten inches high, now very rare and valuable. I only saw her three times in the next four years—although we corresponded regularly while I was in Chicago. I never knew why she waited for me.

In 1929 I went to Billings Hospital, the University of Chicago, the year after it was opened. There were interesting people on the new staff at that time. Dallas Phemister, the orthopaedist, was professor of surgery. Russell Wilder, later connected with the Mayo Clinic and a diabetic authority, was professor of Medicine. Ossard H. Robertson, who later went to Peking, was also a professor of Medicine. When he finally retired he became a great authority on Pacific coast birds; but at Chicago he was busy making antisera for the various types of pneumococcus. Louis Leiter, later of the Montefiore Hospital in New York, was on the medical staff, as was Walter Palmer and Emmett Bay. Charlie Huggins, originally a Nova Scotian gone Harvard (he received the Nobel Prize in 1966), was on Urology, while the great Alec Brunschweig, the foremost exponent of exenteration of the pelvis in later years in New York, was a senior on the surgical staff, as was Perry Jenkins. Fat Paul Hodges, also late of Peking, directed x-ray and Fred Kredel was an intern on surgery. Fred later became Professor of Surgery at Pittsburgh, and died quite young. Across the street was old Ajax Carlson, the most intimidating physiologist of his day. It was a very interesting time to go to the University of Chicago, as the pioneering medical group there was just beginning to find its feet.

I had an interesting year as assistant resident in Medicine, enjoying Walter Palmer particularly. Curiously enough both Emmett Bay in Cardiology and Roy Grinker, who later became a psychiatrist in charge of the American Forces in North Africa, wanted me to stay on in their departments. It was one of the

ironies of fate that I turned down the cardiology job and that it was taken by Wright Adams, who later became very prominent in the university medical school. Both Bay and Adams were among the first to criticize our studies on vitamin E in 1947.

The University of Chicago was then on the edge of the black ghetto, but the situation was not nearly as volatile as in later years. There were wonderful lectures in Mandel Hall. I remember once hearing Paul Starkey talk there about his life among the gypsies, illustrating his lecture on his violin. There were wonderful preachers at the big new Rockefeller Chapel, and the music there was superb. I used to go there sometimes with Dr. Erna Kandel, who was an intern of mine and became my fastest friend. She later married a zoologist and practiced haematology in Honolulu. In the winter time we had wonderful skating in the depressions on the Midway (which had been the midway of the World's Fair in 1893). I had many chances to visit the Oriental Institute, which was then presided over by the famous Dr. Henry Breasted, and for the first time made the acquaintance of the thrilling head of Nefertiti, about which I wrote some verses in later years. In those days no one seemed aware of this head. International House was built by the Rockefellers while I was in Chicago.

I used to play squash with Phil Graeser, who later became prominent in Southern California medicine. We played under the stands at the Stage Field Stadium, which was soon thereafter taken over by Enrico Fermi for his first work on the atomic bomb. In fact, I suppose the bomb process was discovered where we played. Helen Van Zant, who had also been at Peking, was the assistant in Bacteriology and taught me any bacteriology I ever learned.

It was in that year that I attempted to continue some studies on an idea which had intrigued me in Detroit, namely an investigation of pyelovenous reflux. I operated on quite a few rabbits, dogs and even monkeys, trying to manufacture prototypes of such reflux. My method, which was a savage one I admit, was to try to precipitate Prussian blue in the collecting tubules opening into the renal pelvis by injecting a ferric salt in solution into a rabbit's renal arteries and very soon after introducing refluxly up the ureter some potassium ferrocyanide solution. These studies were a little absurd and I got nowhere. However, I did learn to do animal surgery and how to handle monkeys. Those were great days and there were rich oppor-

tunities in Billings' animal room for a green lad with original ideas in research.

At the end of my year in medicine, I tried to get a job in surgery but there were no openings at Billings, so I decided to try obstetrics. I began with a six months internship at the old Lying-In Hospital in the fall of 1930. This hospital had been built with private funds and gifts by Dr. J. B. DeLee in 1899. It is now Provident Hospital. My first task at the Lying-In Hospital was to sew up the throat of a white man who had been asleep under a tree in the park until a passing black had casually cut his throat with a razor. Fortunately it was a superficial wound, there was not much bleeding, and no important structures were cut. But that was my introduction to the race problem in Chicago. While I was there a strike occurred. It was called because not enough blacks were being employed by the city in repairing the street railroad. In the park close to the hospital, gangs of blacks milled around during the strike, brandishing revolvers, although there was no actual shooting.

We also spent time as interns at the Dispensary on Newberry Street, in the poorest section of the city. Dr. DeLee had founded it in 1895 when he came back to Chicago after four years in Europe. The doctor in charge at that time was Arthur Hudson, a particularly foul-mouthed individual who disliked and criticized Dr. DeLee on every possible occasion. We examined all the patients with the same set of gloves, merely rinsing them in mercury bichloride between examinations. I shudder at this now. Miss Kemper was the matron in charge of the Dispensary. Inset over the front door were the bricks on which Dr. DeLee had boiled his first instruments many years before when he founded the Dispensary. Student nurses came in from the Mayo Clinic and a number of other American hospitals to get practical experience there, and there was always a line-up of interns from various places across the United States and Canada to study DeLee's methods of home delivery at the Dispensary. Medical students from Northwestern University and the University of Illinois served part of their senior year at the Dispensary. Calls were taken night and day and a crew was rushed out to serve patients in labour. A crew would consist of an intern, a student nurse and a medical student. Once it went on a case in labour the team stayed there night and day until the child was delivered. This involved some real hardship, of course, but was the unvarying rule. If difficulties developed, a

“wrecking crew” was sent out. This consisted of the doctor in charge, in this case Dr. Hudson, and one of the nursing graduates. They performed anything that needed to be done on the spot. Indeed, every obstetrical operation was done in the home, except Caesarean sections or operations on septic patients.

One of the interns, Steindler, had the remarkable habit of sleeping crosswise in bed with his feet perched up on the wall beside the bed. This phenomenon attracted the interest of old Miss Kemper, who surreptitiously used to take selected parties upstairs to view this phenomenon. Fortunately, Steindler always wore pyjamas.

Steindler was called out one night to deliver a patient and, as he and his nurse and student walked into the bedroom, the door was locked behind them. He thought nothing of it until he tried to get out. But the door remained locked and the desperate father on the other side said, “You no leava the room doctor, until you getta the babee. I losa da last two babees. I want a live babee these time. If you no getta live babee, you no go back to the hospital.” He could be heard cocking his revolver outside the door. Steindler worked pretty hard on that case, making sure he was successful.

Bill Kroger was an intern of mine at the Dispensary. He later became famous on the American west coast for his work on hypnosis in obstetrics. Ruth Watkins of Oregon was our tiniest intern at Lying-In. She had to learn to do forceps, of course. We would gather round her when she had a case and lay bets as to whether she would pull the child out or be sucked in.

The conditions under which we worked were often very primitive. One time I delivered a patient in a room over a very odorous stable. The woman had absolutely no clothes of any kind except what she was wearing, and they weren’t much. I once sat up all night in the middle of a tenement room on a stool around which was drawn a ring of lysol to keep the cockroaches from getting into our clothes. The mother was in labour in one bedroom. In another bedroom, four little black children slept crosswise, side by side. The mice and rats in the walls literally sang during the night.

When I returned to the old Lying-In, Miss Mabel Carmon was in charge of the delivery room. She was reputed to be an old flame of Dr. DeLee’s. She was a martinet but an excellent nurse. In the doctors’ room where we waited between cases,

there was a great photograph on the wall, perhaps three feet wide—a blow-up of a piece of hospital linen upon which *cocci* were superimposed. The *cocci*, of course, were smaller than the interstices in the linen. This emphasized one of Dr. DeLee's most important teachings, the value of asepsis. We learned never to touch sterile drapes with one's glove, since these drapes were illusory, deceptive meshes and did not obstruct the passage of streptococci to and fro. Prominent also on the doctors' room walls was a motto that he liked to quote: "*primum non nocere*" which in translation means, "The first consideration is to do no harm." This had been freely translated by some wiseacre to mean "once will do no harm" (ascribed to Harvard's Professor Rand).

The staff at Lying-In were people whom DeLee had had with him for years. He himself delivered the millionaires of Chicago and now selected only old patients or patients of great difficulty. He was a very spare, nervous man who delighted to talk to interns or students in the hall, who loved to teach, whose whole life was involved in obstetrics. He did no operative gynaecology. He had no wife or family. He lived for his books on obstetrics which he was always revising. It was one of the three standard works on obstetrics in English and was a wonderfully adequate manual for the delivery of patients. Dr. DeLee loved books and on his library wall was a sign which read: "In case of fire, save my books." He was not a scientist as his great rival, Williams of Baltimore, was, but he was a very expert obstetrician and a master of the forceps he had devised, a modification of the Simpson forceps. He had also devised a head stethoscope for listening to the foetal heart.

One of the features of the Lying-In was the weekly conference on Thursday afternoon which Dr. DeLee and Dr. Dieckman held. They were originally Dr. DeLee's talks, but as the years went by Dr. Dieckman gradually took them over. Dr. DeLee would select some topic and then reminisce on it, giving us the meticulously recorded details of his experience. There never were such obstetrical meetings. It was like sitting at the feet of a Delphic oracle. One of the things that used to impress me was the fact that Dr. DeLee had many wealthy patients to whom an heir was very important. Time after time he put these precariously pregnant women to bed for seven to eight months. What a way to have a baby!

Dr. DeLee's textbook, which was always referred to in

hushed tones as "the Book," was on continuous revision. Dr. DeLee always spoke of it with such a touch of awe in his voice, as if it were written by some third person. As a matter of fact, he had written it all himself with the help of very few collaborators. When someone would ask him what was in it, he would say, "I wish I knew." Because he was nervous he was inclined to deliver a patient too rapidly. On that account he timed all his deliveries. He had a clock on the wall which we would watch as he worked. He pulled so many seconds on the forceps, then relaxed so many seconds, doing everything by that clock.

DeLee's senior assistants at the Lying-In were Bloomfield, Horner, Urnes, Davis and Greenhill who was even then famous as editor of the *Yearbook of Obstetrics and Gynaecology* and the most interfering obstetrician I ever saw. He was always too impatient to wait for full dilation of any cervix. He did the only vaginal Caesarean section I have ever seen, an operation that deserves to be well forgotten—bloody and needless. Frank Whitacre (to be mentioned later) was the senior resident in charge. Beatrice Tucker was next in line to Whitacre. She later took over the Lying-In Dispensary and ran it as a philanthropy for many years. She never married, but she adopted a baby and named it after me. I wrote to her to thank her and to indicate how glad I was that I hadn't been to Chicago for a year or two before. Ed Colvin of Atlanta also interned there with me. Colvin later became well known for his work with Bartholomew on toxæmias. Phil Daley was the internist on the DeLee team, a very good and quiet little cardiologist. Junior to me were Arthur Hunt, Jerry Rogers who became clinical professor of obstetrics at the University of Oklahoma and Ed Dailey, who years later took over the Committee on Maternal Health and Welfare in Washington.

One of Dr. DeLee's new assistant professors at the Lying-In, H. Close Hesseltine, was a most indecisive person. His feet would beat a tattoo on the floor as he used the forceps. One of the interns who was a great wag, Bernard Botsch from Toledo, used to imitate him doing what he called "the Hesseltine clog."

One of the funniest things that happened at this time was the Hesseltine experiment on vulvar thrush, a fearfully itchy genital condition. Hesseltine persuaded a few trusting women patients to come in for free obstetrical care and personal delivery by himself at term on condition that he could pour sugar solution over their vulvas periodically to test whether this

increased the incidence of thrush (long known to be more frequent in diabetics whose urine is sugary). What we all laughed at was the reward, for Hesseltine was far from being the best obstetrician one could find. We suspected that the poor experimentees lost out on both accounts.

While I was there Mrs. Abramson came in for delivery. Her husband, Dr. Abramson, was a physiologist at the University of Chicago who had written a book on "progressive relaxation." The theory of the book was that the involuntary muscles could be automatically relaxed by relaxing the voluntary muscles. Voluntarily, therefore, one should be able to control the movements of the bowel, those involved in nausea and vomiting, or the muscular reactions of the uterus. His wife was under his complete domination. She made no sound, and didn't blink an eyelash through the whole delivery. This was long prior to Natural Childbirth, of course. Her special nurse who was on duty with her during the night came to me (since I was on duty that night) to complain about this. She said she could not tell how her patient was progressing, since she showed none of the ordinary signs of a patient in labour, and she would certainly "precipitate." That is exactly what happened. The baby's scalp showed without the patient so much as moving a muscle. While Dr. Abramson tore up and down the hall, the most unrelaxed man in Chicago, we tried desperately to get hold of Professor Fred Adair in time for the delivery. He didn't get there in time and she was delivered by the senior on night duty that night, Manuel Spiegel. How Abramson tore his hair. The sequel to this is also of interest. When I was Assistant Resident later, at the new Lying-In Hospital, Mrs. Abramson came in for her second baby. By now she had completely escaped from her husband's domination and yelled bloody murder throughout the whole performance. Abramson was as unrelaxed as ever, but Dr. Dieckmann got there in time to do the delivery, and Abramson had less cause for complaint than before.

Bloomfield was famous among us for his "little book." When a patient registered with him and asked what she was going to have, he replied, "a boy" and then wrote "girl" opposite her name in his little book. When the baby came it might be a boy, in which case the patient congratulated the doctor on his prescience and he would remark: "Oh, that's nothing. I'm always right." But if it happened to be a girl and the patient complained, the patient was shown the little book where "girl"

had been predicted opposite her name and she was reassured that she had misremembered. I have heard of this scheme being worked by others, but Bloomfield was the only person I ever knew to put the scheme into actual practice.

At the end of my time at the old Lying-In Hospital, I looked for a surgical job again and still couldn't find one. Dr. DeLee had just retired and Dr. Fred Adair from Minneapolis had replaced him. He suggested that I begin a three years residency in obstetrics and gynaecology at the new Lying-In which had just been completed, since there was no other opportunity. Thus was I precipitated into gynetics.

I began by spending six months in the old Dispensary again, this time in charge. I was the last person to go to it from the Lying-In, for Dr. Adair felt domiciliary obstetrics was dead and would gladly have seen Dr. DeLee's "baby" (or any other idea of his) go down the drain. Dr. DeLee rescued it from his private pocket, however, until finally Dr. Tucker and Dr. Harry Bernaron took it over, organized a women's group to support it, and gladdened the old master's last days.

I spent six months at the Dispensary on Maxwell and Newberry Streets and enjoyed that experience very much, even though the district in which the Dispensary stood was a poor one. Just across from us was the Marcy Centre, a Methodist Settlement House. It still carries on its cornerstone, marks of the bullets fired when, one day during my sojourn there, a load of gangsters tried to cut down "Barney," the local ganster chief. They missed him, but just before I left the Dispensary, Barney was finally gunned down in a little restaurant two or three doors from the corner.

Also while I was there, a bomb exploded and blew the front out of a little tavern one short block away. These people had been buying beer from the wrong bootleggers, apparently. The house across from the explosion had its windows blown out and it so happened that I had a delivery in the room with the broken windows the following morning. It was a rainy, cold morning which I will never forget.

Floating crap games such as were made famous in *Guys and Dolls* took place occasionally in the alley at the rear of the Dispensary, just under its windows. We could look out and down on the game. The gangsters taking part would give up their guns while they knelt to shoot dice, while proud little black boys held the guns in their hands, strutting around, pretending

they were big-time gangsters.

King Levinsky, who was one of the heavyweight contenders of the day, lived with his sister, Big Bertha, over her fish store, a block from the Dispensary. The King had a group of sycophants who followed him around, and once, to demonstrate his prowess, he committed a rape in broad daylight on an empty display table in a store further down the street. I remember Big Bertha's fish store because it had an electrified screen door. As soon as flies touched it they sparked and burned up. On Rosh Hashanah the street was empty of its usual Jewish merchants, and medicine men came in by the score. This was a remarkable scene. Each man had his own peculiar pitch, mathematical puzzles or minor feats of juggling or story-telling, and each went on to sell bottles of snake oil or pills which could do almost anything to any ailment, all at tremendous bargains.

I delivered a gypsy while I was at the Dispensary, and it happened that my father was visiting me at the time. He had never seen a gypsy delivery and was much taken with the experience. It was believed that anything a gypsy woman touches when she is in labour becomes unclean and must be destroyed. As a result, when we went into the ground floor room in the tenement where the gypsies lived, there was nothing in the room but the mattress on which the woman in labour lay. We had to wash our hands in basins which would be destroyed after we left. There were a couple of attendant women, but all the men had gone into other rooms in the house. There was another woman in the room on a mattress—an old crone who had had one of the first spinal anaesthetics administered in America some twenty years before and had been completely paralyzed in the lower extremities since. Fortunately the labour went well and everybody was pleased. We filed out in the early morning hours, taking care not to touch anything, as anything we touched would now become "unclean" also.

The "wrecking crew" was called one night to the third floor of a run-down tenement to see a young girl who had been delivering by breech. Unfortunately the head had caught, and despite strenuous efforts by the other girls in that house of prostitution, no one had been able to extract the child. I did so easily, the only difficulty being that the sanitary conditions were very bad. Somebody had knocked over a stovepipe just as we got there and the whole of the third floor was full of acrid smoke. In this smoke a number of prostitutes ran around in

various stages of undress, trying to be helpful, but really getting in the way with their extraordinary curiosity. The girl was obviously very ill. She had a complicating psoas abscess from tuberculosis of the spine and this psoas abscess got in the way of the expulsion of the child. We shipped her off to Cook County Hospital as soon as we got the child extracted. Either through our efforts or spontaneously the psoas abscess soon broke and a week or so later the patient died.

South Parkway was once one of the finest residential streets in Chicago and there I delivered a baby in the old Armour house. I remember scrubbing up in the old butler's pantry where there still were the bell pulls indicating "Mr. Armour's room," "Mrs. Armour's room," "Miss Armour's room," and so on. the cupboards were made of tremendous mahogany boards. Now there was a family living in every room. I delivered a baby in another home where the father of the family was a Pullman porter who made a hobby of collecting antique jewellery. It was a delightful collection.

We delivered every sort of patient in the home, sending to Cook County Hospital only Caesareans, patients needing transfusions, or those with sepsis or eclampsia with convulsions. What the intern and nurse and student (the first-line team) could not manage, the "wrecking crew" usually could. I was on the "wrecking crew" for the six months period I spent there. Dr. DeLee used to say, "You learn obstetrics at the hospital. Here you practice it." As an example, we had no pituitrin in our bags and controlled all haemorrhages by leaning hard on the neck of the emptied uterus while autoflexing it steadily with all our strength with the other hand. We draped the bed and the patient with rolls or sheets of newspaper we soon learned to prepare expertly. We quickly learned to touch nothing outside the field we worked in and where the child was to appear if all went well. Truly, almost nothing daunted us, and special angels worked for us for we achieved an incredible sort of record, as had our predecessors of the preceding 35 years. We were caught up in the total and loving discipline that surrounded old Dr. DeLee and we were determined not to let him down.

The New Lying-In Hospital

After Dr. J. B. DeLee resigned, Dr. Fred Adair of the University of Minnesota had come in to replace him. No two men could be more different from each other. It was inevitable

that they should disagree fundamentally and immediately. Dr. DeLee favoured home delivery, prophylactic forceps, low Caesarean operations, and did no gynaecology. Sir William Orpen caught Dr. DeLee in a characteristic mood in the famous portrait which hangs in the foyer of the New Lying-In Hospital. Dr. Adair was ambitious to do gynaecological surgery (which he never did well), seemed to be calm but was really irritable, was jealous of DeLee's prestige and authority, was very canny and never committed himself until the last moment to any diagnosis or course of action, always hedged, was iron-willed and was determined to be absolute. In no time at all Dr. DeLee and Adair were resenting each other and countermanaging each other's orders.

The battle grew steadily worse until DeLee resigned before his time was up. He stayed up in his room after that and tried to keep away from the wards except to finish his series of movies. It was a pitiful sight to see an old man trying to hide in his room, when every impulse he had was to go out into the hospital which he had actually founded single-handed, to show the interns what he knew.

Miss Balfour was the Night Supervisor. She was a sister of the great Donald Balfour, the surgeon at Mayo Clinic who was next in line to the Mayo brothers themselves at that time. Theodore Roosevelt had taken an interest in the Lying-In since his daughter had been delivered there. Any time he was passing through Chicago the ex-President would phone up and see how things were. Once he called up at night and said, "This is Theodore Roosevelt." Miss Balfour, who was momentarily substituting for the night operator at the time very promptly said, "This is the Queen of Sheba." She was never allowed to live the error down. Any further conversation is unrecorded.

Frank Whitacre was an old smoothie with good hands; he was a good bluffer, tactful, just the sort of fellow who would get ahead. He later went to Peking as an instructor and then came back to be Associate Professor or Professor (I am not sure which) at the University of Tennessee. Hunt, the resident who came after me, later became head of obstetrics at the Mayo Clinic. He was industrious, patient, self-sacrificing, and one of the nicest fellows I ever knew. He had a wine mark on his cheek which never seemed to disfigure him, although it was very obvious. I think that sort of thing usually makes a man. It certainly made something of Arthur Hunt.

I once saw a psychogenic death. A patient who had had a troublesome vesico-vaginal fistula through which urine constantly dripped was operated on by Dr. Adair. The operation failed and he told her so as she convalesced, and added that he would do it over again. Until then she seemed perfectly well and was at the end of a good general recovery. In two minutes she was dead.

Dr. Adair suggested that I should take my Ph.D. degree on a study of the iron in the placenta. Instinctively I knew that this was a silly problem and I didn't like the idea. I did, however, pass the German and French examinations for the Ph.D. I went over to talk to the Dean of Biological and Medical Sciences, Dr. Basil Harvey, about planning the rest of my Ph.D. studies, but I was foolish enough to make some quip about saving as much money as possible. He took instant umbrage at this and would no longer talk to me. Some years later, when we were working on vitamin E for the heart, Dr. Harvey wrote me for help with his angina and got a good result.

I never did do any work on placental iron, and looking back now, I imagine this was the parting of the ways as far as promotion at Chicago was concerned. Fred Adair, an iron disciplinarian, never forgave me for turning down such a suggestion of his and being independent.

I was trying my American Board of Obstetrics and Gynaecology as I left the Lying-In, so as an essential preliminary, I had to do a certain number of operations myself and deliver a certain number of operative obstetrical patients whom I could report on in detail as my own cases. It was almost impossible to pry these operations out of Adair, who liked to do all the staff operating himself. Time after time, I had to ask him despairingly to let me do an operation. Occasionally he agreed with poor grace. He happened to be my examiner when I later took the oral examinations in Milwaukee. Pathology was the subject assigned to him. Other examinees were given five to eight slides to diagnose. He gave me every slide on the table; there must have been thirty to forty. The academic place at the Lying-In I might have had, I suppose, was taken by Ed Daily, who came to the Lying-In just after me and was smart enough to put a photograph of Dr. Adair on his clean desk (where it could be seen through the door as Adair walked down the hall)

I began to write the odd verse when I was in Montreal, all addressed to Marion. At Chicago I attempted a little more; most

were intended to be humourous. I had the encouragement of my friend, Dr. Erna Kandel, who used to write good verses in reply.

Bill Keith, of my class in Toronto, later a distinguished neurosurgeon there, came down to spend a year at Billings in Chicago, just as I was finishing at the Lying-In. A number of us went downtown to a movie one night. We came back on the Illinois Central. He and the other fellows went through the turnstile ahead of me while I stopped to buy a ticket. They noticed that I had not followed them through the turnstile and Bill turned to call raucously: "Shute, Shute"—and all sorts of people raised their hands above their heads without a glance behind them. This was the Al Capone era in Chicago.

Dr. Dieckman, who was well known during those years for his studies on the toxemias of pregnancy, wrote a book on the topic which is still quoted. I was not his great favourite, mostly because he thought me a coward on the tennis court. I ducked fast balls coming at the net, as I had long ducked fists in the boxing ring, a habit I found hard to break. Dieckmann was a very stocky squat man, very forthright and Germanic, who was theoretically keen, but not so good practically. He followed Adair as Chief at the Lying-In. When my brother tried to get an appointment at the Lying-In, years afterward, Dieckmann blocked it because Wallace had been to too many places for his post-graduate work and therefore either "lacked stability or was not likeable!" If Wallace had gone to the Lying-In in Chicago, he would certainly have made a splash in American obstetrics. Dieckmann finally died of a coronary, some years after I had urged him to protect his angina with alpha tocopherol. He didn't.

Maurice Davis retired from the Lying-In in 1967. He was a very pleasant fellow, with great technical skill both in obstetrics and gynaecology. He and I did some papers together. They were among my first papers. We always got along well. He was editor of the *Journal of Fertility and Sterility* for some years. I always enjoyed seeing him when I went back to the Lying-In.

Out of the many experiments that I tried during my time at the Lying-In eventually came five papers, although I never published anything on pyelo venous reflux, or foetal electrocardiography. Rudesill and I published some of the first material decrying the use of thorotrust for the x-ray visualization of viscera. I published what remained the best review of torsion of

the adnexa, but I failed in all my attempts to reproduce the phenomenon in monkeys. Maurie Davis and I published some observations on narcosis in the infant produced by morphine given to the mother before delivery, and these remained relevant as long as morphine was used in labour. Ours, too, were among the first efforts to study foetal electrocardiograms.

I also published a paper on a very rare pathological phenomenon—invagination of the appendiceal mucosa, in which the innermost lining of the appendix folded back on itself like a glove. We happened to see sections of concentric rings, with the loose linings dropped out section by section as if they had been cut by a punch press. I think this is the only recorded case—but it cannot be as rare a condition as that would suggest.

On the whole it was not a bad record for a person who was busily engaged at all times in the routine obstetrical and gynaecological work of the hospital and certainly it broke new ground at the Chicago Lying-In. No resident had ever tackled such a variety of interesting problems before.

The most important thing that happened in Chicago was that I married Marion. She came down from Montreal to visit me in September 1932, and we decided on the spur of the moment that marriage would be a good idea. I have often thought of the good advice I have given others since. I urge people to "deliberate" and to "think things over." We had known each other for five years, but had really seen very little of each other. I suppose the principal thing that commended her to me was that she was the only girl I ever saw whom every other girl liked. I knew how rare this was and thought she must be a paragon, and a paragon she has been.

Toward the end of my stay at Chicago I wondered what I would be doing next. I still felt I would like to do surgery and I looked around for a surgical job, which still proved to be non-existent. I even travelled to Cleveland in a tremendous snowstorm with Dr. Clarence Weidemann one time to see if there were any opportunities there. Anyhow, there was no job in surgery that I could find. I then asked Dr. Adair to try to get me into the Kelly Clinic, as I was anxious to spend some time with Dr. Howard Kelly before he died, as he was then quite old. I don't know if Adair tried very hard to do this, as he undoubtedly could have arranged it if he had wanted to. In any case he told me there was no opening, so I gave up on that score, naively, and decided to come back to Canada. I wrote to Win-

nipeg to the professor of Obstetrics and Gynaecology at the University of Manitoba, but got a very discouraging reception there. Then I went down to Montreal to see "Butch" Little, but I caught him at a very low ebb in his own fortunes, when he was sick with a coronary, had a brother in London who was being sued for bankruptcy after the failure of the old family business, and his own practice was falling off in Montreal. He discouraged me about going back to Montreal.

I left the Chicago Lying-In Hospital in 1933 under a cloud, as far as Adair was concerned. He was prominent on the America First Committee at that time. He had asked for a statement from each of the fellows leaving as to what we thought of the training at the Lying-In Hospital, and how it could be improved. I don't know if the residents ever did anything about this request, but I gave him some details of our strong points and weak points, especially mentioning the difficulty of getting staff operations for the American Board requirements. I added my comment on his America First interest. Both of these items must surely have disgruntled him.

In August, after looking around, I decided to settle in London, Ontario.

Chapter Five

LONDON: A SKULK OF FOXES (1933-1940)

Judge me by my enemies, please
I have put much work on these.
They have often made me squirm
In my passage toward the worm,
Who hope to see me bleed or smother
And sooner meet their little brother.

My friends are fellows I have met
On trains, in business, or in debt.
If I had gone to other places
I'd have liked quite different faces.
I really didn't choose my friends
They happened—like my teeth or wens.

But, oh, my enemies I've made
Quite by myself, with no one's aid.
They do not like me—for myself.
They'd love my ashes on a shelf.
They'd flay me for a quid—or quo.
I'm proud of them. They hate me so.

Vere Jameson, *Sultan of Jobat*, 1947

In London I first talked to Dr. W. Pelton Tew, the Professor of Obstetrics and Gynaecology at the University of Western Ontario. He didn't hold out any great hopes but at least would take me on the staff. He told me that a rule had just been made in Western's Medical School that newcomers on the staff were to be on probation for a year. I found out afterwards from Dr. Fred Campbell that this rule was quite imaginary and designed to allow Dr. Cyril Sullivan to get his Edinburgh Fellowship. If he got it he would be taken on the staff, if he did not make it, I might be taken on. Albert Mowry was already in London in the most junior position on the staff. The rest of the

staff consisted of general practitioners like F. R. Clegg, my father's classmate and friend, and Edward Loughlin. Tew and Mowry were the only ones who had had any post-graduate training. Tew was an exceedingly poor surgeon and a very bland and specious fellow. Perhaps I can best tell what he was like by pointing out that once when he saw an achondroplastic dwarf he didn't recognize the condition and had never heard of achondroplasia. He didn't do any episiotomies for primiparae, even for breech primiparae, unless the conditions were very exceptional. Pre-eclampsia was treated by venesection. All anaemias were treated with ferrous sulphate. There were no manual removals of the placenta in retained placenta unless the placenta stayed in at least 24 hours and so forth. The most famous story to illustrate W.P.'s obtuseness was the story that Ken Richardson later used to tell with enjoyment. W.P. was in the doctors' room at Victoria Hospital, resting between cases, when Eldon Busby and some others were discussing the (then) recent landings of allied troops in Sicily. W.P. heard the conversation and said "Sicily, Sicily" in meditative fashion! Everybody in the room suddenly realized to his astonishment that Tew had forgotten where Sicily was, so Busby spoke up and said "You know, Bill, Sicily in the Mediterranean." Tew replied, "Oh yes, I served on a ship in the Mediterranean in the First World War. Sicily, Sicily" and walked out saying the word under his breath. Everyone looked at the others in astonishment.

Tew let me work in the antenatal clinics as a "voluntary assistant" and talked of doing some "research problems" (which he never could have suggested or imagined). I suggested a study on tuberculous endometritis, but there seemed to be no opportunity for this work at the Local Beck Sanatorium. Dr. Tew then suggested abortions, since Dr. Earl Watson, the Director of Laboratories at Victoria Hospital, had been making wheat germ oil in his laboratory, following the studies of Vogt-Moller in Denmark, and had been handing it out to various obstetricians in town to see if it helped their aborting women.

I arranged to lease Dr. Eldon Busby's office at 260 Queens Avenue. This building belonged to an old scrooge of a dentist, Dr. Albert Santo, and has since been pulled down to make way for the London Life Insurance Company's addition. The best indication I can give of Santo's popularity is that some years later he phoned another tenant, Dr. Steven Moore, the only orthodontist in town at that time and once President of the

Ontario Dental Association, to ask for his overdue rent. Santo said he hadn't been able to ask about it before because he had been ill. Moore asked him what he had wrong. "Oh," Santo said, "I broke my ankle." "Sorry," Moore said, and paused, "Sorry it wasn't your neck."

I actually moved to London on September 5th, 1933. I had decided to live and work in three tiny rooms (really one room 12 feet square, with two closets) on the second floor until Busby decided to move from the first floor. Meanwhile I paid Santo \$50 a month. I felt very lonely without Marion. By the end of the month I had collected patient fees of \$2.00 and my brother Wallace had come down to start his fourth year in Arts at Western. At night he and I pushed back the examining table, spread mattresses on the floor, and slept as well as we could, in atrocious ventilation.

I began to read on the abortion problem. Dr. Tew suggested I ought to try for a Banting Scholarship if I could work out a proposal sufficiently promising. I thought of doing tissue cultures and testing the influence of wheat germ upon them, but that had already been done. I then thought of testing for acetyl-choline to find out if it was elevated in the placenta and blood of abortion patients. I suggested that a study of the umbilical cord in various complications of pregnancy might be in order, as nobody had done much on cords for years. I felt that the antitrypsin in the maternal blood of aborters should be studied. If the placental villi eroded their way into the uterine wall by tryptic digestion, then abortions could be due to poor placentation because of too much antitrypsin in the blood stream.

It is very odd that no one had seemed to notice, then or since, that one of the most fundamental puzzles in connection with gestation is that the placental villi erode their way into the wall of the uterus sufficiently to anchor the afterbirth, then stop. What makes them stop? They could just as logically eat their way through the uterine wall. Yet such a phenomenon is unheard of in the millions born yearly. This is another instance of the lack of wonder in adults. We are conditioned to accept tremendous puzzles as matter of course events. Rarely do we ask why the sky or a bird's feather is blue, and if they are blue by the same mechanism.

We decided to send in a request for a grant based on any one or all of these suggestions and let the Banting Foundation select the most likely one. Marion came down from Montreal

for a few hours visit at the end of the month.

In November I started working on the acetyl-choline problem, got some fresh placentas from the wards, extracted them in alcohol, and tested the solution on muscle strip preparations under direction of Dr. Waud, the Professor of Pharmacology. They were weakly reactive. Next I began extracting some abortion curettings and got about the same quantitative result from a much smaller amount of tissue.

On November 15, 1933, we moved downstairs at 260 Queens as Dr. Busby had finally moved out. My father came down from Windsor with a friend in a truck and moved some bits of furniture as well as an old piano into our new quarters. Marion came up to stay with me at the end of the month and was appalled at the confusion. She should have seen it ten days before. Dr. James Crane opened the door one day with a genial smile, introduced himself to Marion, sat down on a packing box and chatted for a long time. He was an amazing man and did tremendous things for all the local medical students and doctors.

Thirty years earlier, after graduating from the University of Toronto, he had gone to practice near Iona, Ontario. He practiced successfully, snatched tonsils while husband or father gave chloroform, made the farmers' wills and helped everyone as needed. Finally he decided to return to London to teach pharmacology at the little University of Western Ontario Medical School, then holding classes in the old building on the northeast corner of York and Waterloo Streets where my father graduated in 1912. He did post-graduate work under the great Cushney at Edinburgh and later studied for a short time under Velyien Henderson at the University of Toronto. For years, Dr. Crane taught pharmacology by methods decades ahead of his time, giving lectures which stressed the value of observation and personality, and of treating patients as individuals rather than as "cases." He taught the students to count the steps into medical school, enumerate the lamp posts on Waterloo Street, count the proportion of brown-eyed to blue-eyed girls one met on the way to school—all this to practice the observing eye. He was very popular with the students. He lent them money, started their "old book" collections with gifts of old books, advised them where to start practice, what to pay for practices, how to handle patients and colleagues—in fact he was every medical student's friend and confidant. He and his wife had had

twins and another child. All had died in infancy. He made "the boys" his boys. As his popularity with the students grew, jealousy in the medical faculty increased. He was finally ousted as head of Pharmacology and Therapeutics. Then Dr. Crane organized and became the guiding spirit of the Medical School Alumni Association, put out a monthly bulletin filled with "personals" signed with various initials, most of which were his aliases. He ran the alumni association out of his own funds, with the help of one paid secretary. Fortunately, he had carefully invested his earnings in government annuities and was financially independent. He was permitted a few lectures each year, in which he gave little ten page brochures on medical personalities as prizes—a prize to the five of the class who stood highest in his informal examination after each lecture—and no one was allowed to win a prize twice. By the end of his course everyone had won a prize. I will never forget this man with his white hair, twinkling blue eyes, humorous mouth, ruddy face, expansive laugh and the shrewdest insight into people. A man who had a library of 2,000 volumes, mostly medical rarities.

Our days at 260 Queens Avenue were memorable. We had no bathtub and no hot water tap. Marion washed her clothes in a pan heated on the stove; our backyard was only cinders and very dirty (directly under the chimneys of the London Life Insurance Company next door). We had no refrigerator and when we wanted ice-cubes for our friends' cold drinks I walked the mile to the medical school laboratory and got them out of the refrigerator in the biochemistry laboratory. The result was they tasted of odd chemical combinations. We bought butter by the halfpound because we could not afford a pound. I sang in the church choir, as that was one way of passing the time.

When I had any house calls or hospital calls I always walked, unless they were too far away or too urgent, and then I took a taxi. Dr. Edward Loughlin and Dr. Edward Bartram, two contemporaries, also walked everywhere, as none of us had a car for our first year of practice. We bought our first auto with my father's help after about fifteen months of walking. It was a second-hand Ford.

I found it was impossible to know when fresh abortion tissue or fresh placenta were available at the hospital; thus the acetyl-choline study was stalled. I had, however, begun to collect fresh umbilical cords for a study on "abortion cords." I never published anything on this, but it seemed to me that the

elastic layer of the umbilical vein was damaged in cords of tox-aemic patients.

Once a week I assisted Dr. Tew with his operations at the Ontario Hospital (Psychiatric). This was a boring ordeal as he was a slow and poor operator and most of his operations there were just suspensions for retroversion (tipped womb). How suspending the uterus would help the insane I never discovered. I was never even allowed to close the incisions.

That fall I began to organize the Noonday Study Club of London for doctors 40 years of age and under. Dr. Crane got behind it at once. He saw it as a great force to get the young men to "meet and eat" and to train them to speak and present scientific and clinical papers.

My New Year's gift was a letter from Dr. Velyien Henderson, Professor of Pharmacology at Toronto and Executive Secretary of the Banting Foundation, saying that I had been awarded a \$1,500 Banting Scholarship for one year, but urging me to do no work on the acetyl-choline or cord problems. He said that the former study was useless as the substance was so unstable and current assay methods were so unsatisfactory. Accordingly, I immediately began collecting bloods on aborting women and trying to work out standardized laboratory conditions for their tryptic digestion. Professor A. B. MacCallum allowed me to use a bench in the biochemistry laboratory where I worked unhampered for part of every day for nearly two years on my "red water" tests. I could do three to six in a morning. Before I had finished I had done this test some 5672 times. How I grew to hate it! We were glad to get the scholarship since I was earning nothing in London and we had already begun to use Marion's slender savings.

About 35 doctors turned up for the inaugural meeting of the Noonday Study Club in February, 1934. Dr. Garfield Colling of Lambeth was elected President and I was made Vice-President. Dr. Kay Wharton became the secretary and Dr. Charles Ross, treasurer. The first paper was read by Dr. Hans Foucar on the repair of hare lip. I gave the second lecture, using Dr. DeLee's film on breech delivery. I was asked to show this film to the senior class in medicine before I returned it, but W.P. Tew did most of the talking at the presentation, even decrying episiotomy for primiparous breeches. I lectured at Chatham on the breech film, the only invitation that I ever had to Chatham (70 miles away).

By March I had decided that perhaps inhibition of proteolysis was characteristic of the blood sera of spontaneous aborters and was thus able to differentiate them from criminal abortions. I began to wonder if the vitamin E with which Professor Earl Watson had been working had any relationship to this phenomenon. Soon I began to believe that wheat germ oil acted as an antagonist to the inhibitor of tryptic digestion. In May I foolishly and naively sent an unsolicited interim report on my work to the Banting Foundation. I got back a blistering comment from Henderson. I kept on, hurt and unbelieving. By August I suspected that oestrogen was the inhibiting factor. By that time I wondered if I was ever going to get an appointment to the Medical School, since Cyril Sullivan had just come back with his Edinburgh Fellowship and was going on staff promptly, and would now be senior to me.

Fred Coates, the photographic technician in our biochemistry laboratory, acted on the principle that anyone can tell the truth but that it takes more brains and ingenuity to falsify. He was very inquisitive and once this almost got him into real trouble. He overheard fiery Dr. John Fisher shouting at his technicians in the pathology laboratory, so he put an eye to the key hole to see what he could see. At that moment Fisher opened the door and yelled: "What are you doing here?" Without a moment's hesitation Fred straightened up and replied: "Waiting for a street car, sir," and walked off casually.

That August, Marion and I drove to her home in New Brunswick. It was the first time I had ever been east of Montreal, and the first time I had met Marion's family. We also visited gray old Fredericton, taking Marion's father on the first trip that he had made to Fredericton in 35 years. That was the last time we saw him, as he died the following winter from pulmonary embolism.

Wallace, who boarded with us, became friendly with Gerald (Ted) James, and through Ted we met Dr. N. C. James, his father. He had been on the staff of U.W.O. since 1896, had once toured England on a bicycle to collect donations to preserve the university, had never earned more than \$2,000 per year, and then retired in 1931. He had turned down a chair at Chicago and a deanship in New Zealand. He had become president of his university in 1908, the year in which he finally got freedom for the university from the sponsoring Anglican Church and had made it non-denominational. In 1924 he

had been made an LL.D., and was too moved to speak to the Convocation. He spoke Latin and German as readily as English, had a phenomenal memory for the printed page, but never could learn to drive a car or play bridge. He was once caught trying to put on his host's rubbers over his own, and christened his baby Edith because he could not remember the name decided on, Mildred. Once he wore a night shirt to play golf (by error), and could not keep its hems stuffed into his golf breeches, to the amusement of the club verandah and locker room.

In my first year in London I collected \$489 in income. In my fifteenth month I collected nothing. Only Fred Banting, I suppose, had ever done worse in London—\$269 in his first year—before he sold out and went to Toronto to work on dogs and diabetes.

In November 1934 I went down to Toronto to see Dr. Henderson, Dr. Hardolph Wasteneys, and Dr. Guy Marrian. Dr. Wasteneys was Professor of Biochemistry and Dr. Marrian, his assistant, was very knowledgeable in hormones. Henderson gave me a terrific verbal lacing, told me my report was a hodge-podge, had no scientific value, and that there was very little chance of having my Banting Scholarship renewed. He told me to revamp my whole report into a couple of reasonable pages. It was a crushing hour and a half.

I began my own rat colony at the Medical School; feeding, breeding, and autopsying my own rats kept on a vitamin E deficient diet. I learned a lot about rats and collected specimens of their coronaries, aortas and femoral arteries for study later. I had begun to suspect vitamin E deficiency had vascular consequences.

My Banting Scholarship was not renewed. This was a terrific financial blow. We borrowed \$500 from my old university friend in Nevada, Dr. Bill Ririe, and that saved us from shipwreck. By April, Tew was insisting that I get my Canadian Fellowship. As I see it now he never expected me to make it. It was just his way of pushing me out. He told me that my American Diploma "didn't carry much weight around London." I was getting pretty disillusioned with Dr. Tew by this time. In May I had three papers ready on my anti-proteolysis test. I decided to send these to the *Journal of Obstetrics and Gynaecology of the British Empire*. They had been read by Tew, Watson and Professor Fred Miller, F.R.S. of Physiology. Each was unwilling either to bless them or damn them. Each

was sure none would be accepted for publication but they were.

Some friends and I got a body in the anatomy laboratory and dissected it all summer. We were to sit for the examination for the Canadian Fellowship in the Fall. I remember our dissection was very slow, the weather was very hot, and practice was very poor at the time. I got more and more disgusted. The other two fellows never actually finished their dissection and, while puttering about, began writing "famous sayings" on the blackboard in the dissecting room. One contribution was: "The only Fellowship I ever wanted was bed fellowship." I studied that summer on the green north campus beside the quiet tennis courts. It was our only way of getting outdoors.

Professor Alan Skinner's little boy came down one day when I was in the lab pulling the skin off a leg. He danced with glee, shouting: "Skin me too, mister."

In October, 1935, I wrote my Fellowship examination in Surgery in Toronto. If I had been five minutes later in getting there I would not have been allowed to write it, and my summer's work would have been wasted. In the Pathology examination, Dr. Oscar Klotz used such ambiguous English that I didn't know what one of his questions meant, so I wrote down that it meant either "this" or "that" and I would answer both questions, which I proceeded to do. I passed the written examinations and went down on October 21 to the Royal Victoria Hospital in Montreal for the orals. Only one candidate was there for his Medicine oral (which had never been passed up to that time, five years after the institution of the Fellowship). This was Alan Plunkett, who later was secretary of the Royal College for many years. But there were three others up for surgical orals. I was assigned an old Jew who spoke only Yiddish. He had a hernia and prostatic hypertrophy. There was also a highly jaundiced old lady who spoke only French; she had a bile duct obstruction, probably malignant. Then I had two "spot" cases — one of them was the first empyema necessitas I had ever seen, another the first case of tumour of the male breast I had ever seen. I was the last to be quizzed by Drs. Gallie and Archibald. They gave me quite an easy time of it, really. Before they began, I said: "Gentlemen, I think I owe it to myself to state before this examination commences that two of my patients speak no English, and this morning I have taken the first histories in German and French I have taken in a number of years." "Oh, well," said Professor Edward Gallie, "This is a *real* examina-

tion!" Professor Archibald corrected my history on the old French lady; I insisted on my understanding of it so he jabbered with her further (while Gallie looked blank) then admitted I had been right. As we left the room Gallie asked how it was that a Kitchener doctor and I had written such good anatomy papers. I told him I had been dissecting all summer.

After lunch we went back for our quiz in Pathology. Again I was last. I went into a room where Dr. Oscar Klotz, Dr. "Pop" Rhea, Dr. "Archie" and Dr. Gallie were seated around a table. Oscar showed me a subarachnoid haemorrhage and asked me his usual oblique questions about it. I had forgotten his routine type of descriptive answer (no interpretations wanted) and hashed up my answer, taking care to make it intelligible to Gallie and Pop Rhea, who were looking as puzzled as I felt. Then they fished out a fresh autopsy specimen of metastasis to the femur and asked me to differentiate it from a primary tumour at that site. I asked to see the adrenal and kidney—it proved to be a hypernephroma case. From then on I could scarcely fail.

We all went out to cool our heels until Dr. Bazin of the Montreal General came out and beckoned us to one side, one by one. No one knew what had happened to the others for a moment. Anderson of Edmonton, passed. This was his second attempt. The other chap from Edmonton failed, as did the Kitchener surgeon. Dr. Bazin told me that I had passed. Plunkett had passed on this his third attempt, Dr. Bazin called us over to the Medical Building to "meet the College." We were called by name in turn, walked into a small room where Rhea, Bazin, "Archie" and others sat about a small oblong table. Professor Duncan Graham, President of the College, stood to welcome us. He was the only one gowned. He mumbled a brief rigmarole of welcome and we were then dismissed.

Next morning we visited Mr. and Mrs. Robert Stalker. He was an unemployed old Scot, who sang "The Road to the Isles" with unforgettable brogue and feeling. Nan Stalker was a little wisp of a woman with enormous enthusiasm and friendliness, radiating laughter and hospitality. Lately, she had been supporting her family by teacup readings of unusual merit. Nan insisted on reading my hands on this and one later occasion. Among a number of uncanny observations, she told me that my birthday was on October 21 (it is), that I would live to between 70 and 80; that I would never be rich but success would

come slowly and steadily; that I carried my father's watch (I did); that I would have at least one more son (eventually I had three); that my father's work had something to do with automobiles and that he was highly regarded by his associates; and that I had two bad academic enemies (presumably Tew and Watson). Further she predicted that I would have an accident on the way home (we did); that I had been working a long time on a problem that had eluded many students (abortion and tox-aemia) and would have success with it, and that it had to do with the blood and the beginnings of life. She could "see" white animals in cages, but could not discern if they were rats or rabbits. "Had I ever gone to Edinburgh?" she asked. I said "no." Well, she could see me standing there with Princess Street in the background (this happened in 1969). She went on to say that I would cross the seas, receive an honour at the hands of a princess and win great fame. My father would be much pleased, as would my mother, but he would not display his satisfaction (this did not happen); that I should shortly hear of the death of an old and long-time friend. He was a man known on both sides of the border (Could this have been my father?). I immediately thought of Dr. DeLee when she mentioned this. Finally, she said that I would have a long and happy married life.

I applied for a Banting Scholarship again but was refused. The topic I suggested was a study of the formation of congenital anomalies due to hormone-vitamin defects and imbalances. In April 1936 I had quite a quarrel with Dr. Watson. I had been insisting that wheat germ oil should be kept cold and not be allowed to become rancid, but Dr. Watson thought this was nonsense and suggested to the Canada Pharmacal Company that there was no need to keep their "Viteol" cold. That was the preparation we were all using then in London. I was having some quarrelsome moments with Tew at the same time. He even threatened at one time to stop me from doing Caesareans and such "radical" procedures on my own private cases. He sent Mowry and me a little circular letter pointing out the necessity of maintaining the high standards of the Department of Obstetrics and stating that no one should teach routine episiotomies and that there should be no forceps or breech extractions on staff cases by Mowry, Sullivan or me. Also in April I presented a paper on menorrhagia to the Ontario Medical Association. It was my first speech to an important and large audience. I ad-

vocated extensive empirical use of thyroid extract.

At the formal luncheon of the O.M.A. that year, the principal speaker was Lord Tweedsmuir, the Governor-General, who addressed about 2,000 people at the London Armouries. His excellent speech was overshadowed by the vote of thanks given by Dr. John Ferguson, the only living member among the charter members of the O.M.A. Dr. Ferguson was over 80 and about five feet tall.

Professor Walter Thompson of the School of Business Administration decided to see if the Kelly Company, a pharmaceutical firm that he was helping to reorganize, could dispense wheat germ oil. They began making a cold-pressed oil in a linseed oil factory at Baden. About this time Tew had a letter which pointed out that wheat germ oil might be carcinogenic and Watson began some studies on mice to see if this were so. I am sure they hoped it would prove true—which would stop me working on vitamin E. I got Dr. Tew's permission to read a paper at Hamilton and at the Canadian Physiological Society meeting in Kingston in the fall.

For three years I was supposed to have had a Meek Scholarship which hopefully would net me about \$300 a year. Each year, however, I was told by Professor Tew that no money was forthcoming from it because it was invested in the bonds of a township that had never paid a dividend. I did not know until 35 years later that the legacy of the Meeks was \$500,000—to be divided between the Victoria Hospital and the Medical School, and that it took 43 years to reduce it to \$50,000. At least I had no part in its dissipation.

On October 14, 1936, our first child, Jim, was born. Toward the end of Marion's protracted and difficult labour, I finally had to do a very difficult mid-forceps and at 3:30 a.m. Jim was delivered. The shoulders were very difficult. He was quite blue and I feared I had broken his skull. I was just numb with despair. Dad, who had come from Windsor to help, said: "He was a wonderful boy, Evan." Those were the most terrible words I ever heard. Finally Jim began to breathe. Poor Dad got only two hours of sleep and then went back to Windsor. He also seemed quite stunned by the experience, realizing that he was a grandfather at last, and by a close squeak. When I was driving him to the bus he kept saying, "He's such a wonderfully fine child." We had a hard time naming him, since my father was too modest to let me call him James, and my mother liked

almost every other name better. We simply paid no attention and called him Jim as we had long intended to do. I have often wondered what would have happened had any of my colleagues tried to deliver him. The trouble is that I know the answer.

I had to tear myself away on October 30 to attend my one and only meeting of the Canadian Physiological Society at Kingston. I had asked for a chance to present a paper on "The Endocrine Background of the Toxaemias of Late Pregnancy" and was the only "non-fundamental" paper on the programme. I gave my paper to Dr. Tew to look over about four days before the meeting, as I expected he would alter it enormously if he had more time in which to do so. I was greatly surprised, however, to receive no phone message to "come over to the office at four" and wondered what his ploy was to be.

The night before I left I was Dr. Crane's guest at a meeting of the Harvey Club in the Y.M.C.A. Dr. Crane was the speaker and talked on medical book collecting as a hobby. Each man present was asked to take part in the discussion in rotation about the table. Tew was first, sitting directly opposite to me. He had been avoiding my eyes all evening, looking very morose. I had been the essence of good humour and spontaneity as if unaware of his spiritual state. So Tew, in his slow and unctuous way, dilated on the wonders of the *Religio Medici* and especially on its poem which ends "Depart not though, great God away." A Dr. Armstrong piped up to state that he had a copy in his pocket and asked Tew to read it aloud to them. So Tew, in his perfectly hellish mood, had to read aloud that lofty poem, ending with the lines above, which were a delightful commentary on the status of his medical mind at the moment. His voice was harsh and husky and he stumbled. I had never seen him in such vocal difficulties. Still there was no sign of Tew halting me. He left the meeting early, with no recognition of my presence. Dr. Watson remained and was especially suave and charming—which would have warned me if I had known him better.

I drove to Kingston with Drs. Bruce MacCallum and Russel Waud. The papers were very technical, and of small significance. Sir Frederick Banting sat there smoking throughout without any other sign of life. Dr. Charlie Best was also silent. Only old Velyien Henderson in the front row moved and seconded each motion, discussed or criticized each paper, or walked up and back down the aisle scanning faces in his peculiarly grimacing and insolent way. The programme for the

afternoon went rapidly and ended at about 4:00 p.m. The Chairman asked some of the evening speakers to volunteer to go on at once instead. I was the only one to offer to do so and said I could be ready in ten minutes. When the meeting reassembled we were told that several who had wanted to hear me were in the Council Meeting and so I would be asked to open the evening's meeting as originally listed.

At 8 p.m. I delivered my address, perhaps too loudly and too rapidly. I sat down, and was barely seated when Dr. Henderson arose. He said at some length that he "felt like one of the patients Dr. Shute had described—dazed but co-operative." He could not understand my paper, in fact it was not understandable. It meant nothing. Indeed, he wondered what had prompted its presentation at the meeting and what it purported to show. After more of the same he sat down. There was a stunned silence. There had been a moderate amount of discussion of previous papers, but none after this for about an hour. He had doused the meeting with cold water. Waud was sitting next to me. He leaned over and said: "That play was Watson to Miller to Henderson." Dudley Irwin of the Banting Foundation was seated ahead of me and he leaned back to say behind his hand: "The old fellow hasn't changed much, Shutey. What he can't understand nobody can understand." After a painful pause, the Chairman turned to me and asked if I cared to reply. I merely rose and said: "Mr. Chairman, there seems to be very little to say," and sat down. I reckoned Henderson had overplayed his hand. That paper was the first announcement of the use of oestrogens for eclampsia and of alpha tocopherol for abruptic placentae, two of my best medical suggestions.

The next day we drove home, talking about the Toronto Medical School history, Henderson's unpopularity when he had lectured for Dr. MacCallum's father to the latter's class, how Collip and Banting had pummeled each other as recorded in Beale Harris's book. It was all uninspiring. I could understand the reason for Tew's and Watson's silence about the paper now. They had reckoned that Henderson would both kill me and bury the bones.

In November of that year Tew accused me of being partner in Kelly's wheat germ oil company and being involved in the manufacture of wheat germ oil. The Kelly company circulated a little pamphlet which contained some remarks from my Kingston speech. The secretary of the Canadian Physiological

Society, Dr. Ettinger, wrote me to complain about this. Fortunately I was able to allay their doubts by an affidavit showing that I had no personal interest in the Kelly company and that this material had been circulated without my knowledge. Very fortunately this was done by me even before Professor Ettinger's letter arrived. I imagine Watson was behind this little foray and probably hoped to have me ousted from the Canadian Physiological Society for "disgraceful conduct." And yet several London physicians held stock in local pharmaceutical houses at the time and for years afterwards

On February 23, 1937, my father died. The next day we went through father's books, instruments and drugs. It was heart-breaking to discard the dead man's treasures. I'm glad I only had to do it once in my life.

Wilfrid and I drove up to Berkeley for the funeral. I could recall so many old scenes, the houses we had lived in at Holland Centre and Berkeley, and the mill pond where I had first skated and complained at every fall while Dad laughed heartily. We put in Dad's hands the little snapshot of Jim and I taken but last New Year's, a photograph he had shown so proudly to his friends in the previous two weeks.

On the way home we discussed some of the strange events about Dad's death. He had told his friends at Ford just two weeks before that he had done all he had ever planned to do now that he had graduated his three boys from college. Mother and he had talked over all their affairs on the day of his sickness. He had remarked then that he had never had a pain in the appendix in his life.

In March I tried to get on the staff at Vanderbilt and Chicago, but Adair cut me down in a hurry at Chicago and I heard nothing from Vanderbilt. In March I decided to submit my papers for publication without the permission of the Medical School's department heads, since they automatically tried to block them and the papers were more important than my position on the school staff. I decided to burn my bridges behind me. I sent off the paper on the endocrine background of toxæmias, read at Kingston, to *Surgery, Gynaecology and Obstetrics*. The paper on oestrogen theory of eclampsia was accepted by *Endocrinology*. In April I submitted my three papers on wheat germ oil to the *American Journal of Obstetrics and*

Gynaecology. It accepted them. These papers made the first announcement of the use of alpha-tocopherol for premature labour, of high dosage, of alpha tocopherol idiosyncrasy, of its non-effect on normal labour at term, of seasonal changes in its dosage, of its effect on anomalous births and on dysmenorrhoea and anal pruritus. In April some excitement developed on rounds because Tew and Sullivan were suspecting that wheat germ oil produced chorioneithelioma and breast cancers, especially in the light of Rowntree's recent paper on the sarcoma he found in rats taking wheat germ oil. I told them that it was such an important matter that they should start a monkey colony or at least a rat colony for active experimentation on the problem.

At the end of April that year we had the great flood which submerged West London to the second story of the houses and was a big factor behind building Fanshawe Dam years later. I had pneumonia at that time with a transient heart block.

Dr. Tew and I had an interview about the papers that were published and I admitted to him that I had broken his rule on publications. I said I thought the papers were more important than my position on the staff of the University of Western Ontario. I didn't care whether I continued on the staff or not. Tew suggested that one way out for me was to apologize to the dean and to him. I apologized and he said we could just forget it all. I suggested to him that there was a really good problem to be done on the hormone control of arteriosclerosis. The arteries of vitamin E deficient rats could be studied, but I wasn't going to embark on any more studies in London until it was clear that my work was not overlapping somebody else's studies and hence nobody was going to feel over-reached or over-looked (with the jealous Dr. Watson in mind, of course). Tew thought we ought to have a research committee set up to supervise and encourage local research. I pointed out that some of the potential members of such a board would veto everything I ever attempted and Tew admitted that "there might be some personal ill feeling in some quarters" which would hinder me. I pointed out that the study I had in mind involved good histological work and that I had had 100 cord sections sitting around in bottles for three years because I had been unable to get them sectioned. Dr. John Fisher had said that cover glasses for slides were too expensive. I really thought this decision might be the turning point in our relations, since the only punishment he had left was to fire me

from the medical staff, and he saw now that I was indifferent to expulsion and cared only for my researches and publications. However, I never could get those blocks cut and so threw them out in another two years. So far as I know no one has ever duplicated this potential study which might have been one of the most informative in the history of arteriosclerotic disease.

One of Dr. Tew's favourite witticisms dealt with circumcision. He would quote from Hamlet: "There is a destiny that shapes our ends; Rough hew them how we will!" One of his papers read at many medical meetings discussed "The Lip Zipper," a mythical device designed to stop surgeons from talking at operations. This was delivered with great pomp and circumstance, unbelievable as that sounds, and before serious medical groups.

On December 29 I had my poem, "Gratefully," accepted by *Canadian Poetry*. This was my first poem that was published. In March, Alan Creighton published a couple of my poems in his *Canadian Anthology*. I nearly applied for the Obstetrics chair at Baghdad in March of the next year, but saw the advertisement too late. Dr. Tew suggested a post in Calcutta he had seen mentioned in *The Lancet*!

That fall I drove to the Canadian Medical Association meeting in Halifax going by way of New England. I talked to the meeting about the common disorders of menstruation. After the meeting, Dr. McLellan, the Chief at Dalhousie, gave all the obstetricians a lobster dinner. Among those at the table was Dr. Benge Atlee of Dalhousie, the writer of detective stories. He was an excellent gynaecological operator, dogmatic, strong-minded, humorous. He told me that he had never done any writing as a student but began after he settled in Halifax "to support himself in the style of an obstetrician in a town like Halifax." After dinner, Dr. Irving, professor at Harvard, introduced himself to me, telling me he was very interested in wheat germ oil. He was a very subtle, unassuming fellow, who was famous for the immortal doggerel on "Big Mary was in Labour."

Dr. Kay Wharton and I, despairing of our new endocrine clinic, wrote to Drs. Hale and Tew, pointing out that our average attendance at the weekly clinic came to three cases, that we were almost never referred any new cases, that we had nothing but thyroid extract and yeast to give them, that we needed some students and some co-operation. I decided to

resign from the clinic by Christmastime if nothing was done to help us. We had had just one consultation from the gynaecological service at that time.

I attended the American Association of Obstetricians, Gynaecologists and Abdominal Surgeons at White Sulphur Springs, going as guest of Dr. J. E. Davis of Detroit. He asked me to write the obstetrical pathology section in a text of pathology he was preparing, and I agreed to do so. I went down by train and in the smoker got talking to Drs. Yates of Detroit, Litzenburg of Minneapolis, and Carroll of Toledo. Litzenburg told us how Red McKelvey had obtained his Minneapolis chair. One disappointed candidate wrote to the Minneapolis dean to say that McKelvey was a "foreigner." Litzenburg replied: "Yes, that was our second great mistake in this country. The first was bringing in Osler."

The meeting was interesting. I discussed Ed Colvin's paper on toxæmias and Greenhill's on monsters, but I didn't do very well. We heard old Dr. Potter strike out to defend his son's paper on breech deliveries.

In December of that year I went down by bus to Oklahoma City to visit Jerry Rogers and to see if there were any obstetrical jobs in that area. I was regularly introduced by Jerry as "the wheat germ oil man" and talked to Professor Ed King of Tulane University about it. I heard that Adair had put me off the programme for the International Obstetrics Congress the next year. I approached Dean Patterson while I was in Oklahoma City to ask if he had any jobs in obstetrics and gynaecology. He was not interested. I talked to Werner of St. Louis at his exhibit. He was the man who proposed the "male menopause." Frank Whitacre was at the meeting. He had just got the chair at Peking, about which he was very pleased. I called at the Lying-In on my way back and had a good visit with Maurice Davis, Hesseltine and Dieckmann. I called on Professor F. L. Adair in the afternoon. He was apprehensive and didn't enjoy the conversation.

Wallace was secretly married in Montreal, in October, which got over mother's objections to the situation very well. Wilfrid had been married in May in Toronto.

On New Year's Day, 1938, we induced Marion at home. After two hours Roberta arrived. I was beginning to get a little practice in obstetrics by then, but still no gynaecological surgery. My note on seasonal variation in oestrogen levels in the

blood was published in *Nature* and the one describing the value of alpha tocopherol for senile vulvovaginitis and pruritus vulvae.

Adair promised to list me among the contributors to his book on obstetrical medicine. The chapter he had me do was the revision that Arthur Hunt and I had made on the DeLee technique for home delivery. But when the book came out there was no mention of my name on the chapter head, which I thought was very poor of him.

DeWitt Wilcox and Ken McAlpine arranged a dinner for me at the Highland Golf Club in London before I went to England for the First Vitamin E Symposium. George Ramsey, Professor of Surgery, and W. P. Tew were amongst those present. Dr. Ramsey made a little speech about the puzzling problems of the hormones and urged me to come back, to continue where I left off, and "not be discouraged." Dr. Geddes remarked that no one else from this school or district had ever been invited to England to speak before. They presented me with a little billfold.

I made a wry little speech of thanks which enabled me to summarize my opinions of Western up to that moment. I said that English speeches could have no terrors for me after this; the wheat germ oil, which I had planned to say helped lactation, certainly was productive of a great lactation of humankindness at least, as the meeting showed. I realized they were toasting my work and not me, for, as Burns indicated: "This man is but the guinea's stamp, the work's the work for a' that." I continued, thanking some present by name; Dr. Crane whom my father had told me of long before I came to Western was a great instance of cardiac hypertrophy, a diagnosis I had been able to confirm. I had heard of Dr. Madge Macklin; she was interested in the only kind of inheritance to which tax collectors paid no attention; and Dr. Charles Macklin whose successes had never given him emphysema; this was ascribable, I presumed, to efficient inter-alveolar ducts. I owed the Dean much for his courtesies, also Dr. A. B. MacCallum, who had helped me greatly during the progress of my work and had accorded me something hard to get, what Hitler called "lebensraum." Dr. Gordon Adams had also helped me greatly during my work, and his wisecracks could make even the metabolism of phenylalanine interesting. In my own department I thanked Dr. Tew, who had taken me in when no other Canadian medical school seemed

anxious to do so. I had gone to Queen's, for instance, to interview them there and the old professor of obstetrics, when I said I had been with DeLee for a while, asked, "Who is DeLee?" Dr. Tew was truly interested in research, I said, something not true of all senior clinicians. It was true that we had not always seen through the same eyes, but stereoscopic vision was often superior to views through identical lenses. Dr. Albert Mowry had befriended me much; he might be termed the other end of the vitamin E axis. I thanked Dr. Eddie Loughlin for his kindness. I suspected his enthusiasm for wheat germ oil had been somewhat dilute, but he had taken pity on a fellow whose grandfather hailed from Cork. Dr. Clegg I was also indebted to, my father's classmate and friend. I then acknowledged my debt to the one who had never wavered whether I lost faith in my work and myself or not—my wife. Research wasn't too difficult, I said. It merely sought to step one step further from the known into the unknown. It was not esoteric. Clinicians could do it, as witness the work of the great *orthopedist* Banting. It wasn't expensive. My five years work had probably cost the medical school less than \$100. But if Banting had wanted to operate on golden dogs it would still have been to the financial advantage of the school to supply them. "Uncle Jim" Crane had given me a copy of the *Decline and Fall*, so that I knew how all of our university systems dated from the Renaissance when Byzantine scholars had been chased out of Constantinople by the Turks. Now we once again saw great refugee scholars adrift and going footloose throughout the world. Our school should harbour some of these men, not only out of mercy and sympathy, but also for our own enlightenment. Our careers depended on the school. It was time we took proper stock of the situation rather than chased the government for more funds.

After I sat down Ed Bartram and DeWitt Wilcox spoke to second my remarks and tell what difficulties I had faced. Dr. Ed Spence told stories. Hugh Fletcher told how I'd begun my high school course in Strathroy using his books, and Beaumont Sexton told of my entrance examination at 9 years of age, of my high school pugilism and my intercollegiate boxing. It was quite a dinner for 1939.

My trip to England got off to a bad start as I left my passport behind and had to telegraph Marion to send it on to Halifax. I sailed about the time that Mussolini marched into Abyssinia and for a while it was undecided whether I should go

or not. As a matter of fact I had taken my bag out of my cabin the night before we sailed. The boat personnel thought I had cancelled my voyage and sent my mail ashore, which caused me some disappointment.

Before the London meetings I had a chance to look around Plymouth. The *Repulse*, on which the King and Queen were soon to sail for Canada, was at anchor there. I wandered about Exeter, through Devon by bus and Hampshire. In Winchester I stayed at the Eclipse Inn and played darts in the public bar. Everywhere I went I marvelled at the antiquities and absorbed the pleasant countryside.

War was in the air. There were large areas of covered trenches in St. James's Park and the noise of the construction of bomb shelters under the buildings in Whitehall was nearly deafening. My bus driver estimated that about 75 percent of any German raiding air force would be destroyed in its first attack.

I saw most of the usual London sights, including a play at the Haymarket Theatre—Coward's *Design for Living* with Diana Wynyard and Rex Harrison.

On April 22 I went over to the Congress on Vitamin E at the School of Hygiene at Gower Street. There I met handsome little Alfred Bacharach for the first time. He was the secretary and organizer of the meeting. He was short, thin-faced, with long wavy hair, full of wit and a good extempore speaker. He was a broadcaster, the author of detective novels, and had edited several books on music. He had worked for years on vitamin assay methods. He was a great authority on boarding laboratory animals. His use of English was remarkable and he was a keen and witty critic. A year later I invited him to send his family out to Canada to me for the duration of the war. He refused to do so because he "loved them too much." His obituary in the *British Medical Journal* for July 30th, 1966, was memorable.

He introduced me to Professor Nixon (he later worked in Hong Kong) and one of the three obstetricians present, Professor Drummond, the chairman of the Arrangements Committee (the man who was murdered with his family in France a few years later in a tremendous tragedy). I also met Professor Todd and Mr. Sweeten who was the husband of Margaret Barrie, the biochemist. She was too pregnant to attend so they asked me out to their home the next day, since she had done so much to

confirm my studies. I took part in the discussion in the afternoon.

Later in the afternoon I met Professor J.F. Browne. Dr. Vogt-Muller's paper was read in his absence by Drummond. I followed with my paper and didn't do too badly. There was a great deal of discussion summed up by Professor Browne, who said that the claims of most of the speakers would cancel each other out. He remarked that habitual abortion had been successfully treated by vitamin C, the serum of pregnant women, even by cold baths. I was called on to reply to him and tried to make some humorous points. In the evening the meeting broke up, Professor Drummond took a party of us to the Gargoyle in Soho, which he called the most respectable night club in London. There were original Picasso drawings on the walls.

Mary Margaret Ogilvie Barrie was a niece of the late Sir James Barrie, the novelist. She had lived for a year in the house in Thrums but her uncle always deliberately pointed out the house across the street to visitors as being the site of the "window in Thrums." She described to me for the first time true eclamptic-like convulsions in rats taking a high ration of vitamin E. She was so ignorant of medicine that she didn't know what eclamptic convulsions were like—in fact she didn't know there were such things. I was almost benumbed by this amazing bit of information bearing on my theory that eclampsia was due to low oestrogen levels, which could probably be produced by a large amount of the antagonistic vitamin E. There was apparently a particular autopsy appearance in rats. She wanted to study the performance of her vitamin E-fed rats after delivery. I suggested that she study their intelligence if she could. Margaret herself had begun to show taxæmia and had bled once about a week before. I advised her to go back on the wheat germ oil she had recently deserted.

I went over to University College to demonstrate my serum oestrogen test to Drummond, Cuthbertson, Mason and Baccharach. While I was there, abrupt and burly J. B. S. Haldane dropped in to ask us if there could be a vitamin overdose. Mason told him about the blush from nicotinic acid (niacin).

When I arrived at Southampton to catch the *Normandy* home, I was told that she wasn't on the day's sailing list. I dashed down to the French Lines office only to find it closed. Then I was told that the *Normandy* was lying in the harbour and that the tender had just gone out to her. I tried to get a speedboat to

take me out, but all the officers had gone to supper. Then I tried to get a plane to Plymouth where the big ship was to call to pick up gold bullion. All the planes were out. Next I tried to get a taxi but I had only \$8.00 in American money to get me to Plymouth. No one would take a chance on me until I reached the last man in the cab ranks. He had an old Chrysler and was prepared to take my proposition on trust. It was getting dark and we had about four and a half hours left before the tender would leave Plymouth at 1 a.m. We drove the 133 miles in three and a half hours, missing the New Forest ponies wandering across the road. He charged me £12.19.6d for the whole trip. At its end he wouldn't take any of my money but trusted me until I got home and could send it to him. I went out to the *Normandy* in the tender, standing on two million pounds of gold bricks being sent to the United States for safety. I was the first passenger in years to embark on a ship of the French Line from Plymouth and was able to do it only because of the bullion. As an officer from the tender and I walked down a corridor after entering the boat, the deck suddenly gaped in front of us and instantly we had to jump three or four feet down; my arms were fully loaded. I jumped just in time to avoid striking my head on the iron beam atop the elevator, which rapidly dropped down three or four decks into the hold. The balls of my feet were tender even after I reached Canada. It was one of the narrowest escapes of my life.

I talked at the Ontario Medical Association in Hamilton in June of 1939 on dysmenorrhoea. One of the speakers was Dr. Hertzler, the "Horse and Buggy Doctor," a sallow six-foot three-inch western American, with poor, tobacco-stained teeth and unkempt clothes. He had written several textbooks on pathology and was a master surgeon. For six years he was the United States champion pistol shot. When I asked if he wore a mask at operations, he said, "Hell, no. We don't talk." When people in Germany wanted to translate his book into German he knew it couldn't be done satisfactorily, so he told them that he was Jewish. He said he hoped to spend eternity in a glass jar in Robinson's Museum at Mayo's or Davis' Museum in Detroit. (More of Hertzler later.)

Dr. Kay Wharton and I decided to call the endocrine clinic quits and we wrote to Dr. Hall and Dr. Tew to say so. There was a big quarrel over this. Tew insisted that I shouldn't publish any more papers before he saw them "to sort the wheat from the

chaff,"' and he said that there was about 50 percent chaff in most of my papers. He didn't know how I could collect a series of 120 cases of dysmenorrhoea, for example. He had practised for 20 years and he doubted if he had seen that many in all that time. He told me that I could stay in the department if I reformed. I told him that there wasn't much point in staying on unless I had some lectures to give and had some rotation with the other juniors. He told me my course on gynaecological pathology contained so many errors that Dr. Fisher had told him it had nearly failed two students on their Council examinations. I replied that the course was so easy it was hard to make a mistake in teaching it. I had spent one and a half years in pathology and should know the basics of it. No one else in his department had studied it or could even read slides. He took the lectures away from me.

I spent the summer working very hard on the chapters on obstetrical pathology that I was doing for Dr. Davis. It ruined my summer and as it turned out, the book was never published.

Margaret Barrie Sweeten sent me a note on her convulsing rats but I was resigned now to the end of my scientific work because Tew had me stymied in the department. However, I had most of my ideas in print.

I talked on hormones at Kalamazoo as the guest of Dr. Murray Scott who was the medical director at Upjohn Research Laboratories. After my talk in the evening we went to Gifford Upjohn's house to talk about hormones and research in general. I found him quite charming. But then in the *Biochemical Journal* Drummond and Cuthbertson attacked my oestrogen test roundly. I answered Drummond's comment in the new *Journal* of the British Society of Endocrinology thereafter. Since it picked as its charter members those who had articles accepted in the first issue of the journal.

At the end of January 1940 I had a big discussion with Dr. Tew because he wanted to check the chapters on pathology before they went out. I said he could, of course, but I didn't want them shown all round the Faculty as he had shown Drummond's paper. We had a long quarrel, with all our troubles reviewed. He told me how much fuss I was making in the school. He thought I should resign and I agreed. He asked me if I would like to resign there and then, but I said "No, I'll think it over." I inquired of many of my friends about his request and

they advised me not to accede. Soon I had a telephone call from Dr. Tew who said: "Evan, this is to notify you that your connection with my department will end with this session." I just said: "Thank you, sir. That is all right." And so my academic career was over.

We discovered a property just north of the village of Arva which we later bought for \$15,000 with \$3,000 down. We were stunned at our good luck, since millionaires had tried to buy this property but had been unable to do so. We began to cut down the old apple trees at our new home, Heronspool, in the effort to make a lawn. I was unable to sell any building lots at Arva because everybody was paralyzed by the bad news from Europe of the fall of France and the impending Battle of Britain.

I wrote to Margaret Barrie Sweeten offering her refuge for the duration of the war. Her own appeal for refuge crossed my letter.

On July 10, my third child, Barry, arrived easily. Wilfrid decided to practice in Guelph as he had been dissatisfied with his practice in North Dakota and disliked partnerships.

That fall, Dr. James E. Davis and I called on Dr. Hertzler whom Dr. Davis had known for many years. Dr. Davis telegraphed that we were coming. Hertzler cabled back: "I sure will purr at the prospect of having you here. I will be sure to put on a clean shirt." Halstead, where he lived, was a straggling little Kansas town of 1,400 people, with a 200 bed hospital over on one side. He called his home "Doxrúa" (Doc's Ruhe, or Doctor's Rest). The townsfolk called him "The Chief."

We had a long chat that evening. Dr. Hertzler thought that France was no good and didn't care who beat her. We met his wife, Dr. Irene Koenike. He said: "If you want to read I have my war books and my theological books downstairs. They deal with the same things, so I put them together." "Whenever I see a stuffed shirt (he was referring to Chicago's Dean Bevan of surgical renown), I spend all my time trying to see what is behind it. I have a couple of boys helping me with my new pathology book. One fellow can't tell the truth alone." He joked, "Every morning the ducks form up under my window and call out—'quack, quack'" He was planning a new non-medical book to be called *Lectures I Have Never Given*. He used local anaesthetics for all his operations above the clavicle, spinals below the diaphragm, and ether for the in-betweens. His routine

was to go to bed at 11:30 p.m., get up at 2 a.m. and read for an hour or so until he felt sleepy again. He started work at the hospital at 6 a.m. and started to operate at 8 a.m.

Hetzler took several naps throughout the day, lasting half an hour or so each. I told him of the heading in the Hamilton paper after his talk to the O.M.A. the year before. "Western University Hertzler's choice." Hertzler replied: "An uncertain faith in the veracity of the fellow reporting this makes me believe the story in a half-hearted way." He told us that he had taught pathology and anatomy for \$50 a month at the University of Kansas when he first began practicing. His practice took only two days a week. He substituted for any other teacher in every subject but ophthalmology. When all his colleagues on the staff were buying new cars around 1905 for \$3,200 apiece he felt that these would soon be scrap, so instead of doing the same he sat down one night and ordered \$3,200 worth of secondhand medical books and journals. This became his own library, which he later gave in part to the University of Kansas and in part to the University of Illinois.

At one time he was receiving 92 journals; when he was working on his book on the peritoneum he had 12,000 abstracts in his file. For his current book he had picked young collaborators because "they hadn't learned to lie yet." The "horse book" had made him one or two associations he valued greatly. One was Margaret Mitchell of *Gone with the Wind*, who was extremely bright. The other was Charles Kettering of General Motors, the inventor of the automobile self-starter and many other gadgets. Kettering had a very poor opinion of college graduates. One of these, when applying to Kettering for a job, was given the task of rubbing two whetstones together all day. The young man rubbed all day without asking why; so Kettering refused to give him a job.

Hertzler wrote on a desk about ten feet long, with shelves of books behind. He wrote in long-hand and then a girl typed it, "since only she can read it." Then he went back and "left out most of the sillies—which I sure get a kick out of writing."

The Horse and Buggy Doctor was a name given to his book by Christopher Morley. Hertzler himself proposed *Too Dumb to Quit*. He told us of the time when he broke his slate over the minister's head as told in *The Horse and Buggy Doctor*. He regarded this as his greatest moment. Hertzler said of Kettering: "He is one guy I can beat in a beauty contest. The other is Lom-

bardi, the Cincinnati catcher." Another remark of his was, "Children in Christian homes are legally legitimate but spiritually bastards." He used this phrase in a Founder's Day address at a Methodist College and survived. I related some of my experiences at the University of Western Ontario. When he heard that they had fired me for "incompatibility" he said: "That's a compliment the like of which you will never get again." He went on to relate that the chancellor of the University of Kansas asked him to resign after one of his speeches. He said that he would never resign but they could fire him if they so desired. The Chancellor died soon and no one else fired him. Hertzler said: "The Chancellor is now in a place where more important things occupy his attention." He told us that he really didn't like operating. He did it only to "get specimens" as he was really interested in pathology. Thyroidectomy was the commonest operation at his hospital, a hospital that he had founded in 1904, and which had had seventeen additions. Some years before our visit he had sold the hospital to the Grey Nuns for a dollar. He was very proud of this bargain. He treated the nuns cavalierly, however. The only concession he made to them was that he wouldn't operate on Sundays. I asked him how they handled ectopics and sterilization. His wife said he merely posted such cases as "defundations." Patients' families were admitted to every operation, attended every consultation post-operatively and knew that nothing was hidden from them. Thus they had great confidence in the skill and honour of the staff. I had never seen this before.

In October, Margaret Sweeten and her son Charles arrived from wartime England. She mentioned casually that her vitamin E deficient rats developed fibroids and endometrial hyperplasia. She hoped to bring her slides over to permit her to publish this. She also had many uncut heart blocks and we hoped to get a chance to see if my idea about coronary sclerosis and vascular changes being related to oestrogen excess were true or not. She told me that the kidneys of vitamin E-free rats developed plaques like those of the old arteriosclerotic human.

I asked John Fisher this same month for duplicate slides on a Mrs. Jervis. So far as I knew she was the only human with hyperthyroidism ever treated with oestrogens whose tissues could be studied afterward. John refused because cover slides cost 60 cents an ounce. He wouldn't let me buy them, so I asked him to lend the slides to me so that I could photograph them. I

never got them. Her tissues are probably unique still, over 30 years later.

Curiously, Murray Barr was discovering the "Barr bodies" one floor below during these years at U.W.O., no one ever suspecting how his findings would alter the course of medical science. He was always an articulate but quiet and modest fellow.

All in all I managed to publish 23 papers in major medical journals during my six years on the medical staff at Western. Many of these original observations are only now coming into recognition and some are still above the tide.

Chapter Six

NOT MINE THE OILY AND THE TACTFUL WORD (1942-1947)

Not mine the oily and the tactful word
But the quick growl and then the body thrust.
Not mine the stick that hides the bitter sword
But a plain falchion that my friends can trust.
Where men wear hauberks or where helms abound
I am the fool who leaves his rash head bare.
The cautious see no Cause as they look around—
Should it obtrude, they would not care or dare!
It may be that I shall not live out my span.
It may be fools shall jeer above my grave.
While here I'll hold my head high like a man—
Nor fear nor yet ambition marked me slave.
Though all I fought for at last may be lost
A scanty truth is still worth what it cost.

Vere Jameson, *Hy-Brasil*, 1952

April, 1942 was the month when Singapore went down before the Japanese. It was the beginning of the end of the Empire and of British domination in the east. By this time my papers on phlebitis, habitual abortion, prematurity, abruptio and eclampsia were ready for the press. Dr. DeLee, my old teacher, died on April 5th in Chicago. I published a biographical article on him years later.

We moved into the unfinished house in Heronspool in July, 1943. A local farmer put his sheep on our place "on shares." We thought they would keep the weeds down but the flock hurdled our brush and barbed wire fences and ate our little garden to the ground. First they lopped off all the little trees before they decided they would eat grass. One even ate most of a bag of plaster of paris that had been left by the plasterer and we had a stiff, internally reinforced plaster of paris sheep to

heave into the pond the next day. We found two large metal herons to perch on the roof of the new old house. I occasionally had to remind people they were herons, not storks, as some people thought I was advertising my obstetrics.

We had a farewell dinner for my office partner and classmate, Kay Wharton, before he went off to Queen's University as Clinical Professor of Medicine. DeWitt Wilcox spoke and mentioned that Kay had been "the first to come here in medicine from Mayo's, the first to use fluoroscopy, the first to make \$750 a month from medicine, the first to start a clinic and the first to be his best man." Carl Cline said that doctors were of three grades: lake dwellers, pond dwellers, and best of all, river dwellers. As one of the latter, the only one left, he congratulated Kay.

I turned in a book of verse (*Moths after Midnight*) to Macmillan, who turned it down, but Lorne Pierce of Ryerson Press took a piece of it for later publication. I began to write some stories in September of that year.

Dr. Edward Hall, my future nemesis, became dean of the University of Western Ontario's School of Medicine in March of 1944. He was one of the most despicable characters I ever met, perhaps *the* worst.

We had drifts that winter in Arva which reached Marion's shoulders, and had trouble in getting water from our wells. We had to melt snow on the stove and cut holes in the ice on the pond to get water. In early May, my second daughter, Mary Janet, was born.

Dr. Russell Morgan called me to say that he was accepting the chair of radiology at Johns Hopkins eight years after graduating from Western.

That couldn't happen in London. He never was asked to come back to Canada, became one of the greatest radiologists of all time, devised methods used also in astronomy, and flourished generally at Hopkins, ending up as Dean.

Dr. Isobel Day from Vancouver wrote to me saying that the University of British Columbia was starting a medical school, and would need a professor of obstetrics. So I wrote to her brother-in-law, President Norman MacKenzie, about this. Nothing ever developed, fortunately.

The Ryerson Press offered to publish my story of a hippopotamus, *The King of the Limpopo*, in a school textbook.

Nothing ever came of this. Vere, our last child, was born on June 24, 1945.

I had an interview with Dean Hall and asked him to stop the local general surgeons on the staff from doing gynaecological surgery. He said he would warn the new people coming on the staff but could do nothing about those who were already on the staff and established in their surgical habits. This was my first conversation with that deplorable man.

In July of 1945 I delivered 25 babies in 17 days. I never came near this record again.

I talked to the Toronto East General Hospital on conservative measures in gynaecology and had the paper accepted by the *Medical World*. Dr. Leslie Black made a nice speech of thanks. He was the head of Surgery there and my old team-mate on the boxing team at the University of Toronto.

Floyd Skelton, U.W.O. medical student who had come to me in search of a research project, wrote up his account of his summer's work on inducing thrombocytopaenic purpura in dogs with oestrogens, then curing or preventing it with Vitamin E, and presented it to Dr. Waud of Pharmacology and Dean Hall. In September I got the idea about trying to find a purpura case to treat with Vitamin E. I phoned Frank Kennedy but he refused to treat a purpura case of his in this way. In the course of the next three months we did get four or five purpuras which we treated with large doses of Vitamin E and the results were fine. I think this was the best thing I had done in original clinical medicine up to that time.

I had two ideas I was working on at this time; one was a hysteroscope, which I tried to develop with a company in Rochester, New York, the Electro-Surgical Company. The other was giving big doses of oestrogen to chorioneopitheliomas—both failed to come off. The hysteroscope idea was revived periodically by others, and three types could be described in 1974 by Cohen and Dimouski.

At the end of the year I used intravenous oestrogen therapy for the first time on two severe pre-eclampsias. I hadn't heard of oestrogens being given intravenously before and could find no suitable preparations. I therefore had several ampoules made.

In early 1946 there was a good deal of talk around the hospital over the purpura work. I kept out of the picture as long as possible, letting Skelton and others carry the ball. One of Ivan Smith's patients was involved and I told Ivan that if he and

Hall were good propagandists, they had a real basis here for a campaign for clinical research funds.

Mother was having severe bouts of angina. She could not walk across her kitchen without having a bout of chest pain. I started mother taking vitamin E on February 15, 1946.

Wilfrid and I went down to Rochester, New York, where at the Strong Memorial Hospital we met Karl Mason's student, Blandau, famous later for his work on fertilized ova and ovum transplant. At the time he was plating guinea pig ova on gelatin plates. I suggested that he should also try adding oestrogen or vitamin E to the plates. Mason showed me the acid-fast ceroid pigment laid down in the adrenal cortex either during vitamin E deficiency or upon the administration of oestrogens (when the vitamin E prevented its appearance). Mason then drove us out to Eastman Distillation Products to meet Dr. Kenneth Hickman. Hickman is the one who evolved the scheme of spinning oils on plates, distilling them, then eluting the various fractions. He insisted that no one should use more than 200 mgm of vitamin E per day. He told me of its use in Dupuytren's Contracture by Dr. Steinberg of Rochester and to prevent tartar formation on teeth. He took us around the factory and showed us his great vitamin E stills. He mentioned that they could make an injectible but expensive d alpha tocopherol phosphate. He was one of the most interesting scientific people I had yet met.

We noticed marked improvement in mother, after just one week on vitamin E. She lost her rales in the base of the right lung, put out more urine, and her swollen hands became wrinkled again. I decided to start Roy Bicknell, our barber, on vitamin E. He was in desperate straits with angina. He had been in bed for a week with severe attacks of pain. Even the weight of his pyjamas hurt his chest wall. At times he slept leaning over the back of a chair. Dr. Arthur Vogelsang had noticed that the digitalis dose on a Mr. Beaumont could be reduced when he was taking vitamin E. I suggested to Dr. Waud that he and I should write a letter to *Science* about our purpura work. I also suggested companion papers, one for the *Canadian Medical Association Journal* and one for the *Journal of Experimental Pharmacology and Therapeutics*. I took Dr. Waud to see Mr. Beaumont, who had been taken off digitalis by this time as his heart was doing so well. He was free of both his purpura and his cardiac decompensation. Floyd Skelton was called in to meet

Professor Frank Brien (Medicine), Hall and Professor Waud (Pharmacology) to discuss purpas, but I still kept out of it. Permission to send the letter on purpura to *Science* was granted.

By this time I had written 43 children's stories. My children were so insatiable for them that I soon ran out of all the traditional Greek tall tales of Hercules and the like.

We sent the letter on purpura to *Science* on March 4. There were no changes in my draft. I put Skelton's name first. I suggested Waud's should come next, but he insisted that mine come next. He offered to be left off but I said that his name should go on because it was his university laboratory which had provided the opportunity that I had lacked for eight years before. He then could scarcely refuse adding Grant Skinner's name when I urged it.

By March 28 Roy Bicknell was virtually back from the dead. Mother was doing well. He wondered if the action of vitamin E on the heart was digitalis-like. Wilfrid was unhappy with helping the heart work from Guelph. He was out of things because of distance and felt he was missing much of the excitement.

I had a meeting with Dr. Keith Stuart who came up from Hamilton to talk with Art Vogelsang, Ivan Smith, Floyd Skelton and me, to thresh out the cardiac histories and conclusions, and give us some external guidance. We concluded that vitamin E might be a better digitalis and resultant heart blocks were no longer feared.

After ten years I started getting my post-partum and post-operative women up out of bed in five days. I had never dared to be so "brutal" before. My contemporaries disapproved heartily when I sent an appendectomy case home in five days time. How strange this debate seems today.

Soon vitamin E for hearts was beginning to be local gossip. Dr. Tew usually went to Roy Bicknell once a week for a hair cut. One day he asked for the last appointment and quizzed Roy for three quarters of an hour on his recovery, his treatment, and who did it. Dr. Charlie Harris, the old Medical Officer of Health, stopped Roy in the street to ask him how the "guinea pig" was doing. A dying cardiac on a Victoria Hospital ward changed to Art Vogelsang for his medical care and soon wanted to go home, free of oedema and pain. When Vogelsang called

on him in the ward, he found that Drs. Carl Cline and DeWitt Wilcox were examining their former patient and looking flabbergasted. They quizzed Art on the dosage and other details. They finally said: "You are taking all our patients away, you know. That man had all the classical treatment."

Floyd Skelton and I prepared the purpura paper in May and sent it in to Ed Hall to have it passed by the medical school before the annual examinations came up. If we had sent it in without the Dean's approval we would have feared Watson would flunk Floyd as he was so indignant at our appropriation of "his" vitamin E.

Floyd and I reviewed some of the coincidences in our studies:

1. I was Dr. Grant Skinner's only medical friend and confidant. I kept going around to pharmacology to encourage him. He was about to be fired from the Department of Pharmacology where he was doing good things with vitamin B¹ for neuralgia. At the same time I was trying to hold his marriage together, as his wife was my patient.
2. Grant Skinner got Floyd Skelton a small sum for summer research. I suggested to Floyd he use intravenous oestrogens to develop purpura in animals.
3. When Grant asked me to suggest another problem I named several, out of which he selected the oestrogen effect on blood platelets, because he had worked on platelets before and had developed a fast method of counting them.
4. Floyd managed to get four dogs from the medical school and that was just enough to prove our point on oestrogenic thrombocytopaenic purpuras and their cure or prevention by the use of alpha tocopherol. Later, we found to our chagrin, that this thrombocytopaenic influence of oestrogens was found in dogs, not in man.
5. I suggested we try to treat a thrombocytopaenic purpura case. Dr. Frank Kennedy refused to give us a patient he had and Dr. Bartram was away and could not be asked. Dr. Arthur Vogelsang replied that he had one who was supposed to have his spleen out the next day, but Dr. Busby didn't want to do it because the man, Mr. Beaumont, had had such a bad coronary. So we found a thrombocytopaenic purpura patient on our third try.
6. Beaumont got up and about the ward without orders because his heart responded to alpha-tocopheral even better than his purpura did.

7. Mother's angina was no longer being controlled at this time. She had rapid loss of pain while on Vitamin E when we used her as guinea pig number two.
8. Roy Bicknell was given up by Dr. Ed Bartram, who had finally left him morphine pills and informed him he was not going to call on Roy any more. Ed ignored my request for an electrocardiogram so I had to get Art Vogelsang to take it.
9. I had just been to Rochester and had talked to Hickman who gave me a few of the tocopheral phosphate tablets he had made up for special experiments. These I could utilize at once on Roy Bicknell.

Marion remarked that if I had remained on the medical staff I would have been too busy and contented to bother searching. It was a good thing, she said, that I was dismissed. She always had more faith in me than I had. In May of 1946 Dr. Kay Wharton (my former partner) turned up from Queen's University and offered to take Floyd down there if he was expelled from Western's medical school for his part in our work. He went over our case report with us and was much impressed.

On May 10 my brother Wilfrid came down from Guelph, bringing some of his tocopherol treated patients. Dr. Keith Stuart came up especially from Hamilton to see them and we cross questioned them. Keith advised us to show the draft of the heart paper to Hall and ask for it back in three days. Wilfrid, who was a classmate of Hall and knew him well, advised us to ignore Hall. He said if I mentioned Floyd's name in the body of the paper but didn't list him as co-author it would be adequate and proper. Then we need not involve Dr. Hall at all. I was sure by this time that the discovery couldn't be stalled by anyone, however, and insisted that student Floyd Skelton's name be first on the list of authors. That turned out to be our major tactical error in the whole conduct of our researches but I still believe it was the proper thing to do. I cannot recall having seen a student's name put first on any medical paper.

Wilfrid called from a pay phone on his way home to remind me that I had treated Harry Simpson's angina with big doses of wheat germ oil in 1936. I had forgotten this completely. Accordingly I wrote a paragraph on this case into the preamble of our paper on Vitamin E for hearts. The next day I found this old case history and found that it contained good notes on that cardiac episode.

I began thinking about vitamin E for thrombosis as well as for shock, and Floyd Skelton noticed that a wound healed better when vitamin E was applied. I wondered if better circulation would aid in the healing of fractures, something we never had had a chance to work on then or later. The phlebitis idea, however, proved one of our best insights into therapeutics.

On May 13 Vogelsang and I saw Dean Hall. He was cool and cagey, repeatedly called me "Evan," and told me that the two papers on purpura had not yet been passed on to others to read. We gave him the cardiac paper and asked if we could have it back in three days time. He suggested that he could have Professor Frank Brien check it. I told him that we didn't mind. I added that Wharton and Stuart had been using vitamin E on their patients for the last ten days or so and also that I would write to MacDermott, Editor of the *C.M.A.J.*, and ask for prompt publication of this first paper as I would like to publish it in Canada.

The next day Dean Hall called to suggest that as the paper would be so widely read it should be set up in more dignified phraseology. He objected to a phrase that Wilfrid had used about a patient of his eating like a horse and acting like a colt. He offered to help me put the material into better form. He said that the case histories, for example, should be single-spaced. He offered me a choice of three hours the next day when I could see him for consultation on the paper.

I came upon Dr. Frank Brien reading my paper and about to show it to the former head of the Department of Medicine, Dr. George Hale. Dr. Waud told Floyd Skelton as he passed him in the hall that we had made "quite a furore." We were told that Dr. Murray Barr, of chromosome fame and one of my contemporaries at the medical school, was checking over the purpura paper.

I had my final interview with Dean Hall on May 17. He spent an hour and a half with me going over our "preliminary paper." He altered every second word, reversed all the sentences—in short he slashed it to bits on inconsequentials. We got three pages looked over in that hour and a half. I was supposed to have another appointment with him in three days. As I was about to leave he told me I was to leave Skelton's name off the paper, but that he could be mentioned in the bibliography at the end. He pointed out that no one would have done as well by a student as I had. I insisted that Skelton's name be on, because

the whole discovery stemmed from Skelton's work on the purpura of dogs and the high therapeutic dose of vitamin E that he had found necessary. Hall pointed out that it was a small contribution, so he stroked Skelton's name off. Then he suggested that I take Wilfrid's name off, since it was really my work and Vogelsang's. I could "mention" Wilfrid's name with an asterisk after his case reports. This really nettled me and I refused this suggestion too, saying that I thought we should err on the side of generosity. I talked it over with Wilfrid and Vogelsang, who both wanted me to publish at once with no further reference to Hall. I decided to send it in as it was, with the first part "corrected," and go back to Hall with what remained in order to ensure that Floyd's name was left on. Wilfrid was more sure than before that Hall was trying to steal our work and urged me not to go back to him. Then Vogelsang telephoned me that he had found that the St. Thomas and East Elgin Medical Society was holding a meeting that night and that there was a place for a further paper on their programme. If Art filled this place by reading our paper and the Beaumont case report, we could establish conventional scientific priority and could leave a copy with the Society's secretary for future reference. This looked like a stroke of good luck so we all worked on our paper and rushed it through in order that Art Vogelsang could read it that night (This was the original paper without Dean Hall's changes and with Skelton's name still out front). Art and Floyd attended the meeting, Art read the paper, and it had a tremendous reception. That night we sent the paper to the *Canadian Medical Association Journal* complete with electrocardiograms and photographs and a personal letter to the editor of the journal indicating that this study might be the most important contribution to Canadian medicine since insulin. I asked him to telegraph in reply and added that a note on the matter had been sent to *Nature*.

An intern at Victoria Hospital told Roy Bicknell that all the cardiac patients at the hospital had suddenly been given Vitamin E. I went to the hospital to check on this remark and found that it seemed to be true. All these public ward cardiacs were under Professor Brien's care and in the last two days they had been taken off digitalis and any other medication and given vitamin E only. We had been told or asked nothing about this procedure. Since our discovery seemed about to be stolen or already had been, we agreed among ourselves to break it to the Canadian

Press. On May 21 we got a letter from *Nature* saying that our communication on the use of vitamin E for hearts had been accepted for publication. I phoned the *Canadian Medical Association Journal* that afternoon. McDermott, the editor, was pretty dry over the phone. He had just read the paper, had not submitted it to his editorial board, but warned me he couldn't publish the paper for months. He thought it should be sent back to us. Accordingly I asked him to return it. Only Hall knew that we planned to send the paper in to the *Canadian Medical Association Journal* and that I had decided to ask for fast publication.

Wilfrid, Skelton, Vogelsang and I, on May 22, collected all our diaries and correspondence on our discoveries, and made an affidavit before lawyer Frank Little detailing the priorities of our discovery and how it came about. I even had the wit to include Harry Simpson's old case history notes in this material. This later proved to be a wise move.

We decided to submit our rejected paper to the *Journal of Laboratory and Clinical Medicine*. We interviewed Mr. Murray of the Canadian Press on the night of May 21, pointing out that we wanted a press release at once in the hope of protecting Floyd Skelton, who was due to write his examinations in seven days time. He quickly grasped the thorny problem and was very helpful.

The result was that on May 25, 1946, we had a good spread in the *London Free Pres*, the *Globe and Mail*, and a paper in Sydney, Nova Scotia. That night Roy Bicknell's picture in fishing togs appeared in the *Free Press* with the article. Dr. Bruce MacCallum, the professor of biochemistry whose laboratory I had been working in for the previous 13 years, dropped into the house that evening and told us that Banting and Best had been warned by Macleod's stenographer years ago that their names were not on the paper on insulin's discovery that Macleod was to have read in Baltimore. Accordingly, they waited until Macleod was on the train to Baltimore, then they called in the press to announce the discovery of insulin, almost sending Macleod into apoplexy in Baltimore when he first read the news report.

We were mentioned in the sermon at St. Paul's Cathedral by Dean Luxton (later Bishop of Huron) and an editorial in the *Free Press* urged encouragement, stimulation and protection of research. We had an interview for *Time* with their local man, Arthur Carty. We didn't ask to see his material until it appeared

in the magazine, unfortunately, and this was a grave error as we could not proofread Carty's material. We heard that a batch of old "crocks" at Victoria Hospital had all gone into worse heart failure after eight days of intensive trial on vitamin E just as Dean Hall had sailed for Europe. The official reaction was about to be negative, therefore, and Hall left with peace of mind as he was not about to confirm vitamin E's value. After the article appeared in *Time*, confirmatory letters came from Dr. Marco Kyprie, Dr. Walter Bapty of Oshawa, and others. Several mentioned the same hunch, and our mail began to be tremendous.

Dr. Alan Skinner, professor of Anatomy, stopped me on the sidewalk to say: "Evan, I heard you were working on a defence against the atom bomb." I said: "No, Alan, I'm the fellow who dropped the atom bomb. Now anybody who likes may pick up the pieces." Keith Stuart phoned to say that he had helped two instances of claudication with vitamin E. These were the first cases we had tried. He thought at the time that he could get a paper ready in ten days on the effect of vitamin E on angina.

In June the American Heart Association wrote to us asking for our data. Dr. Hardy Geddes, who shared an office with me, refused to look at old Mr. Beaumont when he came to see me that day, "walking all over town with that bad heart and thrombocytopaenic purpura," as Geddes said. When this was the reaction of a friend, it was not surprising to find that by this time hardly a medical man in London would speak to us. We were "quacks" and "publicity hounds." The U.W.O. Medical School was absolutely negative—and has remained stuck in that position ever since. We now heard that the American Heart Association was making inquiries locally about our work. By July 10 we were beginning to use what for that time were high dosages, 300 to 400 mgm of vitamin E per day. We were hearing of good results from many quarters by this time.

Dr. Cotton, the famous diagnostician in Toronto, wrote to tell us that he had used vitamin E for hearts since 1943. The *Journal of the American Medical Association* turned down Vogelsang's report on Beaumont's case and has steadfastly refused to publish any of our work since. We heard that Floyd Skelton had passed his examinations with a "C" grade in both Clinical Medicine (Professor Brien) and in Clinical Pathology (Professor Watson). He had been working with Wilfrid and

Keith Stuart in Hamilton and had prepared their material for publication.

On July 20, our purpura paper was rejected by the *J.A.M.A.* Dr. George Dowd came up from Boston at the end of July and he said it was the "best day of his life." He told us that Harvard had had a bad letter from Western's Medical School about us. One word used in that letter was "upstarts." Some of Harvard's authorities had sent him up "to spy out the land." I got angry thinking about this, and drafted an appeal to the American Heart Association to send up a committee of non-Canadians to look into the matter first-hand. Wilfrid phoned from Guelph and told us that one of the Guelph doctors had told him that our paper had been rejected by the *Canadian Medical Association Journal*. How did anybody there know that we had submitted it?

We had good results on our first varicose ulcer and varicose eczema. On July 22 I sent out the dogeared purpura paper and the Beaumont case report to the *American Heart Journal*. All medical journals were being closed to us and we began to consider invitations from *Reader's Digest*, *American Mercury*, and *Coronet*.

Early In August, the ebullient Walter Winchell broadcast a comment that Americans had to go to Canada now to get the latest in heart treatment. Mr. Kelly, the Ontario Minister of Health, told the *Toronto Star* that he was going to investigate our therapy.

I went down to Hamilton to meet Keith Stuart and Kay Wharton; they went over our original three heart papers, word for word, making many good criticisms. Keith and Kay both had about fifteen cases ready for publication, but hesitated to publish. They never did publish on vitamin E since it was too dangerous professionally to do so. Ironically, both later died of cardio-vascular disease.

Mr. Wilkins, manager of British Drug Houses in Canada, came up from Toronto in September for a chat. I asked him for some money to subsidize research on vitamin E and the heart at St. Michael's Hospital in Toronto and the Montreal General Hospital where I hoped I could initiate national studies. He told me that Hickman had tried some years ago to get a Rochester clinician to work on vitamin E for heart disease but had failed.

That month, too, the *Medical Record* accepted our fundamental heart paper, five days after receiving it. What a load

off our minds! We feared we couldn't publish it anywhere. We submitted our three major heart papers to the *American Heart Journal* that month.

In the last week of the month Wilfrid first successfully treated two cases of acute nephritis and two peripheral thrombosis cases. These were our first cases of these types. The medical use of vitamin E was getting more and more exciting.

We had another visit from Dr. George Dowd. He was now enthusiastic about vitamin E and reported fine results with it in indolent ulcer of the toe and a portal cirrhosis. We took him to Guelph and showed his many patients, including one of Wilfrid's acute nephritis cases. We then went down to Hamilton where we showed him Keith Stuart's cases, including a wonderful electrocardiogram series. Before he left we gave him copies of our papers, showed him letters, reprints and so on, and he offered to show these to Dr. Paul Dudley White as soon as he returned to Boston.

I went down to Kingston to see Dean Ettinger of Queen's University Medical School. I told him our story, showed him our correspondence, affidavits, papers, and so on, and left the purpura and heart papers with him to file with the Medical Research Division of the National Research Council, of which Professor Collip was Vice-President and he the Secretary. He told me he wasn't surprised that our paper had been stopped in the *Canadian Medical Association Journal*, that I had the right to demand the referee's rejection slip with the reasons given, although I didn't have the right to ask his name. He observed that press publicity was our most damaging feature. (It was especially damaging to the student, Skelton.)

The *New England Journal of Medicine* turned down our purpura paper. Accordingly, we turned it in to the *Urological and Cutaneous Review* where it was accepted at once.

In October Art Vogelsang had a chat with Dr. Paul Dudley White of Boston. Nothing came of it. White told him that he wasn't for or against us, that we lacked controls, and that we would have done better to publish a few case reports carefully analyzed.

We arranged a medical tour for November 10 to show cases in London, Guelph and Hamilton. We invited the Ontario Medical Association, the Canadian Medical Association, and the local Academy of Medicine to send representatives. Dr. Hickman had written to us that Dr. Philip Harris of Distillation

Products, and Professor Karl Mason of the University of Rochester could come up that day.

In October, we got a summons from the Ontario College of Physicians and Surgeons, asking us to appear before them on November 13 and explain the use of vitamin E for coronary thrombosis and how we had handled the discovery.

Dr. Leo McKenna came to 280 Queens Avenue to share my office. Leo, whom I had known in Montreal, was a wonderful chum and raconteur, with an expressive, merry face. One of his anecdotes was the Scotsman's prayer: "Bless the wee coo so that it can grow up to give lots of white milk. An will the Lord be plased to bless the wee sark so he may grow up to be a big pig. Then will the Lord be pleased to bless my swords and pistols that I may kill all the Grants and MacPhersons and damn their souls to hell forever more."

At the end of October we got a rejection of our papers from the *American Heart Journal* and decided to send them all to the *Medical Record*. The *Medical Record* accepted our papers that November and published them the following January. What a debt I owed editor Stragnell. The next year that journal suspended publication.

I went to see Dr. George Ramsey, President of the Ontario College of Physicians and Surgeons, to ask what the charges against us were. What a preposterous response! He told me that I was charged with having an interest in a pharmaceutical house, that I had a sleeping interest in Stuart's and Vogelsang's practices, that we had not tried to publish our work in medical journals, and had gone to the press prematurely.

On November 10, 1946, we conducted our tour. Bartram and Brien accompanied us from London and my old friend Bartram launched into a personal diatribe against me. I told him bluntly that we had arranged for this for the convenience of the Rochester men, that people like him mattered much less, and that we really didn't care whether it suited him or not. We went to Miss Margaret Thompson's to examine her leg, then over to Art Vogelsang's office where he showed eight cases. The Rochester crowd appeared to be amazed at the acrimony of our conversation with the local people. Dr. Lymburner from Hamilton was along to represent the Ontario Medical Association. Bartram, Brien and Lymburner had decided by this time that all our patients were psycho-neurotic cases. I challenged Bartram to say that Bicknell's coronary thrombosis

was psycho-neurotic, or if phlebitis or leg ulcers could be psycho-neurotic. Wilfrid drove Bartram and Brien to Guelph in his car and wiped the floor with them all the way. He warned them that they were making themselves ridiculous for years to come and told them that they were now ex-cardiologists. He told them that all our papers had been accepted and were soon to appear in print. They were incredulous about this. Brien volunteered: "Was the reason you talked to the paper because you were afraid of Ed (Hall) stealing it?" So Wilfrid replied: "We weren't afraid of him stealing it. He stole it. How did you ever have the guts to take all your cardiacs at Victoria off digitalis and put them on Vitamin E when you didn't understand it? How can you proceed on your own when you still don't know anything about vitamin E? If you had done this with insulin when that first came out you could have been sued for it." This lively conversation went on for about 80 miles. Bartram was so angry when he got to Guelph that he had to leave the dinner table to cool off and was unable to eat afterward. I sat him next to Hickman who gave him a great workout. At the table I passed around our testimonials and the *Science* report of the positive St. Paul experiments on cattle hearts (Gullickson and Calverly).

Then we went to the Y.M.C.A. in Guelph, where Wilfrid showed 14 excellent cases, beginning with Phil Lawson of Toronto, the old professional wrestler. Wilfrid talked for about two hours, with Bartram and Lymburner fighting all the way on the electrocardiographic evidence.

On November 13, 1946, Wilfrid and I had the interesting experience of appearing in Toronto for the first time before the Ontario College of Physicians and Surgeons. The Executive Committee was composed of about 20 members, including Drs. Hepburn and Detweiler from the University of Toronto. Drs. Connell and Brown from Queen's, Drs. Brien and Bartram from Western. Dr. George Ramsey was in the chair. He asked me to read my statement on the five charges against us, that we had a financial interest in the manufacture of vitamin E, and in its sale; that I had an interest in the practices of Vogelsang and Stuart; that I had arranged for a premature press release, that we made no attempts at publication in scientific journals; and that we had inadequate clinical evidence.

I was in rare form and read my statement with gusto. I was later congratulated on it by the solicitor for the College. When I

sat down Ramsey asked twice if there was any question of discipline or incorrect professional procedure here. Could any clinical men present this work and tell the College if it merited being considered by medical schools in the province? Brien rose to say that many people claimed it helped and that he thought it should be investigated by some medical school. He had been on the tour and all the diagnoses were acceptable. The findings were of great interest. Connell rose to say that Queen's had no grant to work on this topic and all the twelve cases he had tried had been failures. (We knew this to be a lie, of course.) Detweiler and Hepburn claimed to be unaware of what our claims were. Bartram rose to say that no evidence that he had seen suggested that vitamin E had any value for anything at all. He believed that any results achieved were due to the "overpowering personality and vigour of the workers." Wilfrid at once rose to say that he felt unworthy of the high compliment paid him by the last speaker. He wasn't a good enough psychiatrist to treat three hundred and fifty consecutive heart patients successfully. Then Ramsey asked those present to consider and peruse our submission over lunch and report afterwards. We were asked to sit with them but we begged to be excused. I said that we hoped they would look into our clinical suggestion and that they could accept it or tear it to pieces. We really didn't care. It was just a nuisance to us. We now had publications and thus our appeal was to the world. Many medical schools were investigating it. We really had no interest in what was done in Ontario. They excused us and we left.

The Ontario College reported *to the press* that our conclusions were groundless. This was an extraordinary manoeuvre and we wrote a bitter letter to complain of it, demanding an apology. None ever came.

In December we had evidence from four or five diabetics that their sugar tolerance was improved by vitamin E. Vogelsang and I had patients with varicose ulcers that were healing well under vitamin E.

In mid-February Art Vogesang had a Buerger's Disease case, a Mr. Kay who had already had a leg off at the knee and in two weeks was supposed to have the other one "assessed." His hands were almost as bad as his feet. After being put on vitamin E despite continued smoking, Kay healed a chronic leg ulcer on his stump and he lost much of his pain.

A nearby M.L.A., Dr. Hobbs Taylor of Dashwood, who

took vitamin E for his own angina, professed to be enthusiastic about vitamin E and tried, unsuccessfully, to get some support from the provincial government through the Minister of Health, Mr. Kelley.

In late February, Wilfrid and I went to Rochester, New York, on our way to Boston, and took part in a little informal seminar in Professor Karl Mason's laboratory. We spent two and a half hours talking about vitamin E to a group, including Dr. Tobin, Dr. Emmel, Dr. Scrimshaw and Dr. Mary Quaife. We found out that a thrombocytopaenic purpura there had failed to show a platelet rise and clinical benefit when given vitamin E. We later found a similar reaction ourselves but only one.

We had dinner at Mason's home with the Basil McLeans. Dr. Hickman and his wife came in later. Hickman told us some things about vitamin E research in progress that later turned out to be either great exaggeration or altogether untrue. For example, he told us that a big pharmaceutical house had sponsored studies of our findings at a major medical school which had confirmed them all. This was to be published in six months time. If our ideas were accepted he could use 10 to 20 per cent of all America's vegetable oils for medicinal vitamin E. The routing of enough oil tank cars through Rochester would be a vast job in itself. He planned to put up big factories in a number of places to make enough alpha tocopherol. He insisted that vitamin E must be useless for fractures and wound healing as the blood supply there was already normal. He thought that vitamins C and E should be used in equal amounts together. He had tocopherol phosphate in production at that time. A man from Lilly's had been on their doorstep for days, imploring him to produce more vitamin E. He said there was eight times more E in an ounce of egg than in an ounce of hen, which proved which came first. Hickman was well informed but dogmatic and we never found out if he was friend or foe. We taught him nothing. He told us.

We thought there might be some hook-up between cytochrome C and vitamin E so we visited the Pratt Diagnostic Clinic in Boston and met Drs. Proger and Dekaneas there. They had been using cytochrome C on intermittent claudication and anginas and had helped a good many of these. However, we concluded that cytochrome C was not a rival for E and this turned out to be true.

Dowd met us in Boston as we were leaving, and on the train to Worcester, travelling with us, he told us of some fine results using vitamin E in pseudobulbar palsy, a stroke patient of six years duration who had thrown away his cane, and some fine results in albuminurias and peripheral leg ulcers. Dowd told us that he planned to read a paper on these experiences before the Massachusetts Medical Society in about two months time. He turned out to be unreliable, and finally deserted us and vitamin E for Vogelsang and the silences of gerontology.

I met Dr. George Ramsey in Victoria Hospital on February 28. He told me that in four days time the Ontario College of Physicians and Surgeons was going to meet with the Minister of Health, Mr. Kelley. At that time the College was going to suggest that our Vitamin E study be laid on the lap of the National Research Council. I told him of our visit to Rochester and told him that we hoped the N.R.C. would help us as we had a good deal yet to do.

Wilfrid's paper on nephritis and vitamin E appeared. He phoned to say that he had a promise of \$50,000 from Percy Gairdner, who later founded the Gairdner prizes in Toronto. Gairdner had already been helped tremendously for his angina. Later, Gairdner suggested he was willing to make his donation when he had seen confirmation of our work. Wilfrid told him, "We won't need you then, Percy. When Banting was Sir Frederick Banting he didn't need help. It was when he was plain Fred that he needed people like you." Gairdner ignored us.

In March I got a copy of Lloyd Stevenson's book on Banting. I discovered the rapid pace of things when Banting was finally given funds, a pension and a place to work. We planned to ask Minister Kelley for something comparable.

On March 12 we had an hour and a quarter interview with Mr. Kelley in the new wing of the Parliament Buildings at Queen's Park. We told him that he had a rare chance to help us. Two or three years from now we wouldn't need his help. He told us that several men came up and told him of their vitamin E cures at the Goderich ploughing match and in Hamilton. He offered to take a week off after the legislature session was over and go around to see our cases. He told us he would call in 100 doctors for a mass discussion in two or three days time and have us come down to speak to them. We agreed, with real pleasure at such help. He phoned the Provincial Secretary while we were there to see what was holding up our application for the

establishment of a research foundation. The Secretary hadn't heard of it. However, Cam Calder had had word three days before that the application was held up in the office of the Minister of Health. We left Kelley a typewritten page telling him how Banting's first year and ours compared, giving a brief on our research, with suggestions as to our needs and also a copy of Stevenson's book on Banting.

On the 15th of March, permission to establish our Foundation came through from Queen's Park. That same month at St. Joseph's Hospital in London, we treated our first case of gangrene, an old man by the name of McKay. We heard of other gangrenes and wrote their doctors for permission to become involved with the treatment but had no replies.

Dr. Ivan Price, a local dermatologist, had an excellent result on a chronic ankle ulcer with vitamin E. Canon Quintin Warner thought his choroiditis was being helped by vitamin E. The night before he could finally distinguish clubs from spades in a game of cards. Ivan Smith tried vitamin E for mazoplasia and was much impressed by it. He later read a paper in Montreal on this topic.

We were unsuccessful in getting a place on the annual program of the Canadian Medical Association. This was true for three years in a row; then we stopped applying. Their programmes were always filled when we applied.

We were turned down for a National Research Council bursary. We announced the establishment of the Foundation to the press in London. The general impression among our confreres now seemed to be that vitamin E for heart disease was "dead." We had a very nice item in the *Free Press* on the topic, however.

In April, we went down to talk to the Kansas City Academy of Medicine. After a fine meal of Rocky Mountain trout with Dr. Donald Coburn and his wife, Max, in Kansas City, we went to the Medical Academy dinner where I met my old obstetrical intern from Lying-In days, Dr. Dick Schultz. The leading medical personality there seemed to be Dr. Helwig, the pathologist. About a hundred people turned up. I spoke first and did fairly well. Wilfrid came on next and stole the show with his case histories. There was a good discussion afterward, all very favourable and friendly, to our surprise. A reporter from the *Kansas City Star* was there. Wesley Hicks, the medical reporter of the *Toronto Star* had dogged us to Kansas City. He

showed us the material he intended to publish, in order to have it corrected before he submitted it for publication.

Another *Toronto Star* reporter came up to London to see us shortly afterward. He told us that all the Toronto doctors were saying off the record that vitamin E was useless, but did not want to be quoted. He remarked that Keith Stuart had said that vitamin E was useless in about 50 per cent of cases and that it was too early to say anything about its use in the remainder. This was a real slap in the face from an old friend who knew better but played it safe ever afterward.

The well-known radio personality, John Fisher, talked to the Canadian Club in London on April and, unexpectedly, gave us a great boost.

I had a letter from Dr. Basil Harvey, the former Dean of the Medical School at the University of Chicago, who had stopped my Ph.D. studies there years before, thanking me for what vitamin E had done for his own heart.

Dr. Hobbs Taylor, another "friend" mentioned above, sent a telegram to the *Star* pointing out that he didn't use vitamin E and had looked into our claims and found them baseless. He died shortly afterward of another coronary.

Mr. Kelley, the Minister of Health, promised to call the great drug houses and ask them to supply vitamin E to Professor Ray Farquharson of the University of Toronto in order that Ray could start a controlled series at once. This never developed. All sorts of pressure, medical and political, was being brought to bear upon newspaper reporters to squelch mention of vitamin E in the papers.

The Honourable Paul Martin, Federal Minister of Health, and an old college classmate, stopped at the Hotel London where I had an hour's chat with him. He was flabbergasted by my story and my coloured photographs and asked what Hall had said about all this. I told him that one of us (Hall or I) was a dreadful rascal. He said he found it very difficult to understand the attitude of the profession, and that he had heard from a doctor in Ottawa that I was feathering my own nest with this silly racket. I pulled out my bankbook to show him how I was getting on financially but he waved it away. He told me that he didn't know what he could do for me, but would do all he could and that Kelley would, too. In parting, he told me that anyone could see that, "You are either a genius or a damn fool." I replied that time would soon tell.

Dr. J. B. Collip of insulin and parathyroid fame became the medical dean of the University of Western Ontario on April 22. I never did talk to him about vitamin E while he lived in London, and he made no attempt to raise the subject, although I had seen him 19 years before when I was at the Montreal General Hospital and had then consulted him about my ideas on accelerating healing of fractures. He had been very uninspiring and unhelpful then. It was curious, really, to have the President of a national medical council able to live and work in London for 17 years and yet ignore our studies. At no time did he or the Medical Division of the National Research Council show any interest of any sort in our studies. He died in London in 1965.

On April 23rd we went down to Toronto where we personally thanked the owner of the *Toronto Star*, Mr. Atkinson, for all that his paper had done. He sent us to his editor, Hindmarsh, who looked at our coloured slides and was pleasant but noncommittal. I talked with Lorne Pierce for a bit at Ryerson Press and put him on vitamin E, as he was failing badly.

Dr. Miller, the internist at Stratford told us that he had used vitamin E on three diabetics and found, as a result, that their insulin requirements were reduced. We told him that Art Vogelsang, George Dowd and Dr. A. G. Whorton of the Warren Teed Company had noticed this also. I heard of another choroiditis that had responded well to vitamin E and Canon Warner sat behind the goalposts at a Stanley Cup game that spring and saw the numbers on the players' sweaters for the first time in many years.

In May, Paul Martin wrote us a kindly non-committal letter about what he could *not* do for us so we decided to forget him.

On May 13, 1947, CBC radio carried Dr. George Ramsey's comment at the Ontario Medical Association meeting that "vitamin E had the doctors split" and "had the profession on the horns of a dilemma." I met him at the hospital and he said he realized that vitamin E could not be ignored and advised me to urge Kelley to action, and to ask Farquharson as President of the Royal College for "direction on the ethics of a problem without precedent in Canadian medicine." I told him that we would be willing to go to the Canadian Medical Association meeting in Winnipeg the next month and that we were writing the local Academy of Medicine urging them to invite the Federal and Ontario Ministers of Health and the President and Vice-

President of the Medical Division of the National Research Council, as well as the President of the Royal College of Physicians and Surgeons to its meeting on vitamin E to be held on June 12. The *Free Press* called us for comment on the situation. I told them that we were bewildered and that we probably would have been wiser to have spent our time on bread pills or fruit trees. It seemed that the controversy was now out of professional control. Wilfrid thought we should point out to the press how hard we had tried to avoid the mess that now loomed up by warnings we had given everybody in authority that Vitamin E could not be ignored or suppressed indefinitely.

On May 15 I saw Mr. Kelley at the Parliament Buildings in Toronto. He told me that he now had dummy capsules and the next day he would call on Professor Farquharson of the University of Toronto to begin his controlled experiment. We recommended at least 25 cases in the treated series and 25 in the controls, which should be chosen randomly and that they should be given six months observation before any conclusions were drawn as to the efficacy of the therapy. Our therapeutic regimen should be adhered to, without any variation. I invited him to the meeting of the London Academy of Medicine on June 12.

After I left Kelley I met Dr. Feasby, the editor of *Modern Medicine* at the Lieutenant-Governor's reception that afternoon. I showed him the card which the London Academy had sent out that morning, calling for a special meeting of the Academy to reconsider our invitation to speak. He told me that his magazine had sent a questionnaire to all professors of medicine in the country asking about vitamin E and that most of them had answered in the negative. I saw Ray Farquharson there, too, and he told me that he had just been appointed Professor of Medicine at Toronto. He said that the Royal College of Physicians and Surgeons had no role to play with respect to our work. He said that he would be glad to discuss vitamin E with me but that he was tied up for two months to come. I doubt that he ever expected to do anything on vitamin E and as it developed, he never did.

I went down to see Mr. Wilkins, Manager of British Drug Houses of Canada, late that afternoon, gave him a summary of our situation, showed him our coloured slides and told him that we wanted \$50,000 from B.D.H. He was non-committal but urged me to ask Distillation Products for \$250,000 for the

research institute I had in mind. I went that evening to our medical class reunion where I found that one of our classmates, Bowerman, had already had a leg amputated for Buerger's Disease. I told him about vitamin E and he took it for years until he died, getting real benefit from its use.

On May 15, 1947, I went to the special meeting of the London Academy of Medicine alone. There were about 36 there. After an hour and a half of discussion the motion to postpone our speech was passed by 19 to 14. The premise for this was that the Ontario College of Physicians and Surgeons was now investigating our "cure" and the Provincial Ministry of Health had appointed a commission for the same purpose. Dr. Carl Cline tried to have me excluded from the meeting, but his motion failed for lack of a seconder. I said no word from start to finish. The Executive Committee was censured by some members because it had by-passed the Programme Committee in calling the meeting. The ten members of the committee who signed the petition to hold this special and unprecedented meeting included Drs. Cline, Kennedy, Wilcox, Bartram, Lewis, Collyer, Bob Johnson and Ward. Ward made much of the press publicity, claiming it was unethical. I nearly choked but said nothing.

George Stevenson's letter to the Programme Committee urging that we be asked to speak to the Academy was read. Old Dr. Seaborn spoke for us as did Ivan Smith and Harold Pink. A particularly savage speech was made by my old "friend," Dr. DeWitt Wilcox. After Wilcox had finished, Seaborn turned around in anger and said to him: "You remind me of the French Academy of Medicine discussing Pasteur." Dr. Cliff Pennecott, the Academy President, suggested that perhaps another ten members should hold a special meeting and should ask us to speak to the Academy. I finally rose to say that we would refuse such a kind invitation in order not to split the Academy. Next morning our opponents got a rough verbal hiding from several doctors at Victoria Hospital, e.g. Jepson, Richardson, Keeley. We never did describe our work to our own Academy of Medicine, of which I was once Treasurer, and years later, Historian.

Canadians do not believe that "mighty works" can come out of Canada. They remind me of the story of the old man in Dayton, Ohio, who was told of the Wright brothers' first airplane flight. He said: "Nobody ain't never gonna fly, and if

anybody does, it won't be nobody from Dayton."

On May 21, Mother and I drove down to Toronto in pouring rain to meet Kelley and Ray Farquharson. The latter failed to show up and could not be found. He was probably hiding under a bed somewhere. While we were there Kelley's secretary rushed in to say that Mr. Greenaway, the *Toronto Star* reporter, was there and wanted pictures of everyone. Kelley said: "No pictures. That would get all the doctors lined up between this and Front Street to demand my resignation." He rushed out to shoo Greenaway away. The Deputy Minister of Health (Dr. Phair) said that Dr. Farquharson saw the need for special investigation and that 25 test cases and 25 controls were really not enough. Fifty to a hundred in each series would be better. We pointed out that we were just trying to make things easier for the University of Toronto Department of Medicine in suggesting a small series. All that we objected to was the series that Dr. George Ramsey of the Ontario College and Dr. Farquharson had agreed to as a preliminary, namely, four in each half of the study. Phair smiled incredulously. We stayed to make some further suggestions about Farquharson's experiment.

Floyd Skelton passed his examinations and finally became an M.D. I got Dr. Hans Selye to give Floyd a job in his Department of Endocrinology for research on vitamin E in the next year. Selye would not let him work on vitamin E, however, and Floyd went on to take his Ph.D. degree in a hormone field selected by Selye.

I attended the American Sterility Society meeting at Atlantic City in June, then stayed for a couple of days to sample the A.M.A. meeting there. I met Dr. Worton again who told me that he thought that Lilly was sponsoring a piece of research on vitamin E at the Mayo Clinic and that President Truman's mother had recovered dramatically recently, using their vitamin E product. We could never confirm either rumour.

I was in the audience of the American Medical Association meeting for the Round Table on Heart, held under the chairmanship of Dr. Paul Dudley White, Harvard's famous chief cardiologist. Dr. Louis Katz of Chicago had just spoken about testosterone and then was given a question on vitamin E. He complained, "I am drawing all the questions with a punch." Then he read the curious statement which has since been so

often cited in the *J.A.M.A.* Vitamin E, he said, was only "ceremonial therapy" and although he had never used it, he agreed that it was valueless.

On my way home I visited the Hoffman La Roche plant at Nutley, New Jersey, and met Dr. Sevrinhaus, their research director, a famous endocrinologist, who at once took me to Vice-President Peterson. I suggested that Hoffman La Roche make us a grant of \$100,000 toward the work of the foundation. Peterson said that this was out of the question. I also asked him for a scholarship for Floyd Skelton. I was shown through the plant and saw the tiny apparatus for making all their Ephanol (vitamin E). It was certainly a minor item with them. I showed Sevrinhaus and his assistants our coloured slides. He finally advised me to keep on with my practice and forget about research and the Foundation.

In June I was included in Canada's *Who's Who*. *Modern Medicine* published our letter on vitamin E but deleted our precautions. I complained about this to Editor Feasby, pointing how needless and dangerous it was. No reply. *Surgery*, *Gynaecology and Obstetrics* accepted our vascular paper with coloured photographs. It appeared around New Year's, 1948.

British Drug Houses turned down our request for a grant for the Foundation and Sevrinhaus officially turned down our request for a grant from Hoffman La Roche, but gave Floyd the \$1500 scholarship with Selye mentioned above. In July, Art Vogelsang and I talked to the interns at St. Joseph's Hospital, London about vitamin E. Parke-Davis and Eli Lilly wrote that they were not interested in supporting the Foundation.

In August we visited Wilfrid's camp, "Stone Turtle," on Lake Temagami. When I got up there Bill Gutterson and Al Webber of Webber Pharmaceuticals in Toronto came up to show us the Vitamin Corporation of America brochures on Vitamin E. We criticized the draft and made several changes in it. Bill Gutterson said he would like to be involved in promoting our Foundation in some way, and offered to pay for the coloured photographs in *Surgery*, *Gynaecology and Obstetrics*. He told us that a representative of the A.M.A. had gone to the American headquarters of Vitamin Corporation of America asking for a prior view of their new brochure.

In September Bill Gutterson told us that he had had an interview with Mr. Kelley. Kelley told him that he couldn't sleep

as he was haunted so much by vitamin E. He said that vitamin E would have been dead if Bill's company had not begun to revive it. We began to have frequent visits from Bill Gutterson, who played a major role in our lives for many years.

My hysteroscope was still not finished at Rochester. I had waited a year and a half for it. I finally abandoned it because it was inadequate and a better one had been made and marketed in the United States.

On September 21, 1947, we had the first of the regional vitamin E meetings that Hickman had proposed. It was held at the Strong Memorial Hospital in Rochester, New York. There were about 30 there, with Dr. Karl Mason as chairman. Dr. George Dowd was there and Dr. Hove read a paper on experimental stomach ulcers in rats, saying that they could be healed by vitamin E. Two purpuras were described by Drs. Bruce and Blandau of Rochester. They had been vaguely helped by vitamin E. Then Dowd got up and talked about vitamin E reducing the insulin dosage in diabetics, lowering blood cholesterol levels, and helping pyelonephritis. A Dr. Cormier talked about the relationship of vitamin E to digitalis. Old Dr. Williams who had worked on insulin in its very early stages, pointed out that many diabetics decrease their insulin requirements spontaneously. He even said that all superficial gangrenes healed with rest and elevation! The value of tocopherol in such problems, he said, was far from obvious. Kaunitz of New York spoke about the oxygen consumption of vitamin E-deficient muscles. Bruce again pointed out that vitamin E had not helped three or four thrombocytopaenic purpuras tried at Strong but the dosage had been small. Hickman concluded by attacking our concept of high dosages, saying that we were "up in a balloon." Art Vogelsang did very well in this discussion.

Our Kansas City paper was refused by the *Missouri State Medical Journal* but appeared in the *Proceedings of the Kansas City Academy of Medicine*. Wilfrid was asked to address the Electrical Club of Toronto on Vitamin E for Hearts. The club wanted to broadcast the speech but I urged against it.

My consultations had fallen off remarkably by this time and my income had dropped considerably inside of a year after our announcement of the use of vitamin E for heart disease. I never again had consultations from any but two doctors in my city, my old friend Beaumont Sexton and Henry Mayr.

On November 25, Bill Gutterson, Wilfrid, Art and I met Dr. George Stevenson of the Ontario Hospital of London, and later, Health Minister, Kelley, at the Parliament Buildings in Toronto. Kelley agreed to run a series at the Ontario Hospital with Art Vogelsang in charge under George Stevenson. Frank Kennedy, consultant internist at the Ontario Hospital, would not be allowed to interfere. Kelley was going to consult his two deputies about this and speak to Dr. Stevenson to finalize it. Patients were initially selected but I don't believe that any ever got one capsule of tocopherol. The trial never got off the ground.

Molotchkick's paper came out in *The Medical Record*, the first medical paper substantiating our claim about the value of vitamin E for heart disease. We had some fine results with eyes at this time, working with local ophthalmologists on optic atrophy, eclamptic retinitis and choroiditis.

In December, Wilfrid talked to the Detroit veterinarians on vitamin E. Wilfrid also met a doctor in Detroit who was very impressed with his own experiences with vitamin E on animals. By that time Wilfrid and Art had had fine results with three cases of Buerger's Disease.

I had been reading Pasteur's life and was struck by the amazing similarities to our own experiences.

Chapter Seven

MEDICAL WAR HEATS UP (1948-1950)

Once, on a problem difficult,
I got a rather good result
And wrote to *Science* to exult
And add to knowledge.
But this aroused the learned cult
—And I left College.

It did not matter were I right
Of if my facts were recondite
Or if men died. Was I polite
And acquiescent?
An academic acolyte
Should bow incessant.

But if he choose to play the man
And print his work before they scan
And add their names or voice a ban
They kick him out,
And ever afterward trepan
The daring lout.

They blacken him by subtle rules
They warn their colleagues and their tools
That he's uncouth or that he drools
And they make sure
He never works in other Schools.
It's quite a cure.

Vere Jameson, *Anatomy Class*, 1953

In early 1948 our article in *Surgery, Gynaecology and Obstetrics* came out, the one that we had really leaned on for the support of our thesis. No one noticed it then or later. The coloured plates cost Bill Gutterson \$1,035.

On January 20 the Honourable Mr. Kelley phoned Bill

Gutterson from *outside* the Parliament Buildings to say that the Cabinet would not support him in any help for us, that there was great organized opposition, that he realized that a third of the doctors in the country were using vitamin E, but that he could do no more unless to announce to the press that a big experiment was being tried at an Ontario Hospital on the use of vitamin E for hearts.

Wilfrid was thinking of moving to Toronto and organizing a club of vitamin E patients. He thought of calling it "Borrowed Timers." They were to meet and dine at the Royal York and hear the continuing news of vitamin E.

At the end of January Wilf and I went down to New York for the second regional meeting on vitamin E at Columbia University. Kaunitz spoke about rat resorption in vitamin E deficiency. Berg spoke about rat stomach ulcers. Blagdon of Harvard spoke about focal necrosis in vitamin E deficient rabbit hearts. Other speakers pointed out that the neurotic areas found in these rabbit hearts were found also in the hearts of rats, hamsters, guinea pigs and cows under similar conditions of vitamin E-deprivation. I. F. Burgess of the Montreal General was a big surprise to us when he said vaguely that he had used vitamin E deprivation. I. F. Burgess of the Montreal General cases of lupus erythematosus and two large diabetic necrobiotic ulcers, as well as some dermatomyositis being helped by vitamin E. Milhorst confirmed these observations. Burgess told me he hadn't had much luck with psoriasis. Dowd told of a case of subacute endocarditis in a diabetic. We said practically nothing throughout, which I thought was wise. I met the neurologist Stone, who insisted that neurological cases needed no more than 50 mgm a day of wheat germ oil. George Dowd showed his decibel apparatus for recording the intensity of heart sounds.

Next morning we got up early to inspect the Vitamin Corporation of America Laboratories at Newark. Its President, Morton Edell, was very enthusiastic about vitamin E, and showed us sheaves of letters from enquiring physicians. He showed us his wonderful new plant. His head pharmacist rolled up his trouser leg and showed us a chronic leg ulcer healed on vitamin E after ligation had failed.

At the end of that month I sent letters indicating our background, our discoveries, and a bibliography to each of the Governors of the University of Western Ontario; to Dr. R. T. Noble, the secretary of the Ontario College of Physicians and

Surgeons; Mr. George Drew, the leader of the Conservative Opposition in Ontario; the Federal Health Minister, Paul Martin; and to Mr. Kelley, Health Minister of Ontario. We also mailed letters to the ten doctors who had protested against our speech to the London Academy of Medicine the year before. One Governor replied courteously. No one else responded. We were treating a good many diabetics by this time and the results were occasionally very good.

Early in February, Mr. Kelley told Bill Gutterson that he hoped the experiment at the Ontario Hospital in London was far enough along to enable him to make a statement. However, we were still waiting word from Dr. George Stevenson, the Superintendent of the hospital, saying that he was ready to begin, a month and a half after he and Kelley had arranged the experiment. Kelley himself had been helped by taking vitamin E and announced at a public meeting that he took it. The press did not report this last remark.

The *Toronto Star* was going to print a little note on the Columbia University meeting, but apparently old Dr. John Oille, the senior Toronto cardiologist, raced down to the *Star* office to stop it.

In February, Art Vogelsang talked to the Toronto Retail Druggists at the Royal York Hotel. It became a kind of old-time testimony meeting, with two druggists telling how each had cured a Buerger's Disease with vitamin E. Alan McAree wrote an article on vitamin E in his column in the *Globe and Mail*, mentioning the enthusiasm for vitamin E of the former champion Canadian heavyweight wrestler, Phil Lawson. The *Toronto Telegram* was besieged with phone calls after Vogelsang's speech.

We wrote to the presidents of the Canadian Life Insurance Officers' Association concerning their recent grant to the Toronto Hospital for Sick Children for work on the degenerations due to diabetes. We asked them if this wasn't fighting the Boer War over again. No reply came.

We found out in February that Butturini of Italy had priority in the tocopherol treatment of diabetes. This was disappointing—and yet encouraging. We promptly acknowledged this and always have done so since. About that time we thought about incorporating in Missouri but that would have put us in the hands of the American Medical Association and would have been professional suicide. We dropped the idea.

In February, 1948, I made my first and only trip to the Mayo Clinic. On the way I stopped at Billings Hospital, Chicago, where Dr. Emmett Bay, University of Chicago cardiologist and an old teacher of mine, quizzed me on vitamin E for hearts. Art Hunt, my old chum at Chicago Lying-In Hospital, met me at Mayo's and refused to let me stay at a hotel. He told me that the Mayo Clinic was enlarging rapidly. The little city of Rochester contained about 30,000 people, nearly all being medical people or in some way dependent upon the clinic. The first morning I was up for an early seminar where I met Drs. Betty Mussey, Randall, Lois Day, Lovelady and others, all in obstetrics. I looked up Dr. Paul O'Leary, the dermatologist, because I knew that he had been using vitamin E for lupus. He had never heard of me, didn't know any of the vitamin E literature, and had blindly followed Burgess's suggestions, using injectible vitamin E. He thought I was a pharmaceutical detail man. As our discussion continued he called in his assistant, Farber, who listened in. Apparently no one at Mayo's knew about the January *Surgery*, *Gynaecology and Obstetrics* paper although this was the end of February. I suspect they read very little, laying emphasis on the endless series of seminars, lectures, conferences and meetings that they hold. I have never known such an exhausting schedule as these doctors had. I went down to the urological department to see if they had ever seen oestrogens produce thrombocytopaenic purpas. Apparently they hadn't. Huggins had not seen this either. I called on Dr. Alberts in the laboratory, but he had nothing to contribute. I talked to Dr. Estes of the vascular department and tried to introduce him to vitamin E. No luck. Then I went down to see Dr. Frank Mann Jr. He was really a ball of fire, and was interested in our suggestions about platelets.

Next morning I was up early and met Dr. Ward Van Petter, who used to be a student at Western and later became a professor of surgery in the United States. He drove me to the experimental farm. Dr. Schlotthauer told me that swine had more anomalies than any other species of animal. At noon I gave a special seminar about vitamin E and oestrogens to the Obstetrical and Gynaecological group for two hours. I found out afterwards that Dr. Lois Day had worked for seven years using oestrogens for pre-eclampsia, but had been afraid to publish her work and couldn't get anyone there to believe it. She was

full of enthusiasm at this unexpected confirmation of her work. So far as I am aware she never did publish or announce her work. She showed me many of her wonderful records confirming our views.

Art showed me through the old Will Mayo home which is now the Foundation house. In it was a round dining table around which the whole staff of the Mayo Clinic had been able to sit in the year 1927.

In March, *Argosy* had an article on us and sent the proofs to correct. Cronenberg of *Magazine Digest* wrote us up in that magazine. By that time Prof. Paul Pin of Paris had published a paper on the value of vitamin E for hearts and we finally got a photostat of Butturini's paper on the use of vitamin E for rat hearts.

On March 6, the new Board of Directors of our Foundation had Bill Gutterson up and we talked about his idea of becoming a public relations officer to raise funds for the Shute Foundation. Bill was to submit a plan for this, provide his own expenses and work on a commission basis.

On April 9, 1948, Dr. Smithwick, a Boston vascular surgeon noted for his sympathectomies, gave a clinic at St. Joseph's Hospital in London and finished off by showing two patients who had just had amputation or were about to have it. I took part in the discussion, saying ironically that an obstetrician rarely discussed this type of case but I was deeply interested in these conditions. I would hesitate to suggest such an expensive, dangerous and difficult therapy as alpha tocopherol, I said with tongue in cheek, but if it were used one could make some interesting predictions, even if I were no Drew Pearson. I would predict that if adequate doses of alpha tocopherol were used the circulation would return to these feet, the ulcerated stumps would heal, no amputation would be required, and these patients would soon leave the hospital. Smithwick made no rejoinder. No one else commented. Silence. More needless amputations and pain, no doubt.

The *Magazine Digest* article came out in April. We were now trying our first burn case (6 year old Frankie Underhill) and our first ununited fracture. Dr. Ford Connell, Professor of Medicine at Queen's had condemned vitamin E at the Ontario College of Physicians and Surgeons' hearing a year before, but now wrote to V.C.A. in Toronto for supplies for an experiment at Kingston. On the reprint of the oestrogen article I sent him I

wrote: "Dear Connell. The Greeks called it nemesis." I believe he developed angina much later, but we never again had any contact.

Our ununited fractures seemed to be doing very well. This supported the prediction we had made at the Kansas City meeting and really touched on a very interesting and fundamental idea, namely, that normal capillary beds could develop increased circulation under the influence of vitamin E. We never again had a chance to treat a fracture, unfortunately.

The *British Medical Journal* accepted our 12 month survey of treated hearts which I had sent them on December 21 but the article never appeared. I have never known of a similar incident. The *Medical Record* accepted Art Vogelsang's paper on diabetes in May (previously rejected by the *Journal of Clinical Endocrinology*). The advertising committee of the C.M.A.J. rejected Bill Gutterson's full page innocuous advertisement of vitamin E.

Early in May the third regional Vitamin E Congress was held at the Montreal General Hospital. It had a very poor attendance—only four from the Montreal General staff. I. F. Burgess showed some interesting skin cases. Wilfrid and Art Vogelsang talked about vitamin E and diabetes and Wilfrid showed interesting blood sugar curves on four diabetics. Dr. Edward Bensley was at the meeting but not Al Fowler or Rabinovitch. In the afternoon, old Dr. Williams of Rochester got up to damn vitamin E for diabetics. Then there was a good paper by Govier on the relations of tocopherol and digitalis, which no one seemed to comprehend, unfortunately. Scardino gave a fine paper on Peyronie's Disease. Stone's paper was dramatic, but he still used small doses of wheat germ oil. Ivan Smith talked about vitamin E for mazoplasia. This turned out to be quite important many years later. Wilf and Art gave another series about electrocardiograms which Dr. Birchard, the Montreal General cardiologist, came in to watch silently. Steinberg reported that vitamin E was not too valuable for five cases of acute rheumatic fever, using small doses. Then a Dr. Mahon of Harvard got up to take vitamin E apart, and our work especially. He pointed out that it was needlessly boosted by the press, was unconfirmed, should have waited for basic work to support it, ought to have been done by proper people, and so on. When he sat down I went over to him and told him he had better not have a coronary for the next forty years, but if

he did have one, what would he take? "Digitalis" he said. I told him: "Curiously enough, that won't help you very much. Just don't get a coronary." He was the little Napoleon type.

We adjourned to the University Club for a wonderful dinner, followed by a fine speech by Hickman on the fundamental values of vitamin E. He said, perhaps for Mahon's benefit, that the thing criticized was always greater than the critic. A joke is always greater than the joker. One million capsules were being used throughout the world. He told us that some studies made on corpses showed that women had twice as much vitamin E in their bodies as men. Some of the big pharmaceutical companies were represented at the dinner. There was a pretty hot discussion afterward about press releases and so on. As we left Dr. Joe Pritchard of the Montreal General Hospital told me he thought we had nothing much to worry about. Mahon finally told me: "I find you a very convincing person, Dr. Shute."

While delivering a baby at Victoria Hospital on May 24, I heard the Salvation Army band playing a concert under the windows of the obstetrical wing. The first hymn ran: "We are not divided, All one body we."

That month a famous freelance writer, Ratcliffe, drove up to spend a day with us. Wilfrid showed him a dozen fine cases and I showed him our slides. He got his story about vitamin E straight. We gave him a pile of correspondence to look at. He spent the evening with Art Vogelsang and saw his electrocardiograms. Dr. Hall hid from him, but Collip saw him readily, and told me he was so busy with his own work that he scarcely knew what else was going on. The next week a Mrs. Jean Cottier spent time with us, preparing an article for *Maclean's Magazine*. Her husband, Roy, interviewed Dr. Hall, who categorically refused to be quoted on the place of vitamin E in medicine. But Cottier wouldn't be sidestepped when Hall wanted to refer his questioner to Dr. R. T. Noble, Secretary of the Ontario College of Physicians and Surgeons. Collip tried to brush him off, too. On "medical advice" *Maclean's* rejected Cottier's offer of his article in mid-June, but *Coronet's* editor, Dr. Bamberger, accepted Ratcliffe's article.

That month we went to dinner with Dr. Bruce MacCallum and met the Hugh McMahon's. They had had an English fox-hound called "Rockdale Rocky" with dyspnoea and Mrs.

McMahon, who had heard that wheat germ oil helped the appearance of a dog's coat, asked her husband to pour three or four drops of oil on the dog's food every day. Mr. McMahon thought that if a little were good more would be better, and he literally poured the oil over the dog's food. At once the dog lost his dyspnoea and began to frisk all over town, although by this time he was 15 years old. It seems that the McMahons antedated our heart discovery by accident.

The *Coronet* article came out on June 1 and was very good. At the end of June the Canadian Medical Association met in Toronto and featured a panel on drugs for heart disease. Dr. Ed Bartram of London was on the panel. Dr. Jack Lewis of London enquired from the floor if vitamin E had any value for heart disease. Dr. Hamilton of Toronto, the panel's chairman, said: "We are ready for this. Dr. Bartram will answer." My old friend Ed got up to say that the Ontario College of Physicians and Surgeons a year ago had found that vitamin E was valueless and he shared their opinion. It was of no value whatever in the management of any form of heart disease. We sat quietly in the audience and said nothing.

About that time I met Dr. Dick Coatsworth, an old friend of Wilfrid's who had been doing good things with vitamin E and diabetes. On July 1 Dr. Hickman was discharged by Distillation Products. We never did find out the reason. He continued in Rochester in another research institute. We saw a paper by him in 1966 and he was working actively in 1973.

Wilfrid, Al Webber, Bill Gutterson and I talked about a Research Institute and I spent sleepless nights as I dreamed about it. It formed in my mind as a four storey Institute with clinical and laboratory research facilities, sitting in the glory of collegiate gothic near the entrance to the university on Richmond Street, built much on the lines of the Mayo Clinic, perhaps with an animal farm near Heronspool, probably costing something like five million dollars. The dream never materialized, but awaits my reincarnation. Selwyn Dewdney drew a sketch of the proposed Institute when I asked him to illustrate one of my books of verse.

In July there was a bad article criticizing us by Boaz and Levy in the *Annals of Internal Medicine*. We promptly submitted a reply which the *Annals* was good enough to publish.

When Roy Cottier interviewed Napier Moore, the editor of *Maclean's*, he squirmed as if before an inquisition. Finally he

told Cottier that he had inquired of the Canadian Medical Association about vitamin E. The Association had referred him to several leading Toronto doctors who had told him to leave us strictly alone. In July, *Hush* published the hottest article yet on vitamin E and the doctors in support of it. There was a strong attack on vitamin E for hearts in the *American Journal of Medical Sciences* by Boer, Heine and Gillford.

Later in the summer of 1948, Cronenberg came up again to interview us for material for a diabetes article in the *Magazine Digest*. We showed him a wonderful case of Vogelsang's, cut from 35 units to 5 units of insulin a day. (Wilfrid and I had three cases of diabetes who did not respond to vitamin E, but were helped by Ronsheim's oestrogen therapy first announced in 1933.) Cronenberg could scarcely believe that the editor of *Modern Medicine* could leave out our cautions on the use of digitalis and insulin with vitamin E until he saw the correspondence. He told us that our article on hearts in *Magazine Digest* had created more interest than almost any article that *Magazine Digest* had ever carried.

New Liberty accepted Cottier's article. I sent to Dr. Charles Best of insulin fame, Art Vogelsang's article from the *Medical Record* with a pleasant covering letter, but had no answer from him then or at any time later.

Dr. C. B. Stewart of the Medical Division of National Research Council inspected facilities for medical research in London and forgot to look us up. Stewart must have been steered away from us by Collip, because Vogelsang had sent Stewart a copy of the *Medical Record* article before he came to London.

Vogelsang was getting worried about the Shute Foundation and the Shute-Vogelsang therapy for hearts. He told us on September 2 that the references should read: "The Vogelsang-Shute therapy for diabetes." He had forgotten that I had sent him Mrs. Clarke, the first diabetic he had ever found to test vitamin E on, that I had thought of vitamin E for diabetes in 1936 and talked to Dr. Earl Watson about it then, and that for months in 1947 I could scarcely interest him in it. In any case, Butturini produced his publication before us, clearly giving the Italian priority.

The September meeting of the Foundation's Board of Directors made Bill Gutterson Business Manager of the Foundation and put its campaign in his hands for the next 15 years.

We inserted a divorce clause in it by my insistence. It gave Floyd Skelton some tuition money for the following year. It made Art Vogelsang and Wilfrid "medical consultants" to the Foundation.

In September I had the idea of starting the Institute in Waverley, the Morgan-Smallman home in south London that was coming up for auction.

We began to have trouble with Art Vogelsang. He was giving his own interviews to the press on his work on diabetes. I wrote to the *Canadian Medical Association Journal* to protest about a Burgess-Pritchard article on vitamin E for ulcers but we could not? Moreover they, Burgess and Pritchard, had forgotten to mention our work in their bibliography.

On September 21, 1948, I delivered seven babies in 21 hours, which became my new record.

Jerry Wyant, just back from Bloemfontein, told us that Sir Ernest Oppenheimer of De Beer's diamond monopoly was the best patient we had advertising vitamin E in South Africa. We never had any other word on this.

Roy Cottier was pushing his heart article in a big publicity campaign. Gordon Sinclair (the well-known Canadian broadcaster) discussed this article on Toronto's CFRB radio station. At the end of September Vogelsang was obviously very leery of joining the Institute. He was happy about Roy Cottier's article, the publicity and his own fame. He enjoyed a fine independent role, and I saw that he didn't want to be cast in daily contact with Wilfrid.

In September Roy Cottier sprang an article in the *Montreal Standard* without any prior proofreading by me—I supposed at Vogelsang's instigation. There was no mention of Butturini's priority and there were few or no restraining adjectives in it. I indignantly chastised Art Vogelsang for this. A day or two later we drafted the Canadian press a warning of the dangers of the use of vitamin E by diabetics, as well as a release on the new Medical Institute we were trying to start.

Art Vogelsang was asked to talk to the London doctors' Noonday Study Club on October 6, but this was postponed to November 17, as the President, Dr. John Lewis, had told the Programme Chairman, Dr. Ronald Bourne, that the talk couldn't be given while he was president. Fortunately the programme was already at the printers. There was a pretty hot controversy but eventually Vogelsang made his speech. He then told

me he would like to be with the Shute Institute, but only on a part-time basis until he saw his way more clearly. We caught him in a couple of lies about the article on diabetes which he released through Roy Cottier in the *Montreal Standard*. We couldn't go ahead with our plans for the Institute until we knew what Vogelsang was going to do. He stalled for several days. He apparently wanted to act as part-time "consultant" to the Institute, but we pointed out that that would be incompatible with its salary programme.

We wrote a letter, at Art's insistence, to Health Minister Paul Martin, the Medical Association of each Province, and the President of the Canadian Medical Association, requesting that vitamin E be put on a restricted list and no longer be sold over the counter. No replies came and nothing was ever done on this proposal.

On October 4, Vogelsang and I had a knock-down, drag-out discussion in a London hotel room, with Al Webber and Kim Beattie present. Art said that purchasing Waverley was premature, that we should wait until the spring at least, that his half-time participation could not endanger our income tax exemption, and that he couldn't work under anyone anyhow. I pointed out that he was getting along pretty well financially in the current situation, but that it was costing us money, as we were doing nothing but answering letters and had hired a stenographer full-time for this work. Art complained that there was a one-sided Shute accent in the forthcoming press release. Accordingly, I went down the text, item by item, asking him what he had actually contributed in original ideas to the investigation, pointing out that all his contributions had been false scents which Wilfrid had streered clear of. I asked him where he was when we picked him up, and pointed out that Skelton's name should be just as prominent as his on our team. I added that only once had I put my name first on a paper, and that was when I had to trade places with Floyd at the latter's request to save his skin with Hans Selye in Montreal. It finally came out clearly that Vogelsang didn't want to join the Institute at all. I said that that was fine and there need be no hard feelings on that account. I didn't blame him for wanting to become independent. I just didn't think that he could be both in and out of our organization at the same time. We agreed to separate in harmony and I told him he was free to change his mind and join later if he chose.

On September 30 we bought Waverley for \$40,000 with an interest-free loan from Webber's. Wilfrid moved down from Guelph and I was almost sick with anxiety at the plunge. It was a building of 40 rooms (we later achieved 56 rooms by dividing or addition). On October 5, 1948, our first employee, Miss Eleanor Hurley, began working at the new Shute Institute.

At the opening meeting of the Noonday Study Club that autumn both Dr. Jack Lewis, the President, and Dr. Ivan Price, the Vice-President, resigned because Vogelsang had been asked to talk on vitamin E for diabetes. There was a lot of bitter controversy but Drs. Sebert Henry and J. W. Crane expressed the general feeling that freedom of speech was at stake and must not be suppressed. Jack Lewis's letter of resignation was long and savage. He thought there was no reason why doctors should hear a talk on a topic one could read of in any newspaper, which his own studies had disproved, which had received no medical support even from Burgess of Montreal, and so on.

On October 7 there was a big spread in the *London Free Press* about our purchase of Waverley and its conversion to a Medical Institute.

In the middle of October, Bill Gutterson and I asked Morton Edell of V.C.A. for a one hundred thousand dollar grant to the Institute. He offered us \$5000 which we refused. He showed us a phony auditors' report, pointing out how low the income of his company was. After I left he insisted that Bill Gutterson split any commissions with him on a fifty-fifty basis. Accordingly, Wilfrid insisted that we forget Edell, which we did. We never saw him again.

We had a phone call from a Mr. Robinson of St. John, New Brunswick, a telephone magnate. He told me that his friend, Sir James Dunn, of Algoma Steel, had been greatly helped by vitamin E and was converting all his friends to its use. Unfortunately, Dunn never contacted us. How he could have helped us and the cause of vitamin E!

On November 5, 1948, we held inaugural ceremonies at the Shute Institute. Canon Quintin Warner presided. He introduced us and I gave the details of the ideal of the Institute. Then there was a chapter of Ecclesiastes read by the Reverend Almer Sheehy and a prayer by the Reverend Mr. Perkins, the president of the Ministerial Council of London. About 90 to 100 people were present. I tried hard to get Dr. Rawlings of

Flint, Michigan, and Dr. Keith Stuart of Hamilton to come on the staff, but Keith had bought a farm near Burlington one week before and Rawlings was not interested.

In the evening we had 110 guests to dinner at the Hotel London and Cam Calder made a wonderful chairman. There was a pleasant speech from Dr. Ivan Smith. Dr. Dick Coatsworth of Toronto spoke of his experience with vitamin E. Dr. Rawlings spoke of Banting's report on the origin of the Banting foundation. I spoke last and was in good form. The guest who had come the farthest was a Dr. Trefry from a little island in Lake Superior. The dinner was a big success.

At the end of the month I took my first plane trip. Bill Gutterson and I flew down to Salt Lake City. Bishop Bert Smoot of the Mormon church met us at the airport. He was a very enthusiastic convert to vitamin E and was a born campaign promoter.

Bert took us to meet the presidency of the Mormon Church. President Joseph Smith was away for the day, but we met privately in the office of President David McKay, who was taking vitamin E, and President Clarke whom we put on vitamin E, as well as his thrombotic daughter. Apparently it was unprecedented to meet any two of the three presidents at one time.

As we entered their office building we were walled in by huge pillars of yellow and red granite which came from a nearby mountain range. The next rooms had walls of polished onyx. The sanctum of the Presidency was walled with great vertical panels of matched Circassian walnut, and carpeted in blue. President McKay was a tall, white-haired, very quiet, kindly type. President Clarke was pale, pudgy, keen-eyed and a little hunched. They listened very attentively to our story. President Clarke had been a corporation lawyer and was a former U.S. Ambassador to Mexico. He asked us what we wanted them to do. I said that we wanted the help of all well-intentioned men and then Bill appealed for funds. They were non-committal and never offered us any help. McKay died in 1970 at 96 and always took his vitamin E regularly.

Then we walked downtown, stopping at various banks, meeting bank managers and businessmen, including the president of the Union Pacific Railroad. In every block we met a millionaire of some kind. Smoot told them what we wanted

from them. They seemed to be staggered by his approach. We certainly were. Then we went to his office where more millionaires arrived, including Edward Preston, who had just turned down ten million dollars for a rather dubious title to some off-shore oil lands along the Pacific coastline.

Next we were conducted to Dr. Widstoe, the President of the Quorum of Twelve, a stout and ruddy old gentleman who was the father of dry soil farming in the west and had been President of the University of Utah. He was kindness itself and told us he had read some of our papers. He said he had been interested in vitamin E for years. He asked us how much we wanted and I told him \$75,000. We later met Apostle Cowley who had a hypertensive heart. We put him on a good dose of vitamin E. Then we went off to Provo where Smoot had arranged a medical meeting to which 70 doctors came, as well as McDonald, the President of Brigham Young University and his biochemist, Dr. Sperry. I showed slides and we had a pleasant meeting.

At 3:30 we attended a special meeting which had been called at the County Hospital with 184 doctors present. I was introduced by Professor Max Wintrobe, the well-known haematologist and medical author (and an ex-Canadian, I believe) with an insulting speech and it was soon obvious that the group was very antagonistic. I gave a long two-fisted speech and showed our coloured slides. Immediately Wintrobe gave a further attack, calling upon different people there to speak. There was savage comment and condemnation of my presentation. Wintrobe even contradicted my quotations from the literature. When my turn came to reply I banged away at them equally hard. They had obviously been planning the attack for days because their opening critic, a man called Dr. Hecht, had slides to show and a written statement on the subject. His presentation showed that angina pain cured itself, and that nitroglycerine and aminophylline were no more helpful than sugar pills. Our past releases were criticized; they were foolish papers, it was said, which had been rejected by the journals. I began my refutation by pointing out that the man with the slides had convinced me that sugar pills were just as good as nitroglycerine and that nobody there would dare use nitroglycerine from now on for his own heart attack or pain. The fellows at the back of the room clapped at this remark, with their cautious hands held low behind the back of the seat ahead.

After I had finished, Wintrobe took the unusual step of rebutting the rebuttal. There was a reporter present whose report I was not allowed to comment on. No one spoke to me afterwards or shook my hand. Most of the doctors hurried out of the rear of the lecture room.

In the evening I addressed a public meeting of about 300 people at Barrett Hall in Salt Lake City. President McKay, Apostle Cowley and Dr. Widstoe attended. The slides were most effective again. Smoot chaired the meeting. Then there was a talk by Bill to appeal for funds and by Bishop Walton on the same theme; \$105 was contributed. There were a lot of questions afterwards and much good humour. It was a very pleasant meeting. We then flew out of Salt Lake City in a dangerous snowstorm.

While we were at Salt Lake City the morning paper on November 24 carried word of King George VI's Buerger's Disease. Bill at once cabled his physician, Sir John Weir, quoting the *Surgery, Gynaecology and Obstetrics* article for reference. He also cabled Paul Martin, our Minister of Health, and Menzies Sharp, the English pharmaceutical manufacturer.

In the second week of its operation the Shute Institute made \$1000 and we were able to pay off most of our bills for the alterations to date. *New Liberty Magazine's* and *Magazine Digest's* articles on diabetes came out that week. The *Postmaster's Gazette* came out with a good article on vitamin E and my three-month old letter to the *Canadian Medical Association Journal* was finally published, to my surprise. It was saucy and meant to be. Burgess sent me some lame excuses by letter for omitting our names in his bibliography.

Early in December 1948 Wilfrid, Jack Spence and I began to practice at the Institute, with Margaret Ferguson as my nurse. The initial staff consisted of Eleanor Hurley; Wilfrid's wife, Dorothy; Nurse Florence Kauth; and Vida Thompson, electrocardiographic technician. I was trying to get the Ellyatts to live at the Institute and have Anne work as my nurse. She did so and was with me until 1971, when she retired.

In the middle of the month the Hope Hickey story broke in the *Philadelphia Inquirer*. She was a hopeless and helpless congenital heart case with much temporary benefit from alpha tocopherol. The story was picked up by the *Windsor Star* and the *Toronto Star* which had front page articles on it on December 10.

On December 11 Bill Gutterson telephoned Sir John Weir regarding the state of the King's legs, as he had heard that amputation was pending. He talked to Weir, Professor Learmonth, and also to Earl Lascelles. Weir told him that he had my papers before him and that he was impressed. Bill urged him to ask me to fly over to see the King. Scotland Yard had to check on this call, as did the R.C.M.P. It would, of course, be a matter for the police. No Englishman, and certainly no Canadian, could believe that a Canadian doctor had the only help to offer his King. We weren't able to reach Paul Martin. We received no formal answer to our cable sent from Salt Lake City. Soon it became apparent that the King's problem was really a cancer of the lung. Even vitamin E could not help that. We understood that the pharmacy that supplied Buckingham Palace had sent over a good deal of synthetic alpha tocopherol to the Palace.

On December 23, Hope Hickey flew up from Pennsylvania with Bill Gutterson. There were newsreels and press photos and a Santa Claus was to give her a television set beside the Institute's Christmas tree. On December 28 Hope Hickey returned home and ran down the ramp upon arrival at Philadelphia airport. There were tears in the eyes of the big crowd watching her. As they went into the airport Bill dropped a big bottle of vitamin E. (He denied that he did it deliberately.) The police at once formed a cordon around him to protect him while the yellow nuggets were picked up. Bill was on television twice that night, appealing for help for the Shute Foundation.

Time phoned on January 11, 1949, to ask if I would comment on the rumour that George VI was taking vitamin E. I refused comment.

The Bank of Toronto stopped our prospective loan "at the highest level." Next we went down to the Bank of Montreal in London and quickly raised \$7,500 on Wilfrid's insurance and mine. We also got a \$5,000 loan from a Guelph friend, Alex Cadwell, \$2,000 from my mother, and Wilfrid had \$3,000 cash which made up our down payment of \$17,500. The Canada Trust gave us a \$15,000 mortgage. City Editor Randolph Churchill of the *London Free Press* posted a notice on the reporters' noticeboard ordering "no more mention of the Shute Foundation."

About that time Wilfrid had his first long-range consultation with a woman with a heart condition. He flew to Cleveland and was given \$300 instead of the \$200 fee he asked for. He

diagnosed a Dupuytren's Contracture as he shook hands with the husband.

The *Toronto Star* began a continued, detailed story on vitamin E and us. Marjorie Eady, the reporter, told us that 46 of the 50 doctors the *Star* had contacted throughout the province were highly pleased with vitamin E and only 4 were non-committal.

At this time, in January, we treated London Mayor Wenige's grandson, Michael, who had had second degree burns and skin grafts that had failed. It was highly successful—our second burn case.

Wilfrid met a Canada Life Insurance man at a party in Toronto. This man said: "Are you the one who is upsetting our company and making us review all our life expectancy tables?" We applied to Dr. Francis Dieuaide, Scientific Director of the Life Insurance Medical Fund in New York, for a grant from the associated life insurance companies for a study on changes in heart size produced by vitamin E, and also to follow-up vitamin E-treated coronaries. This was turned down. (It is interesting to consider how little medicine has advanced by the scores of studies this group has sponsored since.)

At the end of the month, J.W. McConnell, the owner of the *Montreal Star*, allocated us (per Kim Beattie) \$10,000 for a study on vitamin E and hearts. It was our first big donation.

Mr. Oscar Ghez of Paris, France, a sort of French DuPont, offered us a chateau about 30 kilometres from Lyons, France, if we would set up a vitamin E institute there.

At the end of February, 1949, the senior class at Western's medical school came over on its own initiative, saw patients and heard lectures by us on our studies.

At Sarnia, Wilfrid and I talked to the Lambton County Medical Society, showing coloured slides and answering questions. They wouldn't let us go until almost midnight. Their secretary told us that the secretary of the Ontario Medical Association didn't want the Shutes to talk in Sarnia and therefore failed for a long while to answer the Lambton man's routine request for the \$10.00 grant allotted for visiting speakers. When the Lambton secretary insisted that the O.M.A. put its objection to us being on the programme in writing he got a quick consent to our presentation. This was our first talk to a medical society in Canada since Art Vogelsang had lectured in St. Thomas several years before.

Dr. Earl Watson had to cut down some of his insulin doses to very low levels for diabetics; some of his patients were taking vitamin E unknown to him. Dr. Fraser Hay of Listowel was quoted by Marjorie Eady in the *Toronto Star* as having good results in diabetics taking vitamin E.

Old Dr. Noble, of the Ontario College of Physicians and Surgeons, phoned Marjorie Eady and asked for the names of forty doctors who had come out in favour of vitamin E. She refused this odd request, fearing College discipline for these men.

On March 26th the CBC phoned us, offering us six and a half minutes to reply on the radio to an attack on vitamin E by a Vancouver doctor. We asked them to get the consent first of the Ontario College of Physicians and Surgeons. We heard no more about it.

Health Minister Kelley, early in April, announced that he planned a Heart Centre in Toronto for the investigation of heart cures. We protested about this but he did not reply to our letter. On the same day he got a coronary himself and went to hospital under Dr. John Oille. That assured him of taking no more alpha tocopherol.

In April we attended the Second International Symposium on Vitamin E in New York City - the first one since the one in London, England in 1939. Only Moore of Cambridge, Schwarz of Heidelberg, Karl Mason of Rochester and I had attended both the International symposia on E. Our angry critics were certainly out in force, but we retorted throughout with polite laughter and derision which was effective. Art Vogelsang was on the programme separately, as he had connived with Mort Edell, George Dowd and Tony DeLuca of London to bring Professor Butturini over from Italy and sponsor him. Vogelsang walked with us no more, nor did Dowd. They never made any further contributions to vitamin E research.

On the third day of the meeting Wilfrid and I discussed several papers and then gave our own papers in the afternoon. The critics were befuddled with my announcement on burns. They had certainly looked for a cardiovascular topic, and could scarcely even discuss burns. What a comical manoeuvre it was.

On May 27, at the conclusion of the Ontario Medical Association Meeting in London, we held a one day special meeting of our own at the Shute Institute. We had a wonderful introduction by Canon Warner. Of the 126 who had indicated

they would be coming, 58 doctors appeared. The *London Free Press* sent a reporter and a photographer, but they had orders to "play it down" from City Editor Churchill. We displayed our patients, and Wilfrid, Dr. Jack Spence and I gave talks several times in the course of the day. Churchill had the reporter copy the list of the doctors present and when we complained to Arthur Ford, the publisher, Churchill told Ford that he had torn up the list and had merely made it should further press surveys be needed.

We decided to issue a medical journal semi-annually, and at first called it *The Seminar*. Later we changed this title to *The Summary* because a medical house already published a leaflet called the *Seminar* and objected to our use of the word.

On our summer holiday that year I wrote an introductory chapter to a book on evolution which I had long planned to write. I finally completed *Flaws in the Theory of Evolution* some 16 years later.

The first issue of our medical journal, *The Seminar*, came out on the first day of September. We sent it everywhere, 4000 copies of it. Later we published 12,000 copies yearly of *The Summary* and it became very influential in the world of vitamin E.

In September we had some small difficulties to face. Art Vogelsang had just written to both *The Lancet* and the *British Medical Journal* claiming priority on vitamin E discoveries. We, in our turn, wrote to the editors of both journals, sending copies of the affidavit on discovery priority. Neither editor answered us or Vogelsang.

Dr. Alton Ochsner, the eminent surgeon at Tulane University was quoted in *Newsweek* on October 13 on the value of tocopherol for the prophylaxis and the treatment of venous thrombosis. Bill Gutterson tried to get Ochsner to talk by telephone about the value of vitamin E for coronary thrombosis but Ochsner dodged that question. We then wrote to him by registered mail but got no reply, and decided that we would force the issue on thrombosis above the diaphragm at a coming meeting of the London Academy of Medicine. We hoped to present the question in such a way that it could not be detoured or squelched.

At this time Zierler's paper in the *American Journal of Physiology* on oxygen conservation and antithrombin also gave us encouragement.

In the first year of the Institute's operation we saw more than 2,800 new patients.

Later in October, Dr. Alton Ochsner came to London to give the anticipated lecture at the medical school. Just prior to the speech we sent him a set of questions on the value of alpha tocopherol in thrombosis by special delivery. We also passed around printed copies of these to the local doctors in the crowded auditorium just before he rose to speak. In a moment our papers were fluttering all over the room. Dean Collip, the chairman, got one of the papers and handed it to Ochsner. We had him rattled for a few minutes. Then he gave the same talk on thrombosis that had been reported in the *New York Times* and in *Newsweek*. Collip asked for a question or two as the guest had to "hurry away." There was a pause, then Collip adjourned the meeting in obvious relief. Perhaps our action was inappropriate, but we had a great deal at stake. Had Ochsner chosen to say a word on the logical extension of his studies to areas above the diaphragm our local opposition would have shrunk to nil. As he played it safe and ignored us, the war went on for more weary years at great cost in life and suffering.

At a clinic the day before, Wilfrid had tangled with Ochsner by asking him if he knew of Boyd's recommendation of alpha tocopherol for Buerger's Disease. Ochsner said "No." Wilfrid also asked him that when a case of thrombosis was brought in if he could say that the clot had occurred in a normal vein or was the vein wall always abnormal before a clot settled on it. Again Ochsner was non-committal.

I wrote to the Canadian Medical Association, to Noble, the Registrar of the Ontario College, and to Collip commenting on the new status of alpha tocopherol since Zierler's and Ochsner's observations had been published. No reply.

In November, Wilfrid and I drove to Grand Rapids, Michigan and talked to the Michigan Osteopathic Society. There were 400 or 500 present and the osteopaths were tremendously enthusiastic with many questions.

Early in November vitamin E was mentioned on the floor of the British House of Commons. In that month's *Canadian Medical Association Journal* Art Vogelsang and Dr. Ed Bensley of Montreal crossed swords on diabetes.

On the 25th of November, Dr. William Greenwood of the Toronto General Hospital read a paper at the Royal College meeting in Toronto pointing out that he had had no results in a

controlled study on congestive heart failure using vitamin E. The *Globe and Mail* phoned us about this, so we drafted two pages of reply for the Canadian Press wire service.

When it came out on the 27th in the *Toronto Star* and *Telegram* our comment attacked the 38 per cent mortality in controls at the Toronto General Hospital admitted in the Greenwood presentation. We pointed out what desperate cases had been chosen if so many died as controls. Everybody was impressed with our reply, I believe, and we easily won that round.

We publicly challenged our critics to debate anywhere. Even the *London Free Press*, despite Churchill's stand, carried our challenge to the Ontario Medical Association to select two medical critics of vitamin E to debate its value with us before any medical or public meeting.

In December the Ontario Medical Association finally invited us to talk for fifteen minutes in their May programme at Ottawa in 1950. We accepted, but asked for a double presentation, by both Wilfrid and me. We got it.

In January, 1950, the rumour that we were insane was mentioned to us by patients from here and there. A dreadful article by Eichert criticizing me personally appeared in the *Southern Medical Journal* and I wrote a reply. It wasn't published.

Mr. R. C. Wood of Toronto had almost completed the organization of an association of heart patients in Canada. This eventually became the Vitamin E Society of Canada, with headquarters in Toronto. He asked Karl Eyre, the M.P. from Timmins, to be President and R. C. Wood was the obvious person for secretary.

In May, just before the O.M.A. meeting, a Canadian Press despatch carried Dr. Schmidt's and Dr. O'Connor's releases on vitamin E from England, praising alpha tocopherol highly. *Saturday Night* quoted Schmidt and O'Connor.

In the middle of May I went down to Chicago where for three hours I talked to the Illinois Osteopathic Society. About 350 people were there. Dr. Ward Ferrill and his wife, Alma Lee, friends from Chicago Lying-In days were there and we had a great chat afterward. Ward died soon after this. On the way to lunch I was stopped by Dr. Osborne, who for years had held the world record for the high jump. He wanted to know if vitamin E would help his protégé, a polevaulter by the name of Richards who could never reach 15 feet. I told him he ought to try it.

The Rev. Bob Richards later set a record of 15 feet plus—this before fibreglass poles.

Later in May we went to Ottawa for the O.M.A. meeting. We distributed *The Summary* to everyone in the hall of the O.M.A. hotel. Our lectures and slides went off well and Wilfrid referred to *The Summary* throughout. We had a packed house and top billing. Karl Eyre, the M.P., came over to hear us and came up front afterwards to pull up a trouser leg and show us how wonderfully his varicose veins had improved with tocopherol. Up to this time we never treated varicose veins with vitamin E. Soon we began to do so. Our old unfriends Drs. Bartram, Brien and John Keith were quite cordial to me. We were touring the Parliament Buildings the next day with Karl Eyre when we ran into Paul Martin and he was cordial, too. He told me that we had received a “nice press notice” and I mentioned that we had shown some of the slides to the O.M.A. meeting that we had shown him two years before.

That month we had a letter from the Medical Director of the British American Oil Co. telling us that he had recommended a research grant for us and that the company’s president was wondering about the prophylactic care of his executives. We heard nothing more of this from his or any other company. I suggested a research problem to Dr. Morris Wearing when he asked me for one that I wanted tried, namely, producing placental infarcts in pregnant dogs by injections of phenol or by radium needle implants, after extirpating one horn of the uterus. It should produce toxæmia and perhaps one could then determine quantitatively how much placental necrosis was needed for the development of toxæmia. To my knowledge this experiment has never yet been tried. What a pity we never had facilities for investigation.

On June 22, 1950, the Vitamin E Society was officially organized in R. C. Wood’s office in Toronto. I had wanted to call it the Canadian Association of Heart Patients. Mr. Karl Eyre was in the chair and R.C. Wood acted as secretary. Mr. Charles Grant, lawyer Fred Underhill, lawyer Cam Calder and I were the others present. At age 69 R.C. was full of pep and thoroughly sold on vitamin E. He was both eloquent and eager. We decided to ask for a Federal Charter, and to draw up a constitution similar to that of the Canadian Diabetic Association.

At the institute, Wilfrid wanted work on his side of the building to be confined to heart only, omitting diabetes, thyroid

cases and such. I wanted to see us as versatile as possible, if only to maintain our own diverse interests in medicine. (After he left the Institute in 1957 we did just that.)

By this time we were being branded by gossip as "racketeers." Wilfrid was told that he must have nearly half a million dollars by now.

In the *Annals of Surgery* for May that year, Oschsner published his first remarks about vitamin E for thrombosis. He made no mention of our work.

In July, 1950, I wrote to the Minister of National Defence, Mr. Brooke Claxton, and to Dr. MacKenzie, the head of the National Research Council, pointing out the value of alpha tocopherol in war. They did not recognize the letter.

On August 1 I paid the last instalment on Heronspool, which we had bought in 1942. When I got the deed for Heronspool I found that the first deed was dated April 27, 1875, and was from Jacob Hawkins to Bailiff Dennis for \$120. The next sale occurred in 1887 and was between James Grant and Elizabeth Morden for \$425. We had paid \$15,000 for it.

We offered Professor Russell Morgan of Johns Hopkins the right to patent his most recent x-ray discoveries through the Shute Foundation. He never did pick up on this idea. It went on to successful development by DuPont. It was used for clarification of images by astronomers within five years.

In September I wrote to Mr. McConnell of Montreal asking him to found an experimental laboratory and farm for us which I would like to build on the north 10 acres at Arva. McConnell had given a million dollars to Dr. Wilder Penfield at McGill Neurological Institute a couple of months before. Nothing came of my proposal.

In my obstetrics practice I had a total of 204 cases in 1950, the lowest my case load had been for five years. As soon as our cardiovascular studies began, patients began to fall away from me, as "now you are doing heart." It took 20 years to reverse the trend. Actually my gynetics practice never recovered but angiography came to my rescue.

In the fall, a Mr. Dingman of Toronto came up to write an article about us for *Liberty* and Fred Underhill flew to Ottawa to see Paul Martin regarding the charter for the Vitamin E Society. Suavely, Paul refused him pointing out that although his own wife was taking vitamin E, the charter would imply

governmental recognition and they couldn't give this on such a controversial subject; that the Canadian Medical Association would oppose it en masse (although the department ran its own affairs independently); and that this would unduly publicize vitamin E and bring money to doctors dealing in vitamin E. He professed admiration for me and the sacrifices I had made. The name we had asked for was The Canadian Heart Patients' Association. That was too similar to the Canadian Heart Association, a name already in existence. Why didn't we just join the Canadian Heart Association (ignoring the fact that the latter was for doctors only)? His deputies, Cameron and Monture, were in at the interview. Finally Fred said that we would create an organization anyhow without a charter. Was there any objection to that? Paul thought we could do that with no problem and on that note they parted.

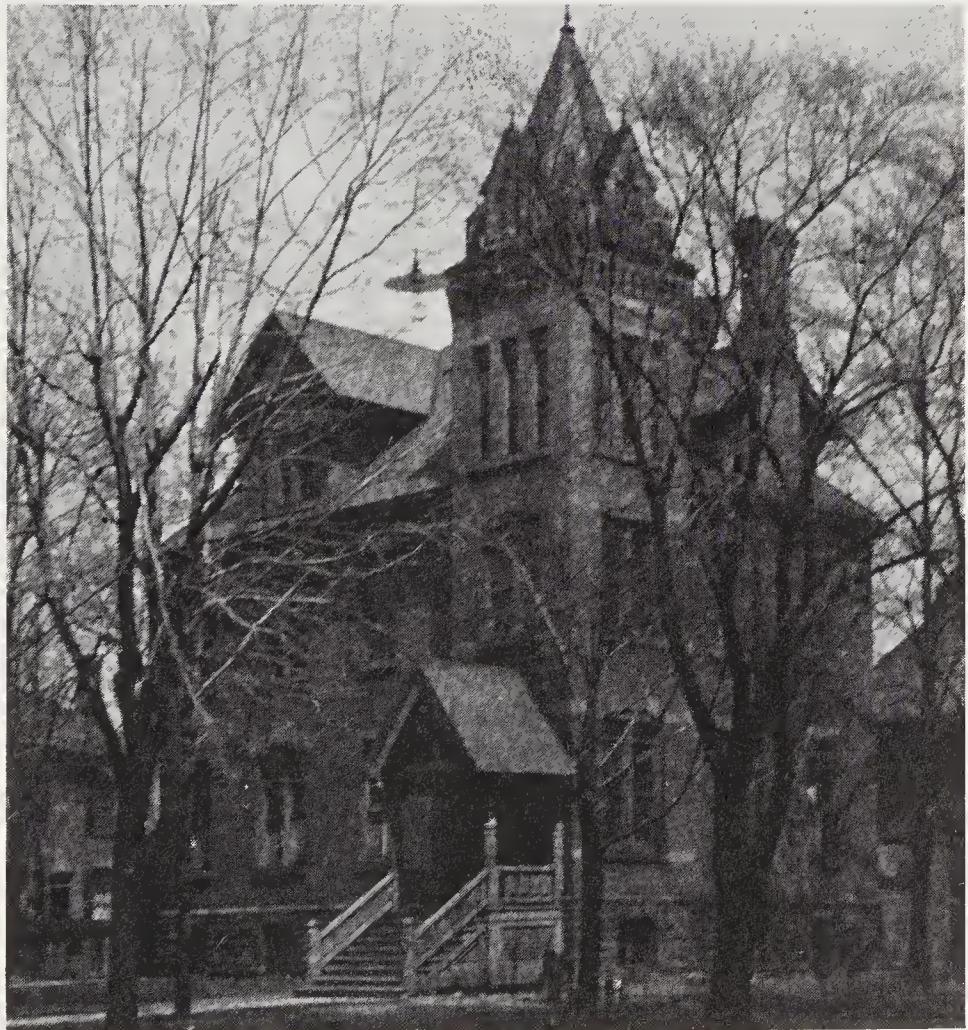
Menzies Sharpe wrote about an interview he had had with Lord Nuffield, who liked the effect of vitamin E upon his own arthritis (one of the few arthritics ever helped by vitamin E) but was "too busy to be an honorary director." Nuffield seemed to have a poor opinion of medical men in general, although he had given more to medicine than any other English philanthropist.

A Dan Armstrong had severe body burns from a hydro accident. We put him on vitamin E (per his mother) and he did very well indeed. He was one of three burn cases reported by Professor Angus McLachlin *et al* in a paper in the *British Medical Journal* (October 28, 1950), and the only one of the three cases to live. We were afraid to say anything about vitamin E for a time because Dan was still at Victoria Hospital on compensation and he had not returned to his job. His mother fed him 375 units of vitamin E nightly and we planned to use the ointment as soon as he was out of hospital. No one ever knew the details of this case but Dan's mother.

On December 7 I put up a notice in the doctors' room at Victoria Hospital urging everyone to look in on a fresh case of thrombosis I was treating with alpha tocopherol only and whose outcome could be interesting. Only Dr. Pennacott looked in on her. Others disfigured the notice with ribald comments. I saved the sheet as an example of medical art and wit.



Evan's parents on their wedding day January 1, 1900 (l. to r. his mother's sister, his father, his father's brother, his mother)



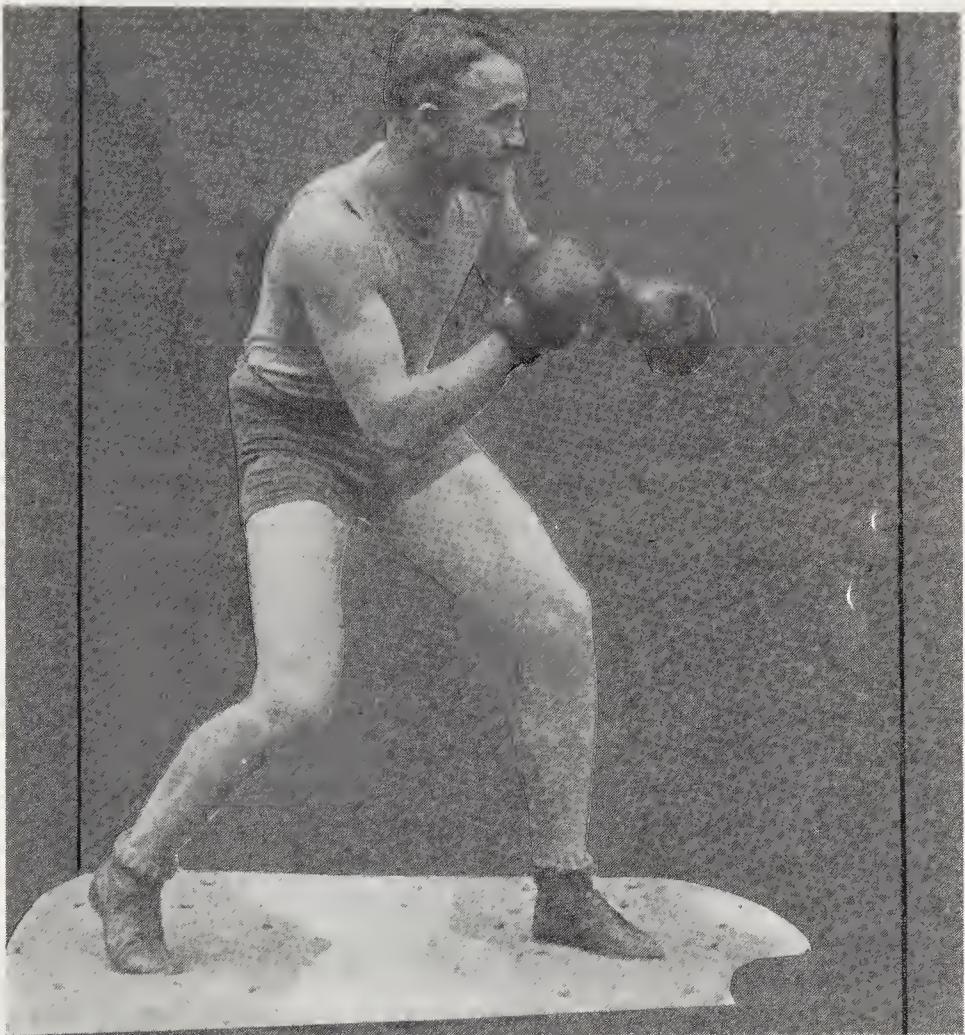
The old medical school in London, Ontario.



Evan, Wallace, Wilfrid in 1914.



University of Toronto Boxing, Wrestling and Fencing Club 1924-25 (Evan is top row, far right; Wilfrid is third row, third from right; Les Black is front row, far left)



The "Champeen" — Evan in the fall of 1925



Evan's university
graduation photo — 1924



l. to r. Wallace, their mother, Evan, their father, Marion, Wilfrid



Evan and Marion, 1934



Evan honored by London physicians, 1939



Vitamin E Society Directors 1954

(l. to r. Cam Calder, Charles Grant, Carl Muir [back to camera], Karl Eye, Evan Shute, Fred Underhill)



First day of work in the Shute Institute, London



Wilfrid at Vitamin E exhibit — BMA/CMA meeting, June 1955



Professor Kamimura and Evan in front of the Institute's smoke tree, 1969



Wilfrid and Evan in 1973



Shute Medical Clinic, 1984

Chapter Eight

HEALING'S HAZES (1951-1955)

There they sit and look at me,
Each man labelled an M.D.
Each one used to tiring speeches,
Baffling help from leading leeches,
Wondering if, in simple phrases,
I'll illumine healing's hazes.
There they sit and here sit I.
Aesculapius hear my cry!

They have come to hear of glands
And their endocrine commands
To the sanguine, cyclic womb
That controls the ovum's doom.
I must tell them e'r I go
How to alter bloody flow,
How to ease the monthly pain,
How keep forty's changes sane!

Weary of complexities,
Critical analyses,
They want simple rules of thumb—
Give this and the periods come,
Use this drug to banish pain—
Sound cures, permanent and plain.
Though that's nothing new, I dread
Telling them what must be said.

Well, that's over, and my speech
Failed of much it meant to teach.
Puzzled many, bored still more,
Left most where they stood before.
Now I slip out of their lives
And they turn back to their gyves—
Patients, problems, cars and friends,
Work that heals but never ends.

Vere Jameson, *Anatomy Class, 1953*

During the winter of 1951, we thought of having a winter clinic in Florida, with just a holding staff in London. That idea didn't work out. It was obvious by this time that we would probably always have quiet winters at the Institute, depending entirely on the weather.

On February 10 we sold the northwest corner of the Waverley property to the Canadian National Institute for the Blind for \$21,000. It was about half the purchase price of our whole property. We turned down a \$21,000 offer for an apartment building in order to take the C.N.I.B. offer. That meant we now had only a \$13,000 mortgage residue and \$5,000 in other debts.

For a year or so, prompted by the Korean war, I had been trying to get people interested in the value of vitamin E therapy for burns. I felt that vitamin E offered hope to the burned victims of warfare. There were no converts. Twenty-three years later that was still true. Yet his was in some ways our most helpful and conspicuous discovery.

Lloyd Percival was well on the way in his study on the effect of vitamin E upon track athletes. The Detroit Red Wings were using vitamin E for its effect upon the musculature. All these team studies failed, however, as too many trainers and coaches who knew too much always got in the way. Psychological factors in the players were impossible to exclude, too.

On February 28 we had a wonderful Vitamin E Society meeting at the Royal York Hotel in Toronto. The capacity of the hall was 1,400 but about 1,600 came and 300 more were turned away. We showed our slides, and Wilfrid and I talked especially on the value of vitamin E for burns. We showed some pictures of Hiroshima taken from the air and commented on the potential use of E for nuclear burns. Dr. Dick Coatsworth also talked and Canon Warner finished up. We were almost killed on the way home as I nearly ran into a blinker pylon on the highway.

That March we thought that vitamin E might have something to offer for varicose veins since so many people told us it did and since I had just read Ruppel's paper on the degeneration of the walls of the veins in vitamin E-free rats. We had refused such patients hitherto. Later this opened up our studies on chronic phlebitis and such patients became almost our largest single group.

An old teacher of ours at the University of Toronto, Dr. Billy Dafoe, brother to the doctor of the Dionne Quintuplets, complained about us to one of his patients, a Mrs. Nurse who was the Vitamin E Society's secretary. He suggested that our coloured photographs were faked and said that one of us should be in jail. I suppose that our Toronto meeting must have stirred up the local doctors a bit.

Late in March we were mentioned on the floor of the Legislature in Toronto. We expected a grant which didn't materialize. We never had any assistance of any kind from any government, although re-studies on penicillin and such could find research funds readily.

In May vitamin E was mentioned in the House of Commons again by Solon Low, the Social Credit leader from Alberta. We telegraphed him some information. Dr. Nelson George sent him a long letter offering to fly his wife to Ottawa to testify before any Parliamentary Committee. We, too, offered to go before any Committee that would deal with vitamin E. Nothing happened.

We prepared a bibliography of 55 papers supporting us and sent it to all the doctors in town, also to the lawyers, dentists and businessmen but no acknowledgement came from anyone then or later.

On May 12, Dr. McKinnon Phillips of Owen Sound, the Ontario Minister of Health in the Frost cabinet, came to London to open the new wing of the War Memorial Children's Hospital. Then, by our invitation, he came over to the Institute for an hour. We showed him many patients and some slides. He was very cordial and asked us how to set up his plan to supply vitamin E to indigent patients. We suggested that he say a word to the Ontario Medical Association. We also told him of the sub rosa ban on our speeches to County Medical Societies, telling him about the Lambton County meeting. Nothing improved.

In June there was a good deal of fresh anxiety about the King's health so Mr. R. C. Wood of the Vitamin E Society wrote to Lord Beaverbrook about it. He also wrote to Mr. M. J. Coldwell, the chairman of the C.C.F. Party in Canada. No replies were received. Unfortunately, R. C. Wood released his letter to Beaverbrook to the Canadian Press and couldn't see that this was an obvious error.

By this time the Vitamin E Society was almost ready to retail vitamin E at cost to its members. For a year Wilfrid had

been talking about a book on vitamin E and I now thought the time was about ripe for it. We decided we would do it and drew up a tentative list of contributors. I also dreamed up a "Ladies Aid" for the Shute Institute to help advance our research and to help our London front. There was to be a committee, the Waverley Guild, which could sponsor art shows and sales in the Institute's Blue Room, handicraft sales, musical concerts, student recitals and such. The scheme worked well for many years.

The Vitamin E Society by this time was in real trouble. R. P. Scherer, the Windsor encapsulators, refused to sell to Mc-Clung Clemens if they in turn sold to the Society. An inspector of the Ontario College of Pharmacy warned Webber Pharmaceuticals that they would be prosecuted if they sold to the Society. R. C. Wood suggested we might get a cut-rate druggist to buy and sell for the Vitamin E Society. This was done, finally. The Society by that time had 786 members and \$800 worth of orders backlogged. This wasn't bad when we considered that the Ontario Diabetic Society now had only 400 members after its much longer life.

In September, 1951, the Canadian National Institute for the Blind paid us for their corner of the clinic property and we paid off the balance of the debt on the Institute. By that time it had cost us approximately \$72,000. By the middle of October the Foundation was debt free and had a \$10,000 nest egg. At about the same time, the Messrs. Bouma of "Mature Americans" came up from Detroit to talk about forming an American branch of the Vitamin E Society.

Mr. McConnell phoned us twice in the middle of November from Ste. Agathe where he was playing host to Princess Elizabeth and the Duke of Edinburgh. He asked us about vitamin E for his recurrent phlebitis. We raised his dose and he was able to stand in their receiving line a few days later.

We were busily trying to get contributors to our book on vitamin E for the heart. Up to then Harris, Hickman, Mason and Boyer had refused to write chapters, but Butturini and Lambert had accepted.

By early 1952 the Vitamin E Society had 1200 members, but R. C. Wood, the guiding spirit, was getting pretty feeble. Also in February, the King died of coronary disease despite his lung cancer.

Mr. Garfield Weston, the Canadian multimillionaire, came to the Institute for the first time in February. Wilfrid examined

him, then we chatted. We showed him our coloured photographs. We found him very easy to talk to, very alert and open to reason. He told us that he was insured for over a million dollars and at that time had 122 factories and stores around the globe. He offered us \$1,000 and told us that we could mention that he was sending his top executives to us. I drove him back to the hotel, telling him about Mr. Lloyd Percival and about the Detroit Red Wings taking vitamin E. Thus began our association with Garfield Weston that lasted until 1970.

I started to write the cardiovascular book, beginning with the last chapter on "Hopeful Margins." It had been very hard to get contributors. Hickman had refused the foreword. Karl Mason refused the physiological chapter so I gave that to Floyd Skelton. Boyer refused the biochemical chapter so I gave that to Professor Pin of Paris. Butturini and Prosperi of Italy both accepted their assignment promptly. Bijdenyk of Rotterdam rejected the chapter on ulcers so I offered it to Stritzler. He refused. Steinberg also refused to write a chapter on rheumatic hearts. We could not get through to Dr. Albert Schweitzer, so we eliminated the chapter on tropical ulcers. We wrote to Radcliffe-Hall for a claudication chapter. He later refused.

In March we were turned down by the Canadian Medical Association for the third consecutive year (our last try), and we were also rejected by the American Medical Association for a place on their annual programme.

The American Vitamin E Society was organized that March. Late in the month Wilfrid talked to the Rotary Club in Montreal and did very well, but the doctors who belonged to Rotary met the preceding Sunday with the Directors of the club and had the usual radio broadcast cancelled. So Crawford of McConnell's staff got the *Montreal Star* to print the speech verbatim. A strong letter of protest from Rotarian Gordon Cohoon, a patient of ours, as well as an editorial supporting our right to speak and a letter of criticism by Dr. I. M. Rabinovitch, my old metabolism chief at the Montreal General Hospital were also printed. I replied to "Rab" in a lengthy letter. He later retired to London but I made it a point never to meet him again.

Wilfrid went down to Washington and spoke there at the first public meeting held under the auspices of the American Vitamin E Society. He was on radio twice and on television. He went on to Richmond, Virginia, where he was the guest of Garfield Weston at his Richmond home. Each member of the

Weston family played a musical instrument. The girls made their own beds, did dishes and other housework. He offered us \$5,000 a year for five years without being asked. He proved better than his word by a good deal. Actually he gave us \$8,000 to \$10,000 every year thereafter until 1970.

We hoped to start animal experiments but I doubted that we could keep animals in the big garage on the Institute property for studies on arteriosclerosis or thrombosis. I thought we should start an experimental farm at Arva for some burn studies on pigs for one thing. We asked Mr. Weston if we could publicize his support as that would be a great help to us, but he asked us not to do so as that would merely bring him further requests for grants to all sorts of people.

On April 27 we had our biggest public lecture yet. We held it in Massey Hall, Toronto, under the auspices of the Vitamin E Society. Wilfrid, Dick Coatsworth and I addressed 1,250 to 1,500 people; we filled the ground floor fairly well. We had hoped to have Mr. Percival of Sports College on the platform with us but the chairman of his board would not allow him to speak for us.

Floyd Skelton told us he couldn't do the physiology chapter in the book. He was going to Kansas City to study pathology. Our proposed book was rejected by Macmillan, by Lea and Febiger and by Thomas Publishers. Ryerson Press decided to publish it with Eastman Distillation Products underwriting the cost of the coloured plates. All summer and fall we were busy writing the medical book. Butturini's chapter on diabetes came in. Ada Pascoe, one of our nurses, had been going around gathering data on our coronary patients all over Ontario.

I circularized six or seven major companies in Canada regarding executive health care, but received no answer from any of them. This idea was years ahead of its time in Canada.

Early in December I went to Ottawa where I appeared before a very alert Senate sub-committee and did some good things for the Vitamin E Society. My old college friend, Dr. Clare Morrell of the Department of Health and Welfare department, said that the Vitamin E Society was not intended in the food regulation they were proposing to amend, only people who were fraudulently advertising for commercial purposes. Old Senator William Euler of Waterloo turned up at the hearing, intervened, showed his vitamin E pills, and said that he was taking

them regularly and felt much better on them. A doctor from Prince Edward Island on the committee congratulated me on my presentation. There is a lot to be said for our Canadian liberties when any citizen can demand to be heard before such a committee of the Senate.

In Karl Eyre's parliamentary office I met a South African doctor, Dr. Harding LeRiche, who was very interested in vitamin E and later considered coming to work for us after he had called to see us. He later became professor of Public Health and Epidemiology at the University of Toronto and has made a real impact on Canadian medicine.

That month the *Journal of the American Medical Association* took another crack at Vitamin E, and the *Canadian Medical Association Journal* turned down Webber's advertising for vitamin E again. We were preparing a seal for the Vitamin E Society with the help of a London *Free Press* artist, Eric Bradford.

Early in 1953 Eric Hutton came up from *Maclean's* magazine to write a story on us. The editor warned Hutton to write about us "down the centre." In April the Canadian Medical Association sent the editor of *Maclean's* a copy of the Hamilton and Wilson article in a recent *British Medical Journal*, decrying the use of vitamin E for claudication. As soon as we heard this we sent tear sheets of our reply as it appeared in the *British Medical Journal*. Neither item was published or used.

The Canadian Medical Association threatened Eric Hutton with the loss of his job with the Canadian Cancer Society if he would not revamp his article on us. He resisted this pressure. The C.M.A. also got the board of *Maclean's* to pressure its editor, Ralph Allen. He held out, too. But they secured from him the right to publish a 900 word article in juxtaposition to ours to state their anti-position. We afterwards found out that this statement was prepared by Dr. Arthur Kelley, Secretary of the Association, for he boasted of it later. We were going to seek similar space for a rebuttal but Eric Hutton advised us to take no action for fear that the harassed Allen might kill the whole item. The art editor of *Maclean's* was also indignant about the article by Hutton because the pages devoted to our pictures cut out the Coronation pictures he had scheduled.

At the end of May I attended the first World Conference on Fertility and Sterility in New York. I discussed a paper by

Polak of the Netherlands and read one of my own. My own paper was on congenital anomalies and I was prouder of this paper than of most I had written. It made absolutely no impression then or later. It reported a series too small for statistical analysis *but* this must always be true of private patients so studied, and my paper presented a treatment approach capable of ready testing. The topic is still one of those considered therapeutically hopeless and so gets little attention.

On June 10 the *Maclean's* article came out. We promptly sent a letter to the Secretary of the Canadian Medical Association offering to appear on their Winnipeg programme the next month and pointing out some of the inaccuracies and ridiculous statements contained in their comment in *Maclean's*. The next day we sent another letter demanding what powers and experience they had to justify comment on any scientific medical subject, and asking who had spoken for them. No reply.

That summer the U.S. Food and Drug Administration called Dr. Welsh, President of the American Vitamin E Society, to appear in Chicago for examination on Wilfrid's speech in Montreal and Nelson George's testimonial, both as reprinted in the American Vitamin E Society's bulletin. Charge dismissed, largely on Wilfrid's testimony.

In the fall, I flew to Fort William for a meeting of the Vitamin E Society. I had been told my plane would land at 7:35 p.m. but it was really scheduled to land at 10 p.m. Carl Muir and George Wardrope, M.L.A., kept about 500 people entertained with stories about vitamin E until I got there. Mayor Robertson was present, as well as Mr. Spence, an oil man who had been a Canadian boxing champion in 1938.

I went down to Toronto to see Lorne Pierce of Ryerson Press. He told me that he had sent our medical manuscript to his strictest proof reader and asked him to go over it very carefully for style and message. He got back a three page analysis which said it was the best manuscript this man had ever read. He barely had to insert a comma. He concluded by saying it would be a crime against humanity if the Press refused to publish it. Lorne Pierce then told me that his advertising manager had refused to sell the book if he damaged the Ryerson Press reputation by printing it. There had been acrimonious discussion at a meeting of his Board. Finally Lorne Pierce said: "You have all discussed this on a socio-economic level. How many of you have mitral stenosis? How many of you have had

a coronary?" None! "I have all these. I am not a Shute patient but I know what this problem is. Here is a case we should present. I will put my 34 years experience as an editor behind this publication. Indeed, if it is decided against you can have my resignation. This is now a matter of principle with me. If the Canadian Medical Association or any university wants to print the case against vitamin E at equal length and with as good evidence I will gladly print it too. The Shutes have the right to be heard outside a magazine article," brandishing the *Maclean's* article in his hand.

I was amazed at his courage and his ultimatum to his Board. I told him I would have taken back the manuscript if I had known what it might cost him. He said. "I'm not taking credit. This is editorial principle I am standing up for. If I capitulated I should not be the editor. I'd be glad to retire now at 64 anyhow, and I want five more years to write four or five books I have in mind." He told me of his wife dying of recurrent cancer of the breast and added. "I don't know what men do if they have no faith." He turned over the illustrations and suggested a 2,000 volume edition. He said that it had been listed in their Fall list of about 20 books and that the book could be out in about 8 weeks. What a wonderful man he was. I told him that anybody could say "thanks," but I would like to have him up at the Institute for half a day. He said he might come—but he never did. He died from heart disease some years later.

Just when the Institute's finances were at a low ebb that fall we got a \$1,000 gift from the R.C. Mahon Foundation of Detroit, an organization we didn't know existed. We also had a phone call from *Maclean's* to say that they had been compelled to put an extra girl on the telephone switchboard to answer inquiries on the Hutton article. They were wondering if they should do a sequel.

Shortly thereafter, we received an invitation to address the Huron County Medical Society. This was our first medical invitation since the one from Lambton County three or four years before. It turned out to be the last we ever had in Ontario until I was invited to St. Catharines in 1973.

We received the galley proofs of the medical book from Ryerson Press in January of 1954 and our third annual \$5,000 donation from Garfield Weston.

That winter I flew down to St. Petersburg, Florida, which was the first time I had been south of Oklahoma City. I met Carl Muir at St. Petersburg. All the large halls in the city had been closed to the Vitamin E Society meeting, including the churches. As a result we had a big meeting at a fraternal hall with about 100 people turned away.

We also had big meetings of the Vitamin E Society in both Ottawa and Montreal and in Kansas City's Masonic Temple in April with about 1,000 people present. These were held under the auspices of the Canadian Vitamin E Society.

On April 19, 1954, our medical book *Alpha Tocopherol in Cardiovascular Disease* came off the press, three years after we had first started it. I suppose the real reason it was published was that Lorne Pierce was impressed by my work years earlier when I first peddled my verses to him.

I went down to Toronto to meet Dr. Bill Greenwood in his office. We had a long chat and argued about vitamin E. He was most cordial but I got nowhere, as later years proved. It was nearly impossible now for anyone who valued his future in Academe to espouse Vitamin E, prescribe it or advise its use. That would make a man a "quack" at once. This situation lasted for many years. In the United States, of course, the closure of the *J.A.M.A.* pages against us and tocopherol meant that it did not exist. It was either in the U.S. medical bible or it was *nought*. No amount of documentation could budge medical men from this stance. Literature in the positive was ignored and left unread. Individual doctors often said: "If it is as good as you say, we would all be using it." But nothing could induce *them* as persons of scientific background to make the simplest trial on a burn or coronary. Brain-washing!

I drafted a series of London essays called "Tolpuddle Echoes" to try on Ryerson Press. These were rejected as too topical, perhaps justifying libel charges. At Lorne Pierce's suggestion I sent a couple of the Tolpuddle stories to *Maclean's* but they were turned down promptly and never saw the light of day.

Marion and I agreed that we ought to have a second clinic and she suggested Kingston. I thought of Montreal, Brockville, or Valleyfield. Wilfrid favoured Toronto. By this time we were feeling that we were becoming merely another Great Lakes Clinic. In July we went down to look at houses in Brockville which we could use for a clinic. I found a good one which we soon forgot, as our situation changed.

I was elected President of the Canadian Society for the Study of Fertility, with Professor Edwin Robertson of Queen's as Vice-President and Dr. Earl Plunkett as Secretary-Treasurer. The annual meeting was quite good and the final banquet was addressed by our friend from Charlo, New Brunswick, Dr. Dick Petrie. I also had a chance while in Montreal to talk to Dr. Paul David, the cardiologist at Maisonneuve Hospital, trying to get him interested in the study of vitamin E. He later undertook a study but nothing came of it. I think he merely wanted money; Bill Gutterson gave him \$6,000 a year for two or three years but he might as well have burnt it in the stove. David was too canny about medical prestige, in any case, to associate himself with vitamin E studies. He could have helped to make them respectable but instead he chose to stand on the side of the gods. I hope his conscience hurts.

In the last six months of 1954 we had a \$10,000 deficit on the operation of the Shute Institute.

In Toronto, after the Fertility Society meeting, I managed to make rounds with Dr. Jousse at Lyndhurst Lodge to see what vitamin E was doing for the bedsores of his paraplegic patients. For a time he seemed quite interested. But this fizzled out and joined other good vitamin E studies in the limbo of trials nearly tried.

In the winter of 1955 I went down to Florida again and to Texas for the first time. I met Carl Muir down there and talked to a Vitamin E Society meeting at Daytona Beach. I didn't like Florida—too artificial and too much mink. At Houston the Ankneys were our hosts. They drove me to Galveston where I had my first T.V. appearance. I didn't do very well for I was mesmerized by the machinery. At Houston I spoke to a meagre 100 people, to Dick Ankney's great disappointment, and of course, to mine. I think Houston had no time for lectures.

Early in February the American Medical Association accepted our application for a display of our work at its Atlantic City Meeting. Bill Gutterson's associate, Ned Marco took their letter of acceptance to Dr. Art Kelley of the C.M.A. and Dr. Glenn Sawyer of the O.M.A. to ask for the same privilege at the coming combined meeting of the British and Canadian medical associations. Kelly and Sawyer listened to him impassively, then asked him if the letter was "like this"—showing him a carbon copy. Then they told him that the A.M.A. had had a committee sit on our application and had written the C.M.A. to ask about

us as we had been in their hair so long. If the answer was satisfactory we were to receive an invitation. Kelley assured Ned that we would be able to show our display at the Toronto meeting and we did.

At that time Wilfrid was talking about starting up another branch of the clinic in the United States since he had his Iowa medical license as well as his license in Illinois.

My most distant consultation occurred at the time when I flew down to Lewes, Delaware to see an old Mr. Hayes who had advanced gangrene of the foot. There was so much fog that we couldn't land at Dover or Atlantic City but landed in Philadelphia instead. Then I taxied 125 miles to Lewes down the whole length of Delaware. There was no choice except amputation. The patient and his brother, powers in Consolidated Fisheries, were very disappointed with my verdict.

On April 9 I received a registered letter from the American Medical Association refusing the scientific exhibit they had accepted on February 15. I promptly sent a long telegram of complaint to the A.M.A., with copies to a dozen members of the Council on Scientific Exhibits, pointing out that this was not Russia. I told them I would be down on Thursday the twelfth to show them my "embarrassing" (their word) exhibit of coloured photos. I sent a night letter to Dr. Maurie Davis, Professor of Obstetrics and Gynaecology at the University of Chicago; Dr. J. P. Greenhill of the *Yearbook of Obstetrics and Gynaecology*; Dr. Walter Palmer of Billings Hospital; and Dr. Lowell Cogeshall of the University of Chicago Clinics, reinforcing my pleas. I had no answer from anyone so I went to the A.M.A. headquarters in Chicago on the morning of April 12, 1955. There I met Dr. Hull, who was secretary of the Council on Scientific Exhibits, and the Past President of the A.M.A. They also had a lawyer there. We talked for an hour. I showed them the transparencies and wondered out loud if the ghost I was fencing was really Dr. Katz or Dr. Fishbein. I told them their rejection was preposterous when the Canadian and British Medical Association had accepted it. I told them they would be hearing a lot of me in the next twenty years so I wanted them to measure me and I wanted to see them. I showed them our old letter of 1946 inviting a committee of the American Heart Association to inspect our studies and our original correspondence with Dr. McMillan, the editor of the *American Heart Journal*. I told them that if I were right the American

medical profession deserved to see what I had done, but if I were wrong the easiest way to destroy me and my theories was to put up my exhibit before the Convention and let my colleagues jeer at me. They asked me if I had had any such difficulty before and I said yes. They asked why and I told them that I would say why if they told me why I was having difficulty now. They were "not at liberty" to tell me that. I told them that they knew slides must be genuine since coloured photographs couldn't be retouched. They replied that they didn't know this. I told them they weren't very bright if they didn't know these things. It was their business to know this and they could talk to anyone on the street to find out. I asked them to bring my real enemy out from behind the curtain and let me see him face to face. I wanted to talk to him but they said that wasn't possible. They finally said they would take the problem under advisement and I left.

I went over to Billings Hospital where I talked to Dr. Walter Palmer. Then I went to the Lying-in Hospital where a reception was being held for long-term employees and I met some of the old nurses I had known. At the invitation of Professor Maurie Davis I talked for about an hour to the medical staff, showing my slides, talking about everything from diabetes to burns, from phlebitis to congenital anomalies. Maurie told the audience when introducing me that they should have kept me there to do research at the Lying-in Hospital.

Port Huron, Michigan, was the location for the initial meeting in April of the new "American Cardiovascular Society" which we were developing. Later we called it the Cardiac Society. Mr. McNally of the United States Rubber Corporation, Detroit, was elected President and Campbell Calder, Q.C. of London, Vice-President. I became its Medical Advisor, at no fee.

I went down to Toronto to meet Dr. W. C. Bigelow, the cardiac surgeon, and showed him my slides. He was the smartest medical man I had talked to since Dr. Paul David. He informed me that as a student he used to detail Kelly's wheat germ oil. Two years earlier he had turned down the job of Chief of Surgery at the Royal Victoria Hospital in Montreal. Nothing came of our meeting. I am sure he hoped for the chair of Surgery in Toronto and did not mean to reduce his chances by any association with our work in vitamin E. In 1969 his father's little book, *Forceps, Fin and Feather*, came out. It told

in gallant style of early medical practice in Brandon, Manitoba, and is one of the choicest memorabilia in my library.

I phoned Dr. Hull from Toronto and was told that the A.M.A. had given our space away, but that he could probably find more without much difficulty if the Council decided to take our exhibit. I told them that I was sure they could find space, because when all the exhibits were set up they could run two freight trains into that auditorium and there would still be room for my display. On June 1 I received final notice that the A.M.A. had decided not to "reconsider Council's actions." We promptly asked for space for an exhibit the next year and were soon refused.

At the end of June 1955 we spent a week in Toronto showing our slides to the combined meeting of the British Medical Association and the Canadian Medical Association. Many visitors came to see our exhibit, but only about 370 Britishers came to the meeting as 1,000 were held up by a shipping strike on the Atlantic. About 50 visitors wanted *The Summary*, but only two wanted our new book.

I met Gil Darlington, the Manager of E. P. Taylor's National Stud Farm at Oshawa, with Bill Gutterson and talked to him about "buck shins" which I take to be a kind of tenosynovitis, affecting two-year-olds. He thought that vitamin E had already improved his stallions' performance in fertility as well as the performance of their racers. I saw the farm's great stallions standing in mahogany stalls with highly polished brass door pulls.

In July, there was a nice editorial on vitamin E in the *Montreal Star* and the first issues of *The Cardiac*, the bulletin of the Cardiac Society, came out. It was published until the Society folded up several years later.

Mother was dying by inches by this time. She finally died on the last day of July, 1955, slipping away quietly in a deep coma. This was a wonderful ending for someone who had so long feared death.

Marion and I left for Europe on the *Queen Mary* in August to attend the World Congress on Vitamin E in Venice. Dr. Enrico Malizia of Rome served as our interpreter. I found that I was to give the main talk in the Cardiovascular Section as Professor Postelli had had a death in the family which prevented him from attending the meeting. The next day I put up my exhibit of coloured photographs, the only one at the

Conference, and dictated my speech. We had dinner that night with Dr. Hamilton Lambert of Dublin, and enjoyed him immensely.

The conference began with good papers by Harris, and a wordy one by Butturini. There were good comments by Green and Blaxter; Bottiglioni and Butturini thought that high doses were dangerous, so I spoke up in opposition to that idea. The speakers the next day were tiresome and windy. I thought that Beckman would go on forever. Nicola and Prosperi thought too much vitamin E might increase the risk of thrombosis; I discussed their paper and reassured them. We ate on a wonderful terrace overlooking the Grand Lagoon where British warships visiting Venice rode at anchor.

At the next day's meeting Sondergaard talked on encephalomalacia. Weitzel emphasized that a combination of vitamin E and A influenced arteriosclerosis in the hen. Vannotti expressed doubt about the use of vitamin E for human arteriosclerosis, in opposition to my ideas. I had a brief debate with him which was featured in the day's report in the *Corriere della Sera* of Milan.

In the afternoon Lambert led off well and I followed, showing our slides. My talk had a good reception. Then Tusini spoke in support of me; Comel was a little more vague. Then there was a wonderful paper with many fine microphotographs on the use of vitamin E for eye diseases by Raverdino. Lee, of London, England, spoke of the use of vitamin E for leg ulcers and O'Connor gave support for our ideas. Professor Foa summarized, mentioning that Romano of his clinic had confirmed most of our work. He ascribed his own health at 74 to vitamin E taken daily.

By September 25, after some sightseeing across Europe, we were en route home from Southampton on the *Samaria*. Well out to sea, I was consulted by the ship's doctor, a young man just out of medical school. A haemophiliac on board, travelling with the Mormon Tabernacle choir from Europe, began vomiting blood and passing blood by the rectum. We decided to give him half the six quarts of plasma on board and later do indirect transfusion as we couldn't match bloods and had no equipment for direct transfusions. Next day we heard at sea of Eisenhower's coronary attack and I cabled Wilfrid to offer our services to the Chairman of the U.S. Republican Party via Ontario's Lieutenant Governor Lawson and Mr. Albright of

Distillation Products, in Rochester. Nothing ever came of this. Our haemophiliac was in pretty bad shape but was still alive after more than twelve transfusions. We had only old rubber tubing to boil and reboil, but fortunately he did not have one reaction.

I thought of starting a branch Institute at Niagara Falls or Windsor, I planned to move and leave Wilfrid in London. In December I went down to Niagara Falls only to find that there was just one big house in the town suitable, the Oakes mansion. Strangely enough I had vaguely seen such a mansion in my mind and knew something of how this place would look. I could even have told on which side of the gate the gatehouse lay. There were 22 acres of lawns and trees, a lovely four apartment gatehouse, a grey stone barn which we could have used for a research laboratory, and the big house of grey stone, over 100 years old, was on a fine major highway near the new hospital about to be built, with a high school nearby. We went through the place and found oak panelling, decorated plaster ceilings, five living suites, an elevator from the basement to the third floor, two penthouses, and a new oil furnace. The dining room had an ancient trestle table with eight oak chairs on which the principal guests at a dinner had sat in 1917 when the Prince of Wales visited Sir Harry and Lady Oakes. The name of each noble guest was engraved on the back of the chair. We thought of asking Mr. Weston to sponsor this as a research centre and to ask Lady Eunice Oakes of Nassau to donate the estate to our Foundation.

Late that fall I went down to Toronto to interview Dr. Gilder, the new editor of the *C.M.A.J.* I wanted him to publish Dr. Priscilla Khoo's article on phlebitis as we badly needed an article in a national journal to improve our status in Canada. I told Gilder about Brow and Rabinovitch and said it was time that our kindergarten struggle ended with the publication of our articles in the national journal.

Chapter Nine

BASS NOTES (1956-1960)

Brief are our days, and half already spent
The current hastens where our prow is bent

We are motes corpusclar in time
Within the beam of light our annals climb

Vera Jameson, *Omar from Nishapur*, 1948

I asked Dr. Keith Stuart if he would like to come to work with us in a Niagara Falls Institute but he delayed answering and obviously didn't want to join us. He retired from ill health soon afterward and died in 1973 after another stroke.

Early in 1956 I had my interview with Lady Oakes at "Clifton Place" in Niagara Falls. Marion and I drove down in a snowstorm. In the late morning we drove around Chippewa and Niagara-on-the-Lake. The city was beautiful in its cloak of new snow. The traffic was nearly nil and we loved it all, particularly Niagara-on-the-Lake.

Lady Oakes was a charming, tall, buxom woman, determined and self-assured, a typical school teacher (which she was in Timmins before Oakes married her). She was a hypertensive and had recently been a patient of Dr. Kempner's on his infamous rice diet. I showed her our patient photographs on the projector I had brought, told her that I wanted a clinic near the U.S. border, told her that no one else had ever had such an opportunity to serve people or to attain immortal medical fame in Canada. She laughed, threw back her head and said: "This is a very unique approach." I told her that I would help solve the seasonal unemployment problem in Niagara Falls. I told her that our Foundation had unique things to offer her from an income tax point of view. I spent about half an hour on my presentation. We talked about burns, legs, race horses—then I left. I felt so relieved that I had at least tried for this. Win or lose, I had explored the possibilities. I presume Lady Oakes

forgot me as soon as I went out the door. I'm so glad she kept her estate and ignored me. I did much better staying in London, as it turned out. It was an interesting episode in the E story.

Our book, *The Heart and Vitamin E* came out in February, about twelve months after we had begun writing it.

I went down to Toronto to see Dr. Art Kelley and Professor Ray Farquharson about getting my gangrene paper on the C.M.A. programme at Quebec in June. I told them that this was the best olive branch that the C.M.A. could hold out to us in the full view of the profession. I failed.

Dr. Geddes from Los Angeles came up to discuss his projected studies on emphysema, ergographic studies on rat ventricles, and coronary ligation in rats. Nothing came of this, however. Through Bill Gutterson we got a study on muscular dystrophy going at the Hamilton General Hospital; also one on the fertility of bulls at Woodstock under Dr. Russell Macdonald. This ended merely in a case report on vitamin E for skin lesions on the bull's prepuce.

We also got a study on the Toronto Maple Leafs Baseball Club, on some chickens at Picton, on bedsores at Lyndhurst Lodge in Toronto, even studies with Farquharson on claudication at the Toronto General Hospital (unknown to us). A study on athletes at the University of Saskatchewan under Paul Thomas tailed off and soon disappeared, as did the others.

Dr. John Brieskorn decided to leave the clinic and go back to Germany. He practiced privately in London for a year before doing so.

I drafted a reply to Professor MacLeod's critique in *The Thoroughbred* of Gil Darlington's article in the *Summary* (the article had been reprinted in that horse journal). Fortunately, the other American horse magazine, by coincidence, carried on the same day statistical analyses of horse fertility which provided me with my answers.

Garfield Weston was in town on the night of a Foundation Directors' meeting and I asked him over to it. He came, took an active role and told us about his amazing business enterprises.

I flew to Europe that May. Colin Sharpe met me at the airport and drove me out to their old house, Ponsbourne Manor, in Hertfordshire. Colin's father, Menzies, had failed greatly but was free of pain since the famous faith healer, Mrs. Elsie Salmon of South Africa, had four weeks previously laid her hands on him. She had a second book on her healings then in press and was a dominant, talkative, keen-eyed, intense, Methodist pastor's wife from Pietermaritzburg. Menzies Sharpe and others attested to the "strange thrill" of her hands. He had a collapsed vertebra but she strongly believed that his prostatic

cancer was cured. I think he was just a hollow shell relieved of pain. He thought he was cured but he soon died.

On May 17 I flew to Rome where Dr. Enrico Malizia met me and took me to the home of his aunt, Mrs. Piacitelli. The maid was astounded when I wanted to carry my own bag in. After two days prowling the slights of Rome, I took the train to Naples to attend the Second World Congress of Fertility and Sterility. Most of the papers were dull. There were about 2,000 people there. I was in good form and read my paper on the "Effect of Vitamin E in Preventing Monstrosities in Children." I was allowed ten minutes whereas the rest got eight.

We were turned down for the Royal College programme again in August. We had submitted a paper on the use of vitamin E for gangrene which was rejected. So we asked Gilder to publish it in the *C.M.A.J.* and he did.

In the fall of 1956 I drove down with Bill Gutterson to Cornell University's Veterinary College at Ithaca, New York. We talked to Drs. Kirk and Delahanty, suggesting some dog experiments they could do with vitamin E. They had found that vitamin E helped dogs in heart failure so we suggested ways of standardizing congestive failure in dogs, ways of studying animal radiation burns and so on. I showed my slides and we had a good reception I thought, but once again nothing developed.

Also that fall I laid my Niagara Falls plans before Garfield Weston. No reaction. In November I went down to Austin, Texas, to meet Captain Benson and Captain Harris of the U.S. Air Force and we talked vitamin E all one Sunday afternoon. I showed my slides at their secret lab under the surveillance of a guard. I was hoping to get them to do work on monkeys, using vitamin E. We later learned that they did find E helpful in protecting rats from total irradiation and that they were thinking of trying similar experiments with monkeys.

Bill Gutterson and I flew down to Washington. We saw Dr. Berliner, Chief Cardiologist of the National Institutes of Health at Bethesda, a polite young fellow 38 years old, who saw my slides but felt he should make no move until Paul David's expected paper came out. He was merely a cardiologist and was uncertain what my slides really meant. Bill left some pills for a trial on a few private patients with heart failure. In the afternoon I met Dr. Nelson, head of the U.S. Food and Drug Administration, and eight of his experts. I showed them our slides,

talking to them strongly as I went along, and asked them to stop labelling wheat germ oil as vitamin E, to enforce labelling of vitamin E in international units, and to enforce a rule that content should equal label. We talked for about two hours on the crucial point of whether vitamin E was a therapeutic agent. My chief critic, Dr. Holland, brought in as Nelson's guest from some federal medical service, was keenly opposed to vitamin E. As I left, their pharmacologist asked me for a prophylactic dose for his children. Our talk ranged over the whole field of vitamin E therapy and its biochemistry. They were all very cordial when I left. Nothing whatever came of this meeting.

A year after my initial chat with Lady Oakes, she turned down my proposition. What a piece of good luck that was! They told us that our offer of \$50,000 cash and \$100,000 income tax exemption was "absurd." In any case, Mr. Weston wrote to tell us that he could not finance the Niagara Falls venture. I then turned my attention to relocating in Windsor. There was a wonderful house at 630 Riverside Drive, a mile east of the Ford factory. I convinced everybody at the Institute that we ought to open a clinic there, except Dr. Power, who hated Windsor. None of my family wanted to leave Arva and move to Windsor.

The Windsor City Council rezoned 630 Riverside Drive and our proposal went before the Ontario Planning Board for review. Our option on it was signed, and we paid our first non-occupancy rent. The London Institute had cost us \$106,000 to date to buy and alter and decorate. Ivan Smith was wondering about buying it for a cancer hospital if we left London. He also thought about it as a University Club or as the local Academy of Medicine headquarters.

I had my first malignant lesion on the left temple excised in March, 1957. I also began to get a little angina with the strain I was working under. The angina never got worse and rarely recurred. The skin lesions were more numerous as time went on. By 1973 I had a rough forehead, but only three squamous cell epitheliomas.

At about this time Wilfrid decided to leave London to set up private practice in Port Credit.

Tolgyes' and my article on gangrene came out in the *Canadian Medical Association Journal*. The plates cost Distillation Products at least \$2,300 and I thanked Mr. Mees, its Presi-

dent, for this. Bill Gutterson was finally able to get an advertisement on vitamin E for vascular disease in the same issue of the journal.

I was having a desperate time with staff that July of 1957. Philip Power was leaving in August so Tolgyes and I were left alone. It was the lowest ebb we had reached since we had founded the Institute nine years before. I then hired Dr. Richard Kosmal to replace Power but he turned out badly. He did not believe in E. Nevertheless, I applied to the Ontario Heart Foundation on behalf of Dr. Kosmal for a scholarship of \$1,500 for telephone expenses on our ten year coronary follow-up studies. It was refused, of course, as was the paper I wrote on the use of vitamin E for night pain which I had submitted to the *Canadian Journal of Surgery*. It had been turned down earlier by the *Journal of Gerontology*, *Geriatrics* and *The Lancet*.

We prepared illuminated boxes for our coloured slides so that they could be on display in our waiting rooms at the clinic. They have been displayed there ever since.

In May, 1958, I had my right-sided hernia operated on by Angus McLachlan and got along very well. That summer I spoke at the Second World Congress of Obstetrics and Gynaecology at Montreal on "Vitamin E and Thrombosis." There were about 1,000 doctors there from 64 countries. Wallace was also on the programme with his forceps.

Early that fall I went to San Remo, Italy, via Paris to attend the meeting of the International Fertility Association. There were guards everywhere at Le Bourget Airport because of the war with Algeria. The attendant who took us into the waiting room, locking the door behind us, said: "C'est comme la guerre, m'sieu." We finally flew into Nice and then had a bus ride down the Italian Riviera to San Remo. Our meeting was held at the municipal casino. I had not been put on the programme but Dr. Comel quickly put me on. My paper on vascular disease fell flat.

In order to survive financially at the Institute, the Foundation agreed to sell the Grand and Ridout corner of the Institute grounds for \$65,000. An apartment building was erected on that location.

Early in 1959 Carl Muir opened a branch of the Cardiac Society at St. Petersburg, Florida. He planned to do the same thing in Kansas City, and somewhere in California, if the

Florida venture proved feasible. It didn't. In March I finished the manuscript of my evolution book and tried to peddle it in England without success. Our medical book on vitamin E was finally sold out, after printing over 4,000 copies. Later I went down to Washington with a representative of the American pharmaceutical firm, Testagar Inc., to meet the Veterinary Division of the Food and Drug Administration. I talked to Dr. Kingsma, Dr. H. Smith, and Dr. Mark, who very coolly pooh-poohed our four-year study on the horses at Oshawa as not being controlled. They suggested plasma tocopherols, sperm counts, and that more stallions be studied. We told them how impossible their demands were. They admitted that we would need to use a long needle for the plasma studies that had to be done 160 miles away from the Institute. Our conversation came to a dead end; the result was that Testagar could not send our horse reprints to United States veterinarians. That was considered "advertising."

In April, Wallace had a good hearing for his forceps film at the American College of Obstetrics and Gynaecology meeting at Atlantic City. This is easily the best medical film I have ever seen. Wallace put on an amazing performance in making it without practice or experience.

Also that month, Bill Gutterson and I visited the Russian Embassy in Ottawa which had been rebuilt since it was destroyed by fire. It was not then the same building that the bold Igor Gouzenko fled. The interpreter at our conversation was a Mr. Laptev, whom I took to be the K.G.B. man. He was much at ease, the only one to take notes, and seemed to be the least watched. He ushered us into a room where we set up our projector and soon Mr. A. A. Aroutunian, the ambassador, came in—a dark, pleasant man. He was accompanied by his consul, Mr. Strounmikov, a Russian female paediatrician, and, of course, the inevitable Laptev.

We showed slides and answered questions, and Bill suggested that he be admitted to Russia to initiate an experiment on vitamin E. They seemed to be most taken by the athletic values of vitamin E. The doctor seemed very dull. We got along well with the ambassador until we came to the word "clot" which no one comprehended. Finally I called it "solid blood"; they immediately said "thrombophlebitis," and we went along well again. The ambassador promised to send our reprints, bibliography, and a bottle of vitamin E in the diplomatic pouch

to Russia, and to urge a study. Aroutunian wanted to know where to get vitamin E and the price and so on, so Bill offered him some as a gift. On the way out Laptev told us that his father had had two heart attacks in Russia. We gave him some vitamin E and he was very pleased. He showed us to our cab and sent us away with hearty handshakes.

In the summer of 1959 Marion and I sailed to Amsterdam on the *Atlantic* to attend the Third World Congress of the Fertility and Sterility Society. On the way over we had a surgical emergency. An old Belgian lady, who had a total hysterectomy fourteen years before when Louvain was under fire during the war, developed a subacute intestinal obstruction. The ship's doctor was an old retired general practitioner. In consultation with the ship's captain we decided it was impossible to return to New York, and Halifax was closed by icebergs. I operated on her at 3:30 in the afternoon. The anaesthetic was given by a Belgian girl who was an ophthalmologist. Since she was pregnant and nauseated she had to stop part-way through and the anaesthesia was continued by her pathologist husband. The old lady stopped breathing and twice had no heart beat before I opened her up. Each time artificial respiration brought her around. I released the tight knot at the end of the ileum where there was an adhesion to an old abdominal scar and where there was some old bowel stenosis. She was so distended it was difficult to close. The Chief Engineer kept the boat as steady as possible while I performed the operation, and he would sterilize the aspirating tube after using it on her throat and then we would use it for aspirating the bloody fluid in the abdominal cavity. The patient died quietly in the night.

We landed in Amsterdam, picked up Toni Davis's car at the Hotel Fleissig and proceeded on a wonderful drive through Holland, Belgium and Luxembourg before registering at the Tropical Institute for the meeting. I gave my paper on controlling abortion on the afternoon of June 9 and had many questions to field afterwards. Later I made a point of hearing papers by De Watteville and Knaus. The best paper was by an old Cambridge veterinarian, John Hammond. He must have been 70 years old.

After more sightseeing in Alkmaar, the Hague, Delft and Rotterdam, we boarded the *Atlantic* in Amsterdam on June 16, then went out after dinner to stand by the rail and watch the boat snake its way through a lock into the Zuyder Zee. We

stayed the next day in Zeebrugge as the tide was very low. I was awakened at 2 a.m. by the purser and along with five other doctors on board we looked over a young ex-boxer who had collapsed on duty at the wheel, probably with a perforated peptic ulcer. We urged the Captain to turn into Southampton which he did. The lad was in real shock with a rigid abdomen and had been unconscious.

It turned out that our captain, Captain Kowalski, had earlier been the captain of the Polish ship, the *Batori*, which smuggled the German Communist, Gerhard Eisler, out of the United States into Poland as the war broke out.

The rest of the trip was uneventful except that the chef fell in the walk-in icebox and probably broke his back. He was immobilized for the rest of the voyage until we got to New York. Such a series of accidents on shipboard I have experienced!

That fall I wrote the first draft of the book on *Questions and Answers* for the Cardiac Society and we moved into our new house at Heronspool.

We got a year's lease on the Bartlett property in Windsor with an option to purchase. We planned to send Dr. Tolgyes, Miss Hurley and Miss Thelma Ansell down there to run it as a clinic.

In November the United States Post Office Department challenged the Cardiac Society on the basis of fraudulent use of the United States mails.

In 1960, still on the lookout for promising clinic locations, We looked at the old Fairbanks mansion at Petrolia. It was so like the Institute building in many ways and was almost contemporary with it. It was then being used as a nursing home. It had a sycamore wainscotting from local trees. We visited it again in 1973, by then a poor antique shop. It dates from the first discovery of gas and oil in North America, despite the claims of Pennsylvania.

That month I went down to the Pan-American Fertility meeting at Miami. I gave my talk on vitamin E in obstetrics and for vascular disease, a topic that was suggested to me by the Society, but I was cut off prematurely and had only time to show my slides. This was one of the worst things I ever saw done at a medical meeting. The Chairman did it with a bland smile. I vowed I would never be caught in that fix again.

While we were away the Soviet Ambassador to Canada spoke to the London Hippocratic Socratic Society and an-

nounced a new Russian study on vitamin E in the presence of Dr. Collip, and about 300 students and district doctors. It must have been an amusing moment.

The Windsor venture got off to a slow start. I went down every Friday by air and came back on the train in the afternoon. Kosmal was now my only physician at the Institute in London.

The hearing of the Cardiac Society case at Washington was postponed from February to March. The Post Office Department seemed to be quite incensed with the deluge of letters it had received from members of the Cardiac Society and their congressmen. In the middle of March we finally had the hearing of the Cardiac Society by the Post office Department in Washington. The hearing began on Monday and for two days we faced the old assault of 1948/1949 papers, the most recent Gillman textbook, three medical people and one F.D.A. biochemist. The biochemist was an adequate man who tried to show there was no evidence of vitamin E deficiency in man. The two cardiologists called were just good general men. One had used vitamin E some eleven years before but had forgotten the dosage he used and the number of patients so treated. Dr. Campbell of the F.D.A. also testified. This man was a very weak G.P. Mr. Ague conducted the prosecution in a blustering way. The Examiner, from the same Post Office Department, was a Mr. Massetti. The Examiner was on the other side, of course, and he himself questioned us and bellowed at us throughout. Indeed, we had more difficulty with the Hearing Examiner than we had with the Prosecutor. We went on the stand on Wednesday morning and Carl Muir was on for half a day. Originally they had planned on allowing us two hours for our total defence and were stunned as our testimony went on day after day. The Examiner asked Carl Muir what his "take" had been when he went to work for the Society after being a minister. Our lawyer, Mr. MacInerny, promptly objected to this. The lawyer the Society had retained, Arthur Carton, was perfectly useless and had done no work on the case at all.

I was in the witness box from 2 to 5 p.m. on Wednesday, from 10 in the morning to 8 p.m. on Thursday. It was a real brainwashing. I can see why men crack under such an attack. I was used up for two or three days afterwards. I felt like a grasshopper with sunstroke.

Both the prosecutor and the examiner took turns at me but I was in good form and got into the record our Canadian Senate

hearing, the whole story of the beginning, Skelton's tale, our difficulties with the *J.A.M.A.*, our plea to the Chiefs of Staff of the American Armed Forces. Campbell remarked to our lawyer that I was an "encyclopaedia," and he told me that I was a "buzz-saw" and had he known what I was like they "never would have had you come down."

It turned out that their stenographer was so poor that the whole evidence was garbled and quite indecipherable. We could hardly reconstitute it from the copy of the Proceedings which was finally sent to us.

Dr. Alvarez came out against us and vitamin E in his syndicated newspaper health column at this time. I drafted an "open letter" to him in reply. In March, Windsor was still going badly and Kosmal planned to leave in the summer. I was really up against it.

I went out to take part in a refresher course in Regina for the Saskatchewan Health Department. Dr. Goldbloom Sr. of McGill was the other guest. He had a very folksy approach to pediatrics. I think I disappointed them badly because I gave a paper on gynaecology which decried hysterectomy. I also gave a talk on vitamin E and obstetrics. They were in the midst of a furore on social medicine. About half of the Saskatchewan doctors seemed to be refugees from the British system.

All that summer I was the only doctor at the Institute, and spent my afternoons on the heart side several days a week. I worked mornings upstairs on my obstetrics and gynaecology.

We got word that the Cardiac Society had lost its case at Washington. We had fifteen days for a routine appeal. In any case we had decided to move the Society to Sarnia and revive the old Vitamin E Society of Canada. We also decided to close up the Windsor clinic and ask Dr. Tolgyes and Miss Hurley to return to London. We just couln't find a doctor to take Dr. Tolgyes' place down there. I voluntarily cut my own salary by \$2,000.

That fall I was suddenly called before the Ontario College of Physicians and Surgeons Discipline Committee because of a letter I had written to a patient "boasting" of my work and the work of the Institute, and saying that our lay board fixed our fees. Cam Calder and I appeared on my birthday before the Committee, and we presented our lengthy, courteous correspondence as well as information on our fee system.

We closed the Windsor Institute in a burst of activity. All

would have gone well with us if we had had more doctors and if we could have hung on for another six months.

Later in the fall Cam Calder and I appeared again before the full Council of the Ontario College of Physicians and Surgeons at Toronto. The Committee had quashed the financial charge against me but let the charge of "boasting" stand. The chairman of the Committee was my old friend Morrison Mitchell of Sudbury. He had been on the U. of T. track team with me years before, had asked me for advice on how to repeat his try for the Canadian Fellowship and had had dinner at our table some years before. Morrison was vicious and contrary. I was so much taken aback that I did very poorly, feeling that speech was useless and that we were precondemned. The staring silence all around seemed to confound me. We escaped, however, because the College had assumed powers to punish for "reprehensible conduct" only on the previous June 12. Our letter to this man, fortunately, was dated in February. Prior to June 12 the Committee could only punish for "infamous and disgraceful conduct." The Discipline Committee and the Council seemed to be disposed not to argue the facts about vitamin E, only my medical manners.

The Russians lost interest in their vitamin E experiment because it seemed to help angina but did not lower cholesterol values or pro-thrombin times. I was struck by the fact that many a good idea must have been defeated because its difficulties seemed endless and insurmountable.

At Glenn Sawyer's request I wrote an article in the *Ontario Medical Review* on Medical Education in Ontario. It accomplished nothing. It is amazing how cheerful I have remained in the face of all my rejections.

Chapter Ten

FORTY YEARS AFTER (1961-1970)

It's forty years ago that we left college,
Physicians shiny new and stuffed with knowledge
Of all the ills that any man is heir to,
And how to treat them should we care and dare to.
Can these old men be half the lads I knew
And had the other half heard Peter's cue?
It cannot be—This senile reminiscence,
This vapid talk and futile concupiscence.

We eat and chat with friends of elder years,
Remember friends gone on, the heart's arrears,
Recall great teachers whom we held in awe,
The Grahams so unlike whose word was law,
Old Silverthorne in jurisprudence jolly
And Dickie Rudolph's therapeutic folly,
Wilson, the cynic surgeon, and the rest
But not one friendly word of interest.

We paced it out again, the student round,
Sometimes a game or Shea's to ease the wound
Made in our plastic minds by cramming knowledge
In that tyrannic trade school misnamed college.
We have escaped from this so long ago—
Most of our teaching quite malapropos.
Now why pretend affection for the school
Which ground out students to a robot's rule?

For seven years each teacher took his broom
To sweep us off pontem scholasticum.
Each teacher knew much less than we know now!
What ignorance behind each haughty brow!
Now forty years are gone and here we are—
The tired G.P., the drunk, the famous star.
We shall not meet again, not all, not here—
Once more I'll learn your faces while you're near.

Vere Jameson, *The Queen of Ethiopia*, 1970

In May of 1961 we had a fiasco of an appeal of the U.S. Post Office ruling before Judge Worthin in Detroit. The Judge refused to hear any evidence by me, threw out testimony by Carl Muir, and would deal only with the record, which was practically unreadable. The old judge upheld the United States Government in banning the Cardiac Society from using the U.S. mails.

Jeanette McDonald, the Hollywood star of the days of my youth, came up to see us that summer for her severe chronic rheumatic heart disease. We heard no more from her and she died a couple of years later. She described Nelson Eddy, who used to sing with her in romantic roles, as a fussy neurotic, very apprehensive about his health.

In the fall, Bill Gutterson and I flew to Stanford University. Bill's friend, a cancerous millionaire by the name of Percy Barker, who was sponsoring us, drove us around. We saw the new 80 million dollar Stanford Medical School. Unfortunately my bag, containing my slides, was held up by U.S. Customs at Cleveland and so I didn't get it back again until I got back to Cleveland. However, I talked to the Stanford radiology group off the cuff and showed them a few blown-up photographs of patients we had treated that Bill happened to have with him. In his turn Bill tried to sell the idea of a burn study. The Stanford people quickly said it was not for them. But they were taken by the idea of using vitamin E on the deep tissue scars they were getting from their new linear accelerator. Stanford at that time had the only one, two miles long and worth \$7,000,000. Nothing came of this visit.

Also that fall I appeared before the Disciplinary Committee of the Ontario College of Physicians and Surgeons for a second time, this time charged by Dr. Quirk of Owen Sound of stealing a patient of his. My patient, a Mrs. Close, had a neighbour, an old man with gangrene. I wrote her a letter in which I urged her to get him down to see us. I had canny Joseph Sedgwick, one of the most famous trials counsels in Ontario, pleading my case. Dr. Whytock of Niagara Falls, who was on the Committee, defended me as always. He earlier had met me outside the hall and said: "This is ridiculous." He said that he didn't want to serve on the Committee. Sedgwick charged us a mere \$500 fee.

Mr. and Mrs. Garfield Weston came to see us at the Institute. I had never met her before. He told me that he felt he ought to build me a clinic on the edge of town somewhere. I told him that what I really needed was doctors to help me. He men-

tioned that he had recently given a million dollars to Dr. Charles Best, \$200,000 to McGill, \$100,000 to Queen's and \$250,000 to Western. He asked Anne Ellyatt, my long-time nurse, what we needed most and she told him more eavestroughs. He asked us to have these repaired and the bill sent to him. The next morning the Westons were in again being checked over, and afterwards roamed about the place. Then he said, "This place needs painting. Get that done, too, and send me the bill." He continued, "We need a new clinic. Let me talk to the doctor." So he took his wife, Eleanor Hurley and me into the Blue Room and said, "Nowadays, people want new up-to-date, progressive things, not old buildings like this. What can you sell it for?" I said. "Perhaps \$40,000, perhaps \$50,000." He said, "Sell it. I'll give you enough to make it up to \$250,000. I'll give you ten acres at the edge of town and we'll build a new Institute." I was flabbergasted and said so.

When he and his wife went out we saw them walking away, so I went out to offer them a ride. This they refused. But later he called me and came back and said, "My wife has pointed out that this is a better location for you than a spot on the edge of town. You have room here for expansion." I said, "Yes, we have the land, more than is apparent at first glance." He said, "We'll build it here across the front and tear down the old house. Who is the best architect in town?" "Phillip Johnson," I replied. "Call him at once and we will meet him at the hotel or Sommerville's and we'll get plans under way." So I did and they did. Next day plans got under way. We were now in the middle of turmoil because Weston wanted quick plans, the London architect wanted time and I didn't want the old building torn down or defaced.

The Ontario College of Physicians and Surgeons decided in November that my innocuous letter to my patient, Mrs. Close, had been "infamous and disgraceful," but that no action would be taken for a year and that no mention would be made of it in their proceedings. What a weird affair!

We pointed out to Mr. Creber, Garfield Weston's lawyer in Toronto, that we didn't want a new building; we needed doctors. I was so bothered with the idea of tearing down the Institute and replacing it with something we didn't want that I was prepared to fly to England to talk to Mr. Weston. I even had a

reservation made. However, we hoped that Creber would be able to short-circuit the whole thing. He did in the end.

Mr. Weston proposed to give us annually \$7,000 rather than \$5,000. This was much more useful to us and was one of the suggestions we had made to Creber.

I began to write a gynaecological book called *Woman Troubles*. We never were able to publish it, as the Secretary of the Ontario College, Dr. J. C. Dawson, forbade it. It "mentioned vitamin E too much."

In January, 1962, Colonel Glenn went round the earth three times. We saw the "blast-off" on our new T.V. given to us by our children after I had held out against T.V. for years.

The Ontario College of Physicians and Surgeons objected to our form letter to Institute patients, notably to the map on the reverse side of the sheet showing where London is situated. In early summer I went to Toronto by my own request and spent two hours with Dr. Dawson, the Secretary of the Ontario College of Physicians and Surgeons, going over all our leaflets to see what could possibly be objectionable to the College. I told him that I had suspected that the College was "after me" but he told me twice that that was not so. I told him about the books that we sold to the public and he told me this was news to him. He told me that he was glad that he had not been on the Council which passed Dr. Marion Hilliard's popular books. I also reminded him of the late Dr. Allan Brown's books, written as his chauffeur drove him about, a busy doctor in ostentatious public view.

In July I used my brother Wallace's new obstetrical forceps for a shoulder dystocia for the first time. I published the account in *The Summary* soon after. Garfield Weston raised his annual gift to \$9,000, but we heard no more from him about the new building, thank heaven.

I suggested to Bill Gutterson that he fly to Ottawa to suggest vitamin E to the Indian High Commissioner as the Indian armed forces were being overrun on the slopes of the Himalayas by the invading Chinese. He did so, the idea took hold, and General Nayar eventually published a paper on the effect of vitamin E on soldiers fighting at high altitudes.

In February, 1963, we put out a new edition of *The Heart and Vitamin E*, with slight textual alterations. This time it was designed for medical readers. We put out for patients in the waiting rooms separate chapters of my unpublished book

Woman Troubles. It turned out to be one of the best things we ever did and revived my obstetrical and gynaecological practice.

In early 1964 I went to Ottawa to help my brother Wallace make his film of the use of his forceps in a Caesarean section. It was the first film work I had done since I helped DeLee in 1932 and 1933. We were using a mannequin at one phase and as Wallace soaped it for the demonstration he remarked that he used the "*paws* that refreshes." He has always been an unrepentant punster.

My daughter Roberta gave a masterly valedictory address at the Victoria Hospital nursing graduation ceremony in June. President G. E. Hall of the University of Western Ontario and the Reverend Angus McQueen, later Moderator of the United Church of Canada, were on the same platform but she outshone them both.

On October 18, 1964, we had our terrible car accident. As we drove down Elmwood Avenue toward Wharncliffe Road, I spoke to Roberta and said: "There is a good possibility of our having an accident," but she reassured me. As we turned onto Wharncliffe Road we were hit almost at once. Marion was sitting in the right front seat and my daughter-in-law Anne was sitting in the rear seat beside me. A drunk driver careened off a car coming toward him in the opposite lane and bounced into us, driving us into a telephone pole which we snapped off. His car turned over and burned but he walked away unharmed. I realized that we were about to hit the pole and told everybody, but our brakes were destroyed and Roberta couldn't stop the car. As we struck the pole I bounced forward and knocked a hole in the windshield about four inches in diameter, then bounced back with my scalp badly cut. I fell across Marion who was doubled up under the dashboard. I could see that her left leg was at a sharp angle and realized that she must have broken it. Anne had a badly broken nose and one foot was almost palsied for a few days. I must have almost broken my ankles, but my toes were caught under the edge of the front seat and that prevented me from going further. I damaged my shins badly. Roberta got a few bruises. Marion was unconscious and was slumped down just as I had seen her in a premonition of the accident. She was wearing the same coat that I had seen in that preview. I had assumed in the dream that I was in the driver's seat. But I recognized immediately what had happened and fear

dropped away from me like a cloak because the monstrous thing I had feared had now actually developed, and we had to get out of our difficulty. I managed to clear Marion's throat and scoop out some of the pieces of her broken plate; her jaw was badly broken in three places. I straightened out the left leg which was obviously fractured. Then Roberta, very cool throughout, displaced me and made me sit on the grass since I was bleeding badly from my scalp as I worked over Marion. I sat and staunched my wounds, while Marion and Roberta went to the hospital by fire rescue truck. It took three hours for Dr. Don Marshall to sew up my scalp and I got to bed by four o'clock. Dr. Jack Harris came to sew up Marion's mouth with its bad lacerations and fractured hard palate and two fractures of the mandible. Her teeth tilted upward in the lower jaw; she had almost cut off her uvula. Dr. Stan Sober took over, set both her humeri, the left femur and right patella. Anne was able to come home from the hospital after four days and I discharged myself the next morning. Marion was nine long months in Victoria Hospital.

It was odd that I had had this premonition of trouble involving Marion for a month or more. I expected that we would be in this car accident on our way to Montreal. In my mind's eye I could see that I would be only mildly hurt, but that Marion would be badly hurt. I could see her sprawled in the right front seat in her tweed coat exactly as it finally happened. How lucky that this accident happened so close to our own hospital and not on the highway. Dr. Svend Melgaard had a premonition of this, too. That same night he was having dinner with the Whartons in Los Angeles and told them that he felt very uneasy about us.

One of my patients, Mrs. Verna Walter, who had never had a nightmare, was in bed on the night of our accident. She suddenly woke up crying out: "Dr. Shute, don't go, don't go."

Herbert Bailey's book, *Vitamin E: Your Key to a Healthy Heart*, came out just after our accident. It was soon in paperback and sold prodigiously.

In July, 1965, Marion came home from the hospital finally. She was getting about on crutches and with a wheel chair. She even did her own ironing and dishes. Although she looked scrawny and haggard, her spirits were fine.

Our family always enjoyed the annual entertaining visit of chimney-sweep Freddie Deacon. He told of being threatened

with a law suit by a rival sweep whom he criticized "for definition of character." He told us he once saw an old lady walking about "to save funeral expenses." He claimed that he wouldn't pay a quarter to see the Statue of Liberty get off her pedestal and walk back up. He once knew a man so stupid that he forgot to go to his own funeral. A friend of his taught in a "kidney-garden" (kindergarten). This same friend flew a plane which he crashed because he was tired of it and anyhow he was "psychomatic." Poor as Freddie was, he tore up millionaire Jack Stevens' cheque for \$4.00 plus because Stevens complained of his charges for chimney cleaning.

In late summer I had three weeks of what I thought was acute labyrinthitis (vertigo). It came on suddenly while I was working in the valley at Arva. I never did find out what caused it, but decided to quit working evening office hours and work just mornings and afternoons. Instantaneous but seconds-long occurrences bothered me for years after. Thanksgiving morning Marion walked across the kitchen without her crutch, to everyone's delight. This was one year after the accident.

The late Miss Agnes McGugan, an old family friend, left the Institute about \$13,000 in 1966, the biggest bequest we had ever had. We also heard that Grainger Weston, one of Garfield's sons, had put the Bailey book on all the bedside tables at his luxurious Jamaica resort, Frenchman's Cove.

At the 1966 annual meeting of the Shute Foundation in June, Herbert Bailey, the author of *Vitamin E: Your Key to a Healthy Heart* came up to talk to us. We had never met before. He claimed that he had once been beaten up by American Medical Association goons; he regularly carried a gun thereafter. He had made the mistake of writing about and praising Krebiozen, apparently. He was about to revise his book on vitamin E and wanted to bring some of the material up to date, so he went to Toronto to see Bill Gutterson of Webbers, and on to Oshawa to see Gil Darlington of E. P. Taylor's National Stud Farm.

My old friend of college days, Dr. Israel Chaikoff, died in Berkeley, California. I just happened to see his obituary in *Nature*. We had been very close in Toronto days. He became a great authority on fat metabolism.

In September *Flaws in the Theory of Evolution* came out in paperback. There were 3,000 copies in the First Edition. I gave

a good many copies of the book to theological seminaries. I could have written two more such books with all the data I had compiled.

An Ohio Quaker, Dr. Champneys, wrote me about using vitamin E ointment for burns in the Viet Nam war. I was enthusiastic and arranged with Bill Gutterson to supply the ointment. The scheme fell through very quickly because the Quakers' medical referee in Oshawa refused to look at our work, and the ship *Phoenix* sailed to Viet Nam without vitamin E.

Dr. Hall resigned as President of the University of Western Ontario in November. I wonder if he will be longest remembered for his fight against vitamin E or, indeed, if he will be remembered at all.

That same month I flew to England at Garfield Weston's behest to consult on the treatment of his daughter's Parkinson's Disease. I had dinner with the Westons at Fortnum and Mason's, meeting the Burnetts (Weston's daughter), Dr. Anna Aslan of Bucharest, Dr. Carlsson of Sweden, and Dr. Bill Williams. I made a brief speech upon the request of Mr. Weston. Dr. Aslan undertook the treatment of Mrs. Burnett's Parkinson's Disease and I had a long talk with her the next morning. Her photographs of patients were remarkable.

I began to learn to type in the winter of 1967, something I had been wanting to do for decades, but I soon gave it up. In April the Waverely Guild disbanded after about thirteen years of assisting the Institute as a women's auxiliary. It had done a good job. That summer Dr. Wilfred Waite joined our medical staff.

In 1968 I heard Dr. Christiaan Barnard of South Africa, the man who did the first heart transplant, lecture at Victoria Hospital. He was a real medical charmer, very bright, quick and starry-eyed at the age of 42. He had a standing-room only crowd. He told a story of his chauffeur who sat at the rear in his lectures. He had heard the lecture so often he volunteered to give it in place of Barnard when the latter said he was sick of giving it. They changed coats and the chauffeur gave the lecture. Then came the question time, the chauffeur still doing well. Finally, one question stumped him. Came the reply: "What a foolish question! Even my chauffeur could answer you. Do it, Fred! So Fred (Barnard, the pseudo-chauffeur) got up and gave Barnard's answer.

Bill Gutterson and I flew to Edmonton where we showed my slides and lectured to about 15 surgeons of that city in the Chateau Lacombe. Professor MacBeth and Dr. Tom Williams of the University of Alberta had been working on vitamin E for intermittent claudication for years and were very receptive to suggestions. In the discussion, great stress was put upon my lack of controls and my opposition to controls. I decided that if I ever gave this talk again I would insist how well controlled our work was by all the previous experience of our 20,000 plus patients.

Dr. Steven Tolgyes left the Institute in November 1967, after being with us for fifteen years, to work in partnership with Wilfrid in Port Credit. Dr. Andrew Guest took over his work.

Late in the fall I had a visit from a Japanese businessman, Dr. Ano, from the Eisai Company. He told me they were the largest manufacturers of vitamin E in Japan, that they made 25,000 tons of it a year, about two-thirds for animals and one-third for humans.

Dr. Jack Walters, in charge of obstetrics at St. Joseph's Hospital, took a convulsive eclamptic out of my hands with a compulsory consultation, cancelling my orders. This was something new in my experience. Later, Walters became Professor of Obstetrics at the new medical school at Toledo, Ohio. That same month I had a left herniotomy, my second such operation.

In July 1969, Marion and I flew to Prestwick, Scotland, where Jim, Anne and my grandson Jeremy met us on their way home from Ghana. We drove to Edinburgh where I interviewed two doctors who were thinking of coming to work at the Institute. Dr. Anthony Pat-Fong did later join us. A lovely tour of Scotland and Ireland followed. Notable stops were our visits in Ireland to the village of Letter in County Fermanagh where there were still Shutes, and the town of Arva in County Cavan, after which our village was named.

On August 26, shortly after our return home, I had a phone call from Dr. Floyd Skelton of Buffalo, one of our original research team. He had a tremendous angina and an angiogram done just prior to this at Western Hospital in Toronto showed diffuse sclerosis of the whole coronary tree. He thought he ought to take vitamin E and was wondering about the proper dosage (which I had suggested over the phone to his wife Jean months before). He had recently resigned from the

chairmanship of the Pathology Department of the University of New York at Buffalo in order to devote himself to research. He had a new laboratory with 8,000 square feet of floor space, had the largest group of post-graduate students in pathology in the United States, but now was suddenly hamstrung. He had achieved everything that any young academic person could hope to achieve, including an impending guest professorship in experimental medicine in the University of Glasgow. I suppose nothing afforded him good relief, as he soon underwent surgery at the Cleveland Clinic, where he died on the operating table on October 29, 1969.

Later in the month we had a visit from the Sales Manager of Eastman Distillation Products, Evans, who pointed out that the U.S. Food and Drug Administration had suggested a 30 mgm recommended daily dose of vitamin E. This had thrown the tocopherol market into a tizzy. He told us that a ten million dollar plant for the synthetic acetate was being built in Germany by Henkel and that other synthetic factories were expanding. I told Evans bluntly that over the last 30 years we had earned them many millions and would earn them many millions more—but that we needed support for studies like those going on in Edmonton or in the Kansas Missouri Heart Stroke and Cancer Group which had been enquiring about vitamin E. Evans didn't even know about the impending International Symposium on Vitamin E in September, 1970, in Japan. Nothing ever came of this or other visits with Eastman.

Professor Kamimura of Sapporo Medical College in Japan called on me to tell me about the coming Symposium in Japan. Kamimura told me that he had "come to Mecca" to see me. I replied that all who went to Mecca had prayer rugs and bowed low. He replied: "Then I will bow before the smoke tree." He had never seen a smoke tree before and insisted on being photographed by my side in front of the Institute's smoke tree, which was especially beautiful at that time.

In the fall of 1969 Wilfrid published his first book on his experiences with vitamin E and the heart in conjunction with Harold Taub, editor of *Prevention* magazine. It was entitled, *Vitamin E for Ailing and Healthy Hearts*. That same fall I was surprised to be made a Fellow of the American Society of Angiology.

In early September, 1970, I attended the Fourth International Symposium on Vitamin E at Lake Hakone, Japan. I

presented an encapsulated history of vitamin E as I had studied and lived it, commenting in passing on medical shortsightedness and neglect of nutrition and prevention. We published in the December, 1970, issue of *The Summary* the abstracts of most of the Symposium papers. While I was hurrying home from Japan to deliver my daughter-in-law Anne, Jason, my second grandson, was born. My partner, Jim Deane, stood in for me at the delivery with his usual competence.

One morning at about 6:45 I had a telephone call from Herbert Bailey. He told me that about 200,000 copies of his book had now been sold and that he had had more than 7,000 letters of enquiry from all over the United States. He believed that we were "going to win yet."

Chapter Eleven

EDDIES IN THE TORRENT (1971-1973)

It was full of scuffles, bruised knees, boils and tonsils.
There was school and keeping my face clean.
Girls and their strange ways, games and holidays.
They told me it was childhood and wonderful
And I loved much of it.

It was a sequence of jobs and operations,
Of hordes of men, a few lovely and kind women,
Of dollar bills too small and problems unusually large.
They told me it was all usual that it was life.
And I loved much of it.

Then came quieter days, eddies in the torrent,
My wife and her children—then theirs—
And housing enough and money enough, but not much hair
I know now it was interesting, absorbing, and final.
I think I loved it all.

Vere Jameson, *Half in Jest*, 1971

Early in 1971 I was described as a “charming eccentric” by Dr. Mayes of Philadelphia on a Boston radio phone-in show. My old friend Kay Wharton died and I flew out to his funeral in Los Angeles.

A letter arrived from Dr. Gillilan at the National Institutes of Health at Bethesda, Maryland, who had run a preliminary trial on vitamin E for anginas and was much pleased with the results. He wanted to undertake a long-term study of the effect of vitamin E on coronary hearts. It seems that I had met him some years before but I had completely forgotten him. Gillilan soon got the go-ahead on his study on vitamin E and coronary disease. Nothing came of it, however, although he continued on the study for three years.

Mrs. Etta Lembeck, a nurse who was interested in vitamin E, took on some of the Boston doctors on the radio in early

March. The show's host then telephoned me and wanted me to come on the air to argue with the Boston doctor who was decrying the use of vitamin E. I refused to do so because, as I told him, the Ontario College of Physicians and Surgeons would never permit such a thing.

In April *Surgery, Gynaecology and Obstetrics* published the work of the University of Alberta team on the use of vitamin E for claudication. They cited the first reference as "Vogelsang *et al.*" I promptly sat down and wrote to the editor of the journal that there were two earlier references, Shute references. This is another example of a deliberate slight by a group that did not want to be associated with the name Shute.

Mr. Demers, the president of the Windsor Diabetic Association and an enthusiastic patient of ours, returned from Ottawa where he met the Minister of Finance, Mr. John Turner. He told us about his effort to get Turner to help our study on vitamin E. Turner told him that E could have a role in "dope and alcoholic addiction."

I had a good trip to New England where I talked and showed slides to the Department of Biochemistry at the University of Vermont. In the audience was Dr. Houston, the first man to climb Mount K 2 in the Himalayas. I went on from Burlington to Bristol in Vermont to talk to 250 lay people and show my slides.

We were told in June that the demand for vitamin E exceeded the supply by two and a half times and that the manufacturers, Eastman Chemical (formerly Distillation Products) were caught short.

I had a visit from Dr. Erwin Di Cyan of New York City. I promised to write a foreword for his forthcoming book on vitamin E. Di Cyan was a writer, a poet, a pharmaceutical consultant, and was on the programme of the old New York Symposium of 1949. He told me, and this was the first time I had heard of it, of the meeting of invited experts on vitamin E, sponsored by the New York Academy of Sciences in New York City planned for 1972. When we got home from holidays we found there had been an article about Bill Gutterson in the *Toronto Star* which called Bill "Mr. Vitamin E."

Ruth Adams' book on E was out with my foreword: *Vitamin E: Wonder Worker of the 70's*. I was written up by Robert Legge in *Research and Development* in a long supportive article.

About the time of my sixty-sixth birthday I decided to give up my abdominal surgery as there was too much work at the Institute for me and I was getting heartburn out of surgery. Also I was getting some numbness in the lateral fingers of the right hand due to arthritis. Sometimes I felt that I could not hold the knife to finish an operation. I hated abdominal surgery anyhow and gladly surrendered it to Morris Wearing and others. I never had Wallace's interest in surgery. Errol Fitzgibbon, our fine osteopath friend and ally in Guelph gave me some adjustments for the numbness in my right hand.

In November, my daughter Janet and I heard Prime Minister Trudeau speak at Centennial Hall. His asides were killing and spontaneous. I was made a Life Member of the London Academy of Medicine.

My grandson Jeremy began 1972 by fracturing his skull in a toboggan ride down our hill at Arva. Fortunately, Dr. Carroll was able to raise the depressed fracture in his head at St. Joseph's Hospital in London. A small spicule of bone protruded and was removed and he had a long laceration across his forehead. Jeremy made a very quick and easy recovery and I still don't know why he's alive.

In the middle of the month, Geri Trotta wrote an article in *The Ladies' Home Journal* on us. Bill Gutterson was finally persuaded to put more stress on the health food stores and on that move alone his firm began coming out of its very depressed financial situation.

Before his unfortunate death, Dr. David Turner of Mount Sinai Hospital in Toronto tested random samples of vitamin E and found average assay was 32 percent of label claim, and one as low as 8 percent. W. M. Toone of Victoria, B.C. was preparing his positive study on angina as treated with vitamin E. His results were published in the *New England Journal of Medicine*. Were we beginning to make the grade?

At this time in my life, at age 66, I was beginning to have many brief bouts of dizziness and faintness, although I never actually fell. I could do the hardest physical labour without difficulty and feel no effects from it but fatigue. But let me rise suddenly from a chair or go from a warm to a cool room, and I was almost blinded temporarily with dizziness. Some irregularity of pulse went with this, but my electrocardiograms were good and I had no angina at any time.

That month I had a call from Billy Graham, who wanted to

come up in June, saying that he had a bundle branch block and was now, on his own, taking 800 units of vitamin E per day. He did not come. Gordon Sinclair, the broadcaster, also telephoned to ask me about E dosages. I referred him to Wilfrid, who was closer to him in Port Credit.

There was an article on us by Bill Trent in *Weekend Magazine*. He came to see us as a preliminary. Before he came he phoned the Secretary of the Ontario College of Physicians and Surgeons and Dr. Kucherepa told him that Dr. Shute knew the rules and in any case I was under the control of the London Academy of Medicine. The local Academy President said he had no objections.

Herb Bailey phoned to tell me that about a million and a half paperbacks of his vitamin E book had been sold. A man in Detroit read about the heart trouble of U.S. President Lyndon Johnson and promptly sent a messenger up to London in a big Lincoln to get copies of our books to send to Johnson's doctor. We heard no more about this.

I was still being asked to write forewords for books, such as the one by Ruth Adams, Dr. Di Cyan and Judge Blain, and now Martin Ebon wanted one. *Good Housekeeping* wrote an article on "Facts about Vitamin E." We insisted that we check the material first but they wouldn't play ball. It was a very poor article when it came out.

I applied to the Ontario Heart Foundation for a \$50,000 grant to pay for an edition of *The Summary* carrying scores of our colour photographs. I then wrote to the Canadian Medical Association to announce this plan. I had no hope of getting such a grant, but I wanted to spread the information as widely as possible among the profession about our being turned down by the Ontario Heart Foundation. Our application was rejected at once.

In early April, *Time* decided they should have a new discussion on vitamin E. As usual, I insisted on a face-to-face interview. Nothing came of this. On a television spectacular Liberace pushed vitamin E.

Early in April two senior classes of U.W.O. medical students asked me to talk to them and give them some information on vitamin E. We showed them our burn patient, Linda Lee, who could once again play the piano after her hands were treated with E, and Dr. Bill Ellyatt brought over a burn case he had treated with vitamin E. Only 8 of the 75 students showed up.

I lectured at the University of Minnesota by invitation and then was the guest of Dr. Danny Waite, head of the Department of Oral Surgery. My lecture was in Mayo Hall. I found out later there was considerable apprehension regarding a personal assault being made on me after a threatening letter from a senior on the medical staff had been sent to Miss Radar, my hostess, and her officials. But apparently the students rallied and guaranteed my safety to my hostess. There were approximately 500 students and nurses in the 600-seat lecture hall. I talked on vitamin E later that day at a public meeting.

Also in the spring of 1972 I was elected a Fellow of the Royal Society of Medicine and CBC-TV invited me to appear on TV about vitamin E. I told Ken Johnston, who was the CBC contact man involved, that I didn't want any more of these talks on the theme "Shute says . . . but others say," but rather to have it "Shute says" and then be allowed to present my evidence. The more this jockeying went on the more I noticed that the worst of all offences were the ones that were not expressed. The TV program was postponed because CBC could not get a decision in time from the Ontario College of Physicians and Surgeons. The College studied the CBC request all summer and not until late October did CBC videotaping take place. By the sheerest coincidence we had a visit that day from Roy Howard, an old coronary of 26 years' duration. He was interviewed and photographed by Ken Johnston. Linda Lee came in and showed her healed arm and played the piano for Johnston. It was a very easy and skillful interview and for the first time I didn't mind it. I usually dreaded these TV things.

Adele Davis, the well-known nutritionist from California, gave two lectures at Toronto and then came down to London for our annual meeting of the Shute Foundation. After a fairly brief business meeting she gave a lecture to the staff and its guests in the Blue Room. She was well-informed and talked excellently. She was most impressed with our slides. I suggested she move out of Los Angeles and escape the fog on account of the pulmonary fibrosis she seemed to have.

The *London Free Press* wanted a story from me about vitamin E but I refused. It took them too many years to get around to it. The *Canadian Nurse* asked me for a paper on vitamin E but they rejected it after I prepared it because it was too scientific for its readers, and it also objected to the fact that I had written the material with "numbered points." I was really angered by this.

We had many requests from athletes in Ottawa and Oklahoma City. One was from a student at the University of Waterloo who hoped to walk across Canada that summer. He did it, by the way, whether on vitamin E or not we never found out. Dr. Rynearson of the Mayo Clinic, their former Head of Medicine, wrote to inquire about vitamin E for himself.

Herb Bailey called me one morning about 5 o'clock to tell me that there were tremendous sales of vitamin E in the United States. He was working on the eleventh edition of his book and was thinking of starting a publishing house of his own. He thought that the Japanese might eventually corner the vitamin E market.

In mid-September of 1972 Di Cyan's good paperback, *Vitamin E and Aging* came out. Bill Trent's article from *Weekend* had been reprinted all across the United States. Dr. Miles Robinson came up from Washington to talk to me and learn about vitamin E. He was writing the foreword to the latest edition of Bailey's book and wanted to be sure he was up to date. He was a very pleasant fellow, very humble and easy. Talking to him after lunch at the back door of the Institute I suddenly had word aphasia, my first and only attack. It lasted for several minutes. I lay down for an hour and a half and was fine again. Robinson was quite distressed by my display. So was I.

Early in November I spoke at the Lincoln and Haldimand Medical Society at St. Catharines and had another unpleasant experience. I decided to stop being a dancing bear any longer and to give no more of these talks to small societies. On a CBC television panel discussion on November 7, 1972, Dr. Paul Dudley White (soon to die) condemned vitamin E. The question that brought out this condemnation was asked by Gordon Sinclair, who appeared on "Front Page Challenge" regularly, and was himself taking vitamin E prescribed by Wilfrid.

Mrs. Dorothy Fischer, the physiotherapist from the Warne Clinic of Pottsville, Pennsylvania, came up with colleagues to see our slides. She later published an article in *The Summary* and allowed us to use some of her colour photographs. She reported great enthusiasm in her part of Pennsylvania about vitamin E.

The great harpsichord player, Lady Jeans, wife of Sir James Jeans, the Astronomer Royal, was in town to play the organ for Gordon Jeffery at Aeolian Hall. She phoned to tell

me that she rejoiced over her result in using vitamin E for her chronic phlebitis.

On November 16 Ken Johnston's programme on the CBC came on in a series of four half-hours dealing with mega-vitamins for the *Take Thirty* television shows.

The cross-country panel included Wilfrid, Robert Legge, Lloyd Percival, and Dr. Morton Schulman. Later on they had Dr. Carl Reich of Calgary speaking about vitamin A and D for allergies, Dr. Abram Hoffer of Saskatoon on niacinimide for schizophrenia, and Dr. Linus Pauling on the value of vitamin C.

I went to Wasau, Wisconsin, to speak to about eight doctors in this little town of 30,000. There was much controversy and I handled myself pretty well with the help of the local druggist, Robert Dustrude, who was a sound convert to vitamin E. Dustrude told us a funny story. He was approached in his drug store by a strip-tease dancer. She wanted some vitamin E ointment for her skin, as her G String was irritating her. He gave her some ointment and she promptly came back to buy a pound of it as the other girls needed it too.

I continued giving all sorts of invited talks on E—to dietitians, podiatrists, church groups and others but I turned down an invitation from the Ontario College of Family Physicians to appear on their Oakville programme on a pro and con presentation. I just didn't want any more of these "con" affairs. I did the same thing for a TV programme at Detroit which was after me. I began to tell everybody now that it was too late; people had already decided. Twenty-six years is too long to wait for the usual recognition. It actually shouldn't be so hard to baptize new ideas. One shouldn't have to spend all his life corroborating his early work.

In December, 1972, vitamin E had the worst assault it had ever had in the *Consumer Reports* which is widely distributed in the United States and Canada. Luckily our *Summary* was coming out then and looked as if it were planned to meet this new situation. Anderson of CBS-TV phoned me for a comment on the *Consumer Reports* and I said that we were sick to death of pro and con discussions and weren't going to have any more. However, the editor of the *London Free Press*, William Heine, wrote a blistering comment in my defence on the reports.

Bill Gutterson sold Webber Pharmaceuticals to a large holding company in Toronto. It was in reality run by Ben

Webster whose family was interested in the *Globe and Mail*. Joan Watson on her CBC radio consumer program said they had received "thousands of letters" dealing with vitamin E. She taped an interview with me but I don't think it was ever put on the air. Mrs. Susan Radar wrote me from Minneapolis that three of the eminent professors there had complained that my recent appearance had left an impression that the University of Minnesota was endorsing my findings. I replied that there was still freedom of speech and I didn't need their endorsement nor did vitamin E. Later there was another violent attack on us in a CBC broadcast coming out of Winnipeg. We never did track it down nor hear any of the details.

Towards the end of April, 1973, I was asked by Betty Kennedy for an interview. I said I would accept if we could get written consent from the Ontario College. This was quite amusing as Betty Kennedy had just been appointed to the lay review board which outranked and supervised the Ontario College of Physicians and Surgeons. However, we heard no more about it.

Dr. Burgerstein of Switzerland was still pressing me to join their clinic in Switzerland. I found out afterwards they were on the verge of bankruptcy and I was the last straw that might have saved them. It would have been an interesting thing to have run a North American and a European clinic at the same time, but it would have been enough to break me down in no time.

I had to stop a squash game with Wallace in Ottawa several times because I was so dizzy, though I could still run around the track without difficulty.

I was awarded a Med. Sc. D. from Graceland College in Iowa, the only such degree they'd ever given. It was quite a stirring occasion. Jim was in Ghana but our other four children drove down to see the investiture.

Lady Phyllis Cilento of Australia came to visit us. She was a very easy guest and was certainly sold on vitamin E. She had a friend, a Mrs. Craig, a reporter from the *Woman's World*, with her. They met Terry Anderson and Wilfrid and Bob Legge as well as me. Lady Cilento's husband, Sir Raphael, was in charge of the Pacific region for the World Health Organization after World War II and was knighted for his services. She was a doctor also and was still writing a health column in an Australian Newspaper at the age of 82.

I was on radio in September although I was apprehensive as usual beforehand. Also on the program were Dr. John Barker,

Mr. Lloyd Percival, and Dr. Bette Stevenson, the president of the Canadian Medical Association. I got in some good licks. I turned down an invitation to write an article on vitamins for *The Canadian Consumer*. I was asked to speak for another interview on CFPL, London, but I turned both down. The *Canadian Medical Association Journal* carried an article by Dr. Lattey of Prince George, B.C., requesting doctors to try vitamin E on themselves for angina. He indicated that I had pharmaceutical connections and I promptly wrote a letter of denial which was published.

In September, 1973, I experienced a good deal of dizziness. My electrocardiogram was still good. I blamed much of my trouble on a heat stroke I had 12 or more years before. These spasms of dizziness lasted just three or four seconds at a time.

Dr. Terry Anderson of Toronto talked negatively in Minneapolis at a Symposium on Vitamin E. I wasn't asked to appear. Haegar of Sweden followed him and criticized him about his procedure and techniques. Haegar had been a strong advocate of vitamin E for claudication.

In the fall I was invited by the BBC to take part in a TV program. I was also asked to spend an hour on telephone by a station in Regina. Both of these I turned down. Dr. Linus Pauling came out with an article in support of vitamin E.

On November 21 I talked on a radio hook-up with Max Horwitt of St. Louis, J. G. Bieri of the National Institutes of Health in Washington, and Pat Burns of a Vancouver radio station. No new ground was opened up, but I seized the longest part of the air time and silenced Bieri.

At the end of November we had an unsuccessful meeting at Ajax Hospital, where I talked to about 12 doctors and 30 nurses. I decided to give no more medical lectures in Ontario. Ontario doctors did not really want to hear anything new from us.

Chapter Twelve

THE FUN, FOIBLES AND DRAMA OF GYNETRICS

“Talk is good,” said the doctor, “if it speeds
Comfort across the deserts of the soul
Where every beauty, might and circumstance
Balances enzymes, spasms, or a current
Climbing in a spinal tract to nuclei
Giving the poet pain, the general sleep, and the preacher
Hope. Talk,—if they knew it,—talk is the empty noise
Where ferments churn and lights go on and off
In a house no words describe, no wit can name.”

“Talk is good,” said Eve to her ever so great granddaughter,
“I hear these men as they rant of the things they know,
And pity their solid heads who think the answer
Is reason or books or soldiers row on row.
The truth lies far under talk, as my tissues tell me,
The truth is an intuition, a blowing rose,
A lily in moonlight, perfume in hair, a tune
Under a city wall, dancing, a stolen kiss.
We women need not talk. We make the world.”

Vere Jameson, *The Queen of Ethiopia*, 1970

“Gynetrics” is a term I created out of the two words, gynaecology and obstetrics; the paired term is so awkward, especially in referring to a specialist in the double field as I have long been. The term never took, as was also true of Dr. Speert’s term announced soon after, “Gyniatrics”. Gynetrics breeds characters—like Dr. Joseph B. DeLee, my old mentor at Chicago Lying-In Hospital (I’ve written of him elsewhere—*The Summary* 4:23, 1952). I remember him for his meticulous movies of forceps and other obstetrical problems and methods; for his anxiety to teach his poor ignorant interns at any time they were encountered, whether in a hospital corridor, in his office, in the delivery room; and for Caesareans all done under local anaesthesia. He did no gynaecological surgery,

perhaps because he was super-clean and regarded gynaecology as "dirty"—as it can be. He was one of the few obstetricians I have known who was a confirmed bachelor. He used to say he could never marry a woman he had not delivered which may have been an excuse, although it contained also a strong modicum of truth; labour was a woman's supreme test.

My findings in respect to vitamin E have made me aware of cold shoulders and passing friends. As a result of the deep freeze I have gradually stopped attending medical meetings and no longer know or care who the giants of my specialty are. I read about them. I can feelingly quote da Vinci: "*Si tu sarai solo tu sarai tutte tuo*"—"If you are alone you are your own man"—a good motto for any artist or for any innovator in medicine. Nevertheless, I have had in my own gynetics career, quite apart from the vitamin E episode, an immense variety of experiences, some of which may be of interest to the reader.

When I was at the Lying-In Hospital in Chicago several of us took a course in reproductive physiology given by the great Professor George Bartelmez of the Department of Anatomy at the University of Chicago. One day he showed us slides of unusually small ovaries, one showing a recent corpus luteum just subsequent to ovulation. "What was it?" he asked.

When all had hazarded a guess, he told us it was the ovary removed at the autopsy of a 102 year old woman. Here was another Sara, the hopeless wife of Abraham. I reported this slide later in a paper on the menopause after getting Dr. Bartelmez' permission to use it. Theoretically, the woman could still have conceived.

When I was at Billings Hospital in Chicago, I saw a ninth cranial nerve neuralgia (the glossopharyngeal nerve) cured for two years by a haemorrhoidectomy. This shows the suggestive power of the knife.

I knew a man who smoked during operations, Dr. McKenty of the Royal Victoria Hospital in Montreal. The ash fell into his patients' wounds but perhaps it did not really matter much as the ash was sterile.

Once, when I was new to practice in London, a doctor's wife, a nurse, came to me about her sterility. I began taking her history by asking her age. She replied: "Forty-five. Oh my! Oh my!" and promptly got up and ran out of the office. I've seen her often since, although never as a patient, and she is a perfectly rational, charming woman.

I once had a marriage go on during a labour I was supervising. The couple wanted to legitimize their child but put it off until almost too late and labour had begun. No minister could be found until I enlisted my own, Mr. J. C. Stuart. He gladly obliged. Uterine contractions imposed an odd punctuation to the responses, but the minister did most of the talking, fortunately. The nursing supervisors made wedding attendants all in white, and I was the congregation.

Like every doctor doing home deliveries in the “good old days” I once had the lights go out while in the actual process of delivering the baby. I worked on, by feel and intuition and habit until the unsteady husband brought in an unsteady, flickering lamp.

Once I was called out to a neighbouring town to do a hysterectomy. I did so, only to find that I was working in one solid mass of bowel adhesions. The woman had had typhoid peritonitis years before and had spilled all over the abdominal cavity. When time came to close I was reviewing her bowel situation and found a piece of what looked like small bowel completely severed and no matching end to be found. I sat down on a stool and spent the longest half hour of my life looking for it. Suddenly it dawned on my reeling brain what had happened. One fallopian tube was as large as small bowel and I had severed it. I closed that woman scrupulously and with great relief. Every operation has its point of no return, a ponderous moment sometimes very startling and frightening.

I had a young woman patient who sang in a rock group. She became pregnant about the time her husband left her. She went from him to another boyfriend. Then the baby came. She heard the husband was still in the vicinity so she left the baby in the care of her boyfriend while she went out to her husband to urge him to come back to her. He did, and chased the boyfriend out of the house. All went well thereafter.

I have never believed in routine circumcision, partly because of a few bad results. I’ve seen local infection take over and a good part of the small penis slough off. I’m sure, too, that the Lord knew how to make boys, as I tell patients. I’d as soon cut off the child’s eyelids as its foreskin, but people so often insist that I rarely argue about it. Some tight looking surgical jobs on the prepuce I’m sure are apt to cause trouble in adult life. The operation is painful, bloody, usually needless, often harmful and occasionally dangerous.

I had a patient who worked overtime in a large London department store. One night another employee who had also stayed late raped her. She complained to me, not about the rape, but about the vile language her attacker had used during the assault.

I had a patient who lived next door to her husband's paramour. They were all friends and the women shared him month by month. On one lady's month with him the other woman made the meals and did the housework for both houses. Next month the services were all reversed. This went on happily for as long as I knew my patient.

Once I had a patient who complained of pain and aches in the right lower abdomen. I ruled out appendicitis and finally called it chronic colitis. Why? There was no domestic problem, no marital trouble, no money or religion or sex or children to worry over. Finally I found out; her home was infested recently by carpet beetles. They were everywhere despite three pesticide men she'd called in and now her one thought was of carpet beetles, night and day. So beetles to bowel was the initial sequence. This illustrates the value of an unhurried medical history for one's patients.

As I got older I tried to save time on long case histories by trying to get to the root problem at once. Sometimes women patients talk and talk, yet do not say anything relevant. Then there is the patient who denies you have proved her sore spot even when you know you have discovered her difficulty. Only an older doctor can then say to her what I sometimes say: "Your lips don't say it but your body shouts it aloud. Here's your real problem, is it not?"

In the early fifties I cared for a woman whose soldier husband had long been in Korea. She conceived while he was away, and went to seven months. Then she took a wrong turn as she walked out of my office, opened the door to the cellar, and promptly sailed out into the blackness below. She set foot half way down the stairs, pirouetted, and landed with her next stride at the bottom, where a three foot wide landing abutted on a terminal brick wall. She landed seated, lying against the wall, unbruised but badly shaken. She should have broken her neck or back or at least gone into labour. No ballet dancer alive could have duplicated that double step. She did not go into labour, but two months later delivered a term child. The child was adopted. The husband came home from Korea on compas-

sionate leave, forgave his wife, and all lived happily thereafter, as far as I know.

Long before the days of vitamin K and its routine use to prevent haemorrhagica neonatorum, a dreaded bleeding disease of newly born infants, I delivered a friend's wife in her home, as I often did then. The baby soon developed a classical haemorrhagica neonatorum. I was desperate. The only known treatment was transfusion with its father's blood. Could I do this at home with only an ordinary syringe and needles? I decided to try, and measured off the needle for the estimated distance I would need to pump it through the scalp and into the superior longitudinal venous sinus running lengthwise of the skull and just under the scalp. With real trepidation I drew off 20cc. of the father's blood and, plunging in my needle by guess and with prayer, I injected the blood where I hoped the sinus ran. It worked promptly, and the baby was saved. He grew up to be a notable medical specialist in London, doing much good. When I saw him about thirty years later I remembered him at 48 hours of age and my terror as I plunged my needle through his scalp, trying to hit an invisible vein the size of a lead pencil without going on through and duplicating the brain haemorrhage. My autopsy experience stood me in good stead that day.

I had heard of false pregnancy (*pseudocyesis*) but never saw one until I was called one time to see a woman in prolonged labour but making no progress. When I examined her, her abdominal muscles were writhing as if she had snakes inside her, and periodically she groaned in violent pain as these muscular contractions occurred. I saw that she was not pregnant and told her doctor so as tactfully as I could. I don't know how he told her and got her out of the hospital, for she was convinced she was in full term labour.

On another occasion I was called to Seaford to operate on a large ovarian cyst. When I saw the patient I had some doubts about the diagnosis. She apparently had a huge midline abdominal tumor, but something about it was all wrong. I took her into the operating room, catheterized her, and at once cured the tumor. It was merely an overfilled bladder. Now how to tell the family? Her doctor and I told them that we had changed our minds and had decided not to operate but we believed that we could treat the tumor successfully by another method and had done so. They looked a little dubious but seemed to accept the explanation. I was never paid, by the way.

W. R. Rankin recorded (*J.A.M.A.* 219,2240, 1969) that the great Lawson Tait once asked him to watch him (Tait) remove a large ovarian cyst. But after arriving at the nursing home the next morning a very embarrassed matron told him the operation had been put off, for the huge ovarian cysts had delivered a baby during the night.

Not long ago I saw a woman who had two children but her husband had begun to lose interest in normal sexual relations. Instead, she found to her indignation and surprise that he was introducing candles and pieces of wood into her. She sought help for the man who was obviously becoming psychoneurotic. I was unable to suggest anything but hypnosis, which he did not want, or a legal change of partners, which their religion did not tolerate.

Obesity cases can be frustrating. Food reduction is not the universal answer, as starvation diets, colectomies and exercise salons indicate only too clearly. I believe that obesity is largely familial in nature and that our ignorance of its causes and treatment is very great. I find TOPS and Weight Watchers are helpful and can do what mere medical men cannot. But once I saw a woman become temporarily deranged and melancholic after losing 100 lbs. of weight and becoming "provincial champion." She recovered, however, without regaining all that fat.

On June 16, 1952, Marion, Eleanor Hurley and I drove to Orillia to see my patient, Mrs. McIsaacs. We first picked up her friend, Mrs. Rolland, at Orillia and then we drove up to Uptigrove, four miles away, to the home of Mrs. McIsaacs. Some priests were waiting in the yard and we were all ushered into the house, which was a very ordinary brick farmhouse, at 7:30 p.m. Finally, Mrs. Rolland called up the stairs, where four priests, two seminarians, several women and we crowded into the little ten by eight foot front bedroom. On the floor was linoleum. There was a cheap dresser with religious pictures on it, and a battered bunk bed. We all stood motionless in the stifling heat. Mrs. McIsaacs lay on the bed in a trance with her eyes closed and bloody smears on her forehead above the hairline and on the palms and back of both hands. There were drops on her nightgown over her left breast and on her pillow. There was no fresh bleeding, merely fresh red smears and smudges. Mrs. McIsaacs was the only Canadian stigmatist there ever has been—someone who apparently bears wounds corresponding to

those of the crucified Christ. This all began in 1939 when her feet began to bleed. She consulted her priest and he finally recognized it as the stigmata when her hands also began bleeding. Now on every Friday, but notably on Good Friday and on the first Friday of each month, she has three hours of Passion suffering. During her suffering she cannot drink wine. Mrs. Rolland told us that she was never wet when standing in the rain and of late years she had rambled on while in her trance, speaking of such details of the Passion as did Saint Veronica, and seeing and describing various incidents in it.

As the group stood or knelt by the foot of the bed in that hot little room, the two little girls of the family knelt by the bed and led all those present in a long rosary. Then Mrs. McIsaacs, tossing about and occasionally twitching, began to relate in a clear monotone: "I see our beloved Saviour as the mob stones and blasphemous Him. He turns to bless them. His blessed mother turns to them urging them not to increase His suffering. She tells them that He has already suffered." She spoke all the two and a half hours that we were there, except for a second rosary which was said at about the half-way mark. She was quiet during these two episodes. She told us twice that the Blessed Mother urged the rosary and the worship of the Sacred Heart on all people. She prayed for herself and those present, including the priests. Finally, she recorded the details of Jesus' death and subsided exactly as if she had been clocked after two and a half hours.

Everyone in the house seemed sincere and humble. They themselves undoubtedly had implicit belief in all that went on. I saw the fresh bloody smudges at close range. They certainly were bloodstained. The smudge on the dorsum of the left hand was a centimetre in diameter. There was no actual bleeding while I was there. Mrs. Rolland said that sometimes her shoes were filled with blood and at times blood poured down from her eyes and forehead to stain her nightgown. She had a stigma on the left side under the heart and in the feet. *Time* (September 25, 1950) carried a detailed account of her examination by three physicians.

Old Dr. Whiteley, who used to practice in Goderich, saw a woman in her home one time and said: "Oh, you're really ill. You must go to bed and stay there until I call on you again and let you get up." He promptly forgot her. Three years later she

met him at a neighbour's house. He remarked how well she looked. "I'm fine, doctor, don't you think, for a woman who has been in bed three years?"

In late 1970, I had a call at 2 a.m. from a woman in Elyria, Ohio, who wanted me to tell her how to stop her husband's nosebleed.

Very recently I had another even more unusual telephone call at 2 a.m. It seems that a group of university students were having a late party and it turned into a seance. One of the girls volunteered to recall her old grandfather from the dead. But she became hysterical at the prospect of meeting him in less than the flesh. I could hear her shrieks over the phone. I advised her frightened friends to put her in a room all alone and she'd soon mend. They did, and she did, and I slept blissfully on.

A small girl heard a nurse at Victoria Hospital talking of putting wax candles up the rectum of patients who had just had pile operations to retain dilation. "Lit?"—asked the youngster.

I was glad to resign from major gynaecological surgery in 1973, after 40 years of it. But the fact that no patients of mine died in that time illustrates what caution and good luck combined can do, the value of the irradiation menopause as against needless hysterectomy, and the ability to find a good assistant for operations I did do. My children and wife laugh at my continued ineptness at all household repairs, all twistings and fittings and pullings, all attempts to mend a thing gone mildly wrong, all engines, all things nailed or screwed down, all ingenious contrivances. I get even worse as I age, until they come to my rescue, knowing Dad's trouble. Imagine me as a surgeon and compensating for my natural awkwardness with extra caution and care and knowledge. My careful learning of technical procedures has armed me well in my obstetrics, where I am generally regarded as a better than good master of forceps, Duhrssen's incisions, Caesareans and such.

Since 1972 I have done no surgery and have concentrated mainly on female vascular disease. I had one old patient who had developed phlebitis 26 years before I met her at the birth of her twins. I cured her symptomatically with alpha tocopherol in big doses, with no trace of pain or swelling remaining. She stopped her vitamin E and the phlebitis symptoms returned. More vitamin E cured her again—and so on, for many repetitions—after 26 years. In 1973 this was still her record, the twins now being 38 years old.

Every doctor should have at least one operation. It teaches him volumes about gas pains, tenderness and nausea. I've learned a lot from my herniotomies, my submucous resection, and from having 17 years of recurrent epitheliomas on my forehead and temples, two of squamous cell type. Realizing that cancer is at work in you is a come down-to-earth experience.

No reminiscence of my medical life would be complete without a word about my two medical brothers, Wilfrid and Wallace.

Wilfrid shares a birthday with me, though two years younger. However, he has always been as different in temperament from Wallace and me as can be imagined. Perhaps mother and father were so unlike that we picked up very different genes in our inheritance.

Wilf was puny as he grew up, until he began to wrestle at the Windsor Y.M.C.A. to learn self-defence. At the University of Toronto he became Canadian Intercollegiate Middleweight wrestling champion and finally turned down an offer to wrestle professionally. After he went to Guelph to practice, he helped to coach the wrestling team at the Ontario Agricultural College (now the University of Guelph). He has been a man of muscle ever since.

Both Wilfrid and Wallace would probably have had difficulty in a modern medical school because they did not do well in their initial years. It is odd to reflect that had Wilf been born ten years later he might never have been a doctor nor have had a part in our medical discovery and purpose. What a loss that would have been. I should never have been allowed to pass second year chemistry and physics. This reminds me that the best neuro-surgeon I ever knew and the best chest physician I ever knew did the same. Somehow our educational system must make a place for late bloomers or the uninterested who much later change their pace and develop an intense interest lacking in their early years. Wilfrid had too many girls and too much photography and sketching when he should have been swotting anatomy and pharmacology.

He was talented as a photographer and was offered a job in this field on graduating by a leading portrait photographer in Toronto. He had piano talent, with a wonderful touch and a virtuoso's phrasing. In those days he enjoyed art and helped to found the Sketch Club at the University of Chicago just as I was leaving. He studied pathology under the famous Walter Cannon

and medicine with Dr. George Dick of Scarlet fever fame (the Dick Test) and did very well. He then studied surgery and ear, nose and throat at St. Michael's Hospital in Toronto under Joe Sullivan (later Senator Sullivan). There he tried vitamin E on a few heart patients under his care after I had treated Harry Simpson in 1936. His conclusions were negative as he used the small doses of wheat germ oil which I suggested to him. We were forced to wait for nine years until Floyd Skelton found by accident the value of big doses of a better preparation.

After his long hospital training he began a partnership in general practice at Devil's Lake, North Dakota. He liked his practice but not Devil's Lake, and after two years went to Guelph where he continued in general practice with special reference to ear, nose and throat. Then vitamin E jumped on him again in 1948 when we bought the Institute and set it up as a medical clinic. Wilfrid assumed responsibility for its medical work, notably in cardiology and specialized in it thereafter until he retired in 1972.

For some years Wilfrid owned and operated a camp on Lake Temagami for boys and girls. He was director of the Canadian Kennel Club, and was long an eminent breeder of Doberman Pinschers, poodles and dachshunds and judged at many great dog shows in various parts of the world.

His wife, nee Dorothy Prior, swam for Canada at the Amsterdam and Los Angeles Olympics. She did the first ornamental swimming in Canada on the roster of the Old Toronto Dolphin Club.

As the years went by we became involved in a good deal of controversy in the field of our new interest and were always under maximum stress. It was not surprising that as this stress mounted, one or the other of us should try to escape, and I searched for a way out in Niagara Falls. Before I could move, however, Wilfrid had decided to go to Port Credit, just west of Toronto and did so in 1957. He was there practicing solo or with a former Institute colleague, Dr. Steven Tolgyes, until his retirement after which he moved to Surrey, B.C. to be nearer his two daughters, Barbara and Karen.

In 1971 he singlehandedly changed the fact of the vitamin E impasse with his book *Vitamin E for Healthy and Ailing Hearts*. This sold like wildfire and interested many people in the therapeutic value of vitamin E. It went into paperback in July 1972, after selling at least 100,000 copies in hard back in

the first year of its publication.

Wilfrid's contributions to the vitamin E story have been considerable. He was the first to recognize that rheumatic hearts and hypertensives usually couldn't tolerate large initial doses of vitamin E. He was the first to find out that one could take vitamin E and iron if one took all the E in the morning and all the iron at night, thus separating them for at least eight hours in the stomach. He originally reported the use of E in acute nephritis and its local application to the eye, among other things.

He has always been an expert clinician and has had a wonderful, breezy and encouraging way with patients. His patients loved him. He is a very shrewd practitioner and became quite expert in cardiology. Although he has always had an easy-going way with him, his sense of humour has tended to be sardonic and sarcastic. He has been antagonistic to the profession and his sharp tongue has mowed down the opposition. There aren't many people I've hesitated to debate with, but he is one. He has been a very good public speaker and debater and has done a good deal of lecturing throughout the United States, Canada and Australia on our favourite theme. As well, he has made convincing appearances on television.

Wallace and I have always been great chums. He and I look alike, think alike, and share the same professional specialty and outlook. It would be easier to describe our differences than our similarities. Wallace plays the piano and I misplay the violin. He sings tenor and I bass. Otherwise, we're much the same. Oh yes, he likes surgery.

He lived with us as a medical student at Western and at that time his handwriting was as indecipherable as mine. I always wonder how he passed his written examinations. We still write badly, or worse, and cannot read each other's scripts. His postcards, sent home from his trips abroad, always demand a family conference at our end. We finally get half the message, principally recognizing the names of cities and helped by the identity of the stamps.

He is the most talented man I have ever known and a great genius. He may have had the best tenor voice in Canada in his youth; certainly I've not heard better and his teacher, Ferrara Fontana, who taught Gigli, said so. He improvises well at the piano and helps me understand how Mozart could do so much. His tunes he never transcribes. He is a good untaught portraitist

who never paints nowadays. He writes verse and historical plays which are imaginative, philosophical and stimulating. He is able to conduct a clinic in bad French or worse German. He has invented the best obstetrical forceps, used widely in Germany, New Zealand, Sweden and the United States. It is based on a simple but ingenious principle, the first new idea in forceps in 400 years. He has devised other instruments not so well known, all very simple and ingenious, such as his endometrial curette, his intra-uterine device for aiding in vaginal ligation of the fallopian tubes. He has introduced the best episiotomy repair and a good method for the combined vaginal and abdominal correction of uterine prolapse (fallen womb). He is a brilliant and vigorous gynaecological surgeon, as good as can be found anywhere. His hobby, beside music, is collecting; whatever he wants, netsukes to armour, he at once becomes an expert on. And thus he is extremely knowledgeable on Tudor oak furniture, English pewter, American glass, swords and water-colours, to mention but a few items. His wife, Betty, is even more interested in some of those items, especially Canadiana and glass, and is an official collector for the National Museum of Canada. There are no dull moments in their professional or avocational lives. Wallace is a strong man, once an inter-collegiate discus record holder, and plays games like squash with all the concentration of a devotee. In college he tried boxing, too, but a "glass jaw" was his undoing.

Of late years, he has made several intense and extensive trips to Europe and China sponsored by the Department of Industry, Trade and Commerce to demonstrate his obstetrical forceps—always solo, at a frenetic pace and with his usual enthusiasm. A fine colour film of his forceps and their use has been shown in more than 75 medical centres in South America, the Philippines and the United States. This film was his first but is one of the best I've watched. He has written 35 medical papers on his original observations. The Shute Parallel forceps, so-called since the blades do not cross, is the only obstetrical forceps ever devised which can be applied to the torso as well as to the child's head; thus it can be used for difficult shoulder impactions or dystocia (obstructed labour). On his 1972 trip to China he was one of the first Canadian physicians to watch acupuncture used for abdominal operations. His paper on his observations was published in the *C.M.A.J.* in November, 1972.

After Wallace graduated from Western in 1935, he interned at Harper Hospital in Detroit where he developed an interest in gynetics. As a Canadian, he was not allowed to stay a second year, owing to some state regulation and so he went to the Royal Victoria Hospital in Montreal, where he did gynetics for a year and met his future wife, Betty Radcliffe. After another year as Dr. Archie Campbell's senior on the Montreal General's gynaecology service, he went down to Cook County Hospital in Chicago in gynetics, then to be Sproat Heaney's assistant at Chicago Presbyterian Hospital. Heaney, the professor at Northwestern University, was the foremost proponent of vaginal hysterectomy in the world. I think his indication for hysterectomy was the presence of a uterus. Wallace then practiced his specialty in Toronto until the war broke out and he enlisted. He was placed in charge of all gynaecology at Westminster Hospital in London until being posted to England in charge of all gynetics in the Canadian armed forces. Then home to settle in Ottawa where he had developed the largest gynetics practice I have ever known. He is the best gynaecological surgeon I know, with fast and meticulous technique. He has had at least his share of the hostility shown the Shutes by the medical profession, having been pushed off the teaching staff of the Ottawa Civic Hospital by John Pudicombe (who had delivered Queen Juliana during her Ottawa wartime stay) in the mid-fifties and ever afterward battling to protect his skill and integrity from small-minded medical people in Ottawa.

Wallace is the most interesting conversationalist I know and he knows more about more things than anybody I know. The pace of his mind and the speed of his walking make me feel slow. However, we are much alike and have always been hearty good friends, complementing each other in an amazing way.

Chapter Thirteen

LOOKING BACK

I thank the gods that in my heart
Lies a lute with slackened strings
That you may hymn my great desire
Or sing my bold imaginings.

I thank the gods that in my mind
Lie sleeping by its subtle springs
Thoughts whose flashing light and shade
Brighten the mystery of things.

If Attic gods should search my soul
And draw its lively essence up,
At times I feel that even they
Might quench their thirst in this new cup.

I thank what gods have given me
This my lute with slackened string
Whose melody can lift the heart
To hurdle any vengeful thing.

Deep in my deeps I take my ease
At peace with groups and creeds and things,
Nor cry for unreturning nights
Nor yearn to stretch my sum of springs.

Vere Jameson, *Hy-Brasil*, 1952

We have often been asked by friends and patients, "Why has it taken your ideas so long to be accepted by the medical profession? Its members are eagerly awaiting new advances in treatment." Or doctors themselves come up with the corollary, "If this treatment is so good, medicine would long ago have adopted it."

Here are some of the many replies we make:

1. Vitamin E first came to medical attention as a "fertility" vitamin. Experiments on rats showed that it helped females to

carry pregnancies to term and males to produce good sperm. But deficiency of vitamin E had no effect on the fertility of male mice or stallions, and goats were able to manufacture their own vitamin E. Had monkeys or rabbits been chosen as the test animal the vitamin might have been called the anti-dystrophic vitamin, for in them it seems to have more to do with muscle function than with reproduction. In monkeys it might have been named the "blood vitamin" because of its influence on red blood cells. In chickens it could have been named the "brain vitamin" for its role in preventing a softening of the brain, called encephalomalacia; and in man the "tooth vitamin" for its role in preventing deposition of tartar on the teeth. By mere accident it became a "fertility" or "sterility" vitamin because the first experimenters used rats and not mice or goats or chickens or stallions or rabbits. That the "fertility" vitamin should be useful for a host of other quite unrelated conditions in humans, like burns, coronary heart disease, phlebitis, scarred palms, exposure to smog, strokes, leg cramps or itchy keloids deserves recognition by serious medical men, even in these days of cortisone, phenylbutazone, acupuncture, vitamin B and many "broad spectrum" antibiotics.

2. Vitamin E was first suggested for multiple uses in human medicine by an obstetrician who should have been as careful to steer away from heart and bloodvessel disease and burns as Banting, a bone surgeon, was to avoid diabetes. This doctor had already been put off the staff of a medical school because of "incompatibility." We insist this be known because if he ever came on any later discovery it reflected on the foresight and integrity of that school, and, indeed, on all medical schools, for they survive on funds donated on the ground that they and they only, have the facilities and staff to do medical research. This chastened doctor *must* not succeed. Success would be inexplicable. The vitamin E discovery was an underhanded blow at the basis of all medical research as it is organized in our day.

3. This investigator of vitamin E sneered at double blind controlled studies, a sacred cow in medical science, preferring humane clinical trials. He said it was impossible to set up adequate controls in conditions as variable as rheumatic heart disease or burns, and cited the fact that heart surgeons have not yet done so. Vast numbers of patients would be needed to

swamp out all the variable conditions, as in the Framingham Heart Study, which proved too expensive for the U.S. Public Health Service and failed to yield the results anticipated, even after enlisting 5,127 volunteers.

It was also pointed out that controls were inhumane in human medicine; no one wanted to be a control. They could not be done ethically on private patients, and were in some instances illegal, as some American investigators found out in court (*Science* 143:651, 1964). Prisoners are usually used nowadays for testing new drugs but now some jurisdictions forbid this because of problems of "meaningful consent."

If these controls were as helpful and necessary as rat workers and some naive physicians suggest, they would long ago have settled more problems than they have, for example, tolbutamide for diabetes, smallpox vaccination, B.C.G. vaccine, polio live vs polio dead vaccines, heart valve operations, the anticoagulants and so on. The facts are very different. Controls merely induce louder disagreements and more vicious arguments, and involve bigger and exorbitantly expensive studies in a host of correlated hospitals under a mob of different investigators.

Controls are still a poor answer. How could there be a greater stench than over the infamous Tuskegee experiment on syphilis in blacks in Alabama conducted by the U.S. Public Health Service? We stress clinical assessment and judgement and if we need controls, the patient's previous medical experience serves best.

My friend, Robert Dustrude of Wisconsin, has posed these questions for devotees of controlled studies:

- (a) Why are not all such studies carried out only on medical students? Presumably they need no persuasion as to the value of such methods. It would indicate their sincerity to the public at large as nothing else could.
- (b) Why no controlled studies of acupuncture? Where are the needle stabs of double blind trials? Imagine a placebo needle for Caesarean section or thyroidectomy!
- (c) Finally, why not a double blind trial on placebos only? Each side of the controls would need to be placebos!

4. What were the chances that a team comprised of the gynaecologist relieved of his teaching role in a medical school, two internists, and a final-year medical student allotted three dogs,

using a few private patients in a small Ontario town, without funds, technical advice or a laboratory, would make one of the major discoveries of our time? And what good medical idea but insulin could come out of Canada? Our country suffers under a titanic inferiority complex. We all realize in Canada that everything Canadian is second rate—until the U.S.A. or Britain supports it. This is true for musicians, painters, architects, inventors of hydrofoils, or almost any expert person. But if such an item gets a foreign accolade we are so proud of our bold little-big country. Alpha tocopherol should have sprouted elsewhere and have had at least a few great names on the title page.

5. Yes, we could not publish. We ran a note in *Nature* (in 1946) and read our preliminary report at a county medical society before broaching it to the press and *Time*, under very urgent circumstances. Suddenly every cardiologist was besieged by patients desiring vitamin E, and no one knew less about nutrition, and vitamins in particular, than cardiologists. But further publication ran into constant blocks. The editor of the *Canadian Medical Association Journal* rejected our first paper outright a few hours after it was received, without even referring the matter to his editorial board. After submissions to the *American Heart Journal*, the *Journal of Laboratory and Clinical Medicine*, the *Journal of the American Medical Association* and others had been rejected we finally had our preliminary series of observations printed in the *Medical Record*. We owe this old, now defunct, journal a great debt of gratitudtude, for by this time we had decided we could never publish our papers, and had asked the Medical Division of the National Research Council of Canada to accept them for historical reasons and hold them for the decades it might take before they became printable. This would substantiate our claim to priority at that future date, however distant. (That request was also refused as being beyond the Division's responsibilities.)

One could add that I had had scores of papers accepted by leading medical journals before this vitamin E and heart episode including the *J.A.M.A.* and the *C.M.A.J.* in the thirties and early forties. It was not for lack of style or experience that we were denied page room by so many journals. It was the “un-touchable” contents of our papers.

6. We should have been able to exhibit the details of our work to major medical meetings. In this way doctors could decide for themselves on the accuracy or falsity of our claims. We never were able to get on the annual programmes of the Canadian Medical Association, despite several applications, as the programme was always "filled". The Ontario Medical Association was much more kind and the combined Canadian Medical Association and British Medical Association Meeting in 1955 permitted a display of before-and-after photographs of our peripheral vascular and burn patients. The American Medical Association that year accepted our exhibit, then later reneged as it was "embarrassing." I was not able to reverse their decision by a trip to Chicago with our exhibit. As of 1974 no papers on vitamin E were able to appear in the *Journal of the American Medical Association* unless written by Ochsner or Ayres. Certainly no Shute papers appeared. To the average American doctor a proposal that can't make the pages of the *J.A.M.A.* simply does not matter since that is their sole medical reading. If it's important it's in their "Bible." If it is not it isn't science.

7. A chorus of critics leaped on our work and us between 1947-9. They did not claim that we were partly wrong; they said that we were totally wrong and blackguards beside, (*J.A.M.A.* 142: 485, 1950) or fools (*J.A.M.A.* 136: 1036, 1948).

Placebos give good relief in 40 to 50 per cent of cases of angina, as was later found. We therefore should have done *as well* with vitamin E as would bread pills or other dummies but were judged to be *totally wrong* which shows the bias and malice of our critics. Our opponents overplayed their hands, however. A brief perusal of their papers of 1947-1949 would show that none would now be acceptable for publication in good journals. Yet their conclusions have been allowed to stand as a basic reference for 24 years or more. How wrong and unwise! Even old Dr. Alvarez punished vitamin E in his newspaper columns long after I wrote him letters of explanation and protest inviting him to look at our work.

8. Time has gone by—too much of it—since 1946. The medical profession has turned the cold shoulder on us for too long. It can never retract and still remain Olympian. How can it

apologize for an error of such colossal dimensions, and what can it do for us when it retracts? Can such dishonoured groups honour us? How would Medicine explain the loss of thousands of legs that vitamin E could have saved, the endurance of so much agony in angina and burned children that could have been alleviated, the thousands of deaths that could have been delayed? Are not those who withhold help as miscreant as those who inflict injury?

9. The clinical uses of alpha tocopherol we have explored were remarkably versatile and valuable in the face of an epidemic of cardiovascular and related disease of vast dimensions. Had we been only partially right we should have deserved the grateful thanks of mankind. That Medicine ignored our work for two decades is both pitiful and hard to pardon. That it should maintain its morose attitude and its head in the sand in the hope that vitamin E will go away or that the Shutes will die and so resolve the long debate, is nearly unbelievable.

10. I should have warned our critics long ago that I had done a good deal of writing in fields far outside medicine. When they chose to assault us so vigorously they never should have charged a man with a pen in his hand; it can impale like a lance. While they have kept us out of the pages of medical journals quite successfully, we have published the *Summary*, our own journal, sending out 12,000 copies across the world each year. When they have scorned our observations we have jibed at their inept conclusions from "controlled studies." When they have reminded us how *totally* wrong we were, we have published colour photographs of our results before and after. When they puffed up cholesterol and dicumarol and other bogies, we have jeered. When they spent millions on Framingham we did our research for nothing and won again. Who laughs last?

11. Once I showed coloured slides of our results to the Minister of Health, Paul Martin. He was a college mate of mine and grew up in my home town. He watched them closely and finally said, "Evan, you're either genius or a damned fool." There the matter was laid to rest. Some years later I asked him for funds with which to publish an issue of *The Summary* containing replicas of those same photographs. Nothing came of my request so I told him I would never trouble him again about

vitamin E. He has since become a High Commissioner and a Senator and has served Canada in other fields. But let it be remembered that when we needed help, and when our photographs could have initiated a medical breakthrough, he was sadly wanting.

12. From the beginning of our studies we have wanted medical associations, groups or individuals to see our clinic in operation and examine our records. The invitation has always been rejected. Yet one would have thought that the great cardiac conventions or medical associations would have at least looked at our work. If it was good, they had a new approach open to heart and vascular therapy. If it was erroneous or misdirected, they could have quashed it once and for all.

13. We have initiated studies in various places at different times. These have fizzled out in odd ways. A pharmaceutical firm we know gave a grant for three years (1955-1958) to the Montreal Cardiological Institute for a study on coronary heart disease and alpha tocopherol to be supervised by its leading cardiologist. Nothing happened. We were told that the biochemist involved had left for France and had taken all the records with him—now irrecoverable. A corresponding study in London, England, under the supervision of the late Dr. Paul Wood, went on for at least a year and all the concurrent comments on it were auspicious—until it fizzled out and Wood died of his own coronary. Meanwhile uncontrolled studies of coronary by-pass grafts and repeated mitral valve operations continue at university centres. Hundreds of thousands of dollars are spent on vast community projects like Framingham until they peter out for the dull and uninspired studies they are. Much of our own best work was done on eclampsia with oestrogens, on senile vaginitis with vitamin E locally, on burns, on congenital anomalies by pretreating the sire, or on legs and anginas. All this has been completely ignored by the profession. Wilfrid and I have been called paranoid. But let anyone name a technique that has not been tried to bury us.

As I look back upon my life I am impressed with the role of fortunate chance in it or could it be direction? How can one ex-

plain the odd coincidences that have characterized it? Was it all meant to be? Let me relate some of these remarkable coincidences.

Through my mother's domineering guidance and lonely persistence I was able to graduate from public school at 9 years of age and high school at 14. I merely had to hold that edge in the extra years that she gave me to be younger than my peers all my life, and, most fortunately and importantly, at the end. I held my arts and medical degrees at 21 years of age. I could spend 6 years in post-graduate study when that was rarely done and still start practice and independent research at 27 years of age. More importantly still, when I waited long years to win recognition for my vitamin E and oestrogen studies I could endure because I still had time to outlast my battalions of critics and win recognition of my views by another generation, for I had not retired. I could still maneuver my regiments in the final engagements, mainly because I was still here and I had more years of experience than my critics. Those years proved to be an invaluable gift from my mother.

I tried as many ways to escape vitamin E as if I had been Jonah dodging Nineveh. When I graduated from medical school I tried to secure an internship in Peking, for the Orient had always lured me. I had loved Chinese art and I had wanderlust. A friend of mine had just finished a year there and I envied him his pleasant and exotic experiences. But the year in which I was applying was the first year in which no North Americans were being accepted.

Instead of going to Peking I spent a year in pathology in Detroit, then a year of general surgery in the Montreal General Hospital, and there I met my future wife, Marion. In Montreal I wanted to spend a second year in medicine as even then I felt that it was the basis of all practice and research and even more important than my previous year of pathology. I applied for nothing else and nowhere else. I overlooked the fact that three good fellows wanted the three posts as seniors in medicine, that they had studied pathology too, and had studied it there. I was left out on a limb when the other fellows got the post I wanted. I had no place to go. In desperation I asked Dr. Campbell Howard, a fine staff physician, to suggest something, although I scarcely knew him. He recommended Ford Hospital in Detroit. I disliked Detroit so much that I promptly vetoed that. He next suggested the University Hospital in Rochester. I again

said no at once, for no reason at all. In surprise and some disgust he told me Billings Hospital at the University of Chicago had just opened. On the backlash of the same whimsy I said "Yes, I'd like that. Would you write me a line of introduction and recommendation?" He agreed. I got the position and thus was directed into gynetics by a further chain of chances.

Soon I finished my year of medicine in Chicago, and then I looked about for a year in surgery. None were offered, so I fell into the only opening in the new obstetrical service Dr. Adair had just come to the University of Chicago to organize. Somehow I inevitably became a gynecian, while trying my hardest to escape that role.

Dr. Adair set me to work on torsion of the adnexa and at least I was able to work a topic up properly and publish it in a respectable medical journal. At Billings Hospital Hillyer Rudesill and I started on the toxicity of thorium compounds, which was just then being recommended for visualization of the spleen and liver. We warned against their use. The next thing was my study on morphine done at the Chicago Lying-In Hospital. This was crude work but revealed many interesting clinical slants. Unfortunately it was too non-chemical and merely qualitative rather than quantitative. But it led directly into methods of resuscitation of the newborn and publications on that with Professor Maurice Davis. Maurie and I made some interesting attempts to get something original on foetal electrocardiograms. We hooked up parallel telephone and electrical connections from Billings Hospital to the adjacent Lying-In Hospital, and tried to take electrocardiograms by this means of a child delivered by Caesarean before its first breath. We were rarely able, however, to get our special electrodes applied to the child before it would take a breath. We had hoped to catch the transition between foetal and adult types of circulation. There was a real atmosphere stimulating research in Billings Hospital and the Chicago Lying-In Hospital at this time.

When Dr. Adair finally suggested that I take my Ph.D. on iron in the placenta, I could see that it was a poor project and very uninteresting to me personally, so I rejected the idea. He never again had any of his residents try for a Ph.D. and I am convinced now that when I turned down the idea I really cooked my future with Adair and the Lying-In Hospital. However, I am still glad I had the hardihood to turn the proposal down.

After three years of this I was ready to go elsewhere and

that elsewhere, in 1933, seemed to be Leipzig, for the year before the Chicago Lying-In Hospital had initiated an exchange with Professor Sellheim at Leipzig and a German, Dr. Heinz Siedentopf coming to Chicago in exchange for our Dr. Frank Whitacre. The next in line at our end was a Jew, Dr. Manuel Spiegel. He would scarcely be welcome in Nazi Germany in 1933. I was next in line but Dr. Adair was poorly impressed by me by this time, notably because we had begun to take opposite sides on "America First" which he promoted and favoured. Rather than send Shute to Leipzig he called off the exchange and it died then and there.

I looked about for a post in Canada for I knew of none in the United States and would, in any case, have got a poor recommendation, if any, from Adair. After unsuccessfully approaching the University of Manitoba and the Montreal General Hospital, I could find no place to hang my hat but in London, Ontario, where Dr. W.P. Tew, the professor of Obstetrics and Gynaecology at U.W.O. at least did not say no, though he offered me little encouragement. He had the position of "research assistant" created in the Department of Obstetrics and Gynaecology and gave me that. He urged me to try for a surgical fellowship, as he didn't think much of American training.

In 1932 the Danish veterinarian, Dr. Philip Vogt-Moller, had published a paper in *The Lancet* on the clinical value of vitamin E in treating habitual abortion. Earl Watson, head of clinical chemistry at Victoria Hospital, had read this and had started one of his technicians distilling wheat germ oil in a little still in a corner of the laboratory. He passed around a small bottle of this to various people on the obstetrical staff, including me. Thus I first heard of vitamin E. It had been called vitamin X when I had my last lectures six years before in medical school at the University of Toronto. So my disappointments in Montreal and Chicago had finally dipped my nose in wheat germ oil and habitual abortion, things I had never thought of before, and areas not being worked on at that time anywhere in North America.

That was not all. Since I had no practice and no money I applied for and got a Banting Scholarship of \$1,500 per year for a study I was to undertake on the causes of spontaneous abortion. It kept the wolf from the door with the help of Marion's savings bonds and I could bring her down to London

from Montreal to set up house in four small rooms behind my office. I worked for a year at my project and soon concluded that vitamin E was a major factor in the abortion problem. Thus I formulated the basic concept on which all our later work depended. And only by a long string of accidents, for nowhere else could I have found a laboratory to work in but in the hospitable biochemistry laboratory of Professor A. B. MacCallum. When Dr. Tew, Dr. Watson and others began to bear down on me, Dr. MacCallum stood by me. When I gave a preliminary report of my ideas and findings to Professor Velyien Henderson of the Banting Foundation he refused to renew my Banting Scholarship and told me to tackle something else. When I showed my work to Professor H. Wasteneys at the University of Toronto, he told me it was valueless and that I should quit. The only laboratory bench I could have found in Canada, probably, was Dr. MacCallum's. How grateful to him I was and remain. I made 5672 such observations over the course of seven years and out of this came my idea that oestrogens must be vitamin E antagonists. This hunch has since been abundantly confirmed by my clinical results on senile vaginitis, toxæmias of pregnancy, mastodynia, chronic cystic mastitis, the "pill" and thrombophlebitis.

The test for blood oestrogens that I developed, was a case of the right result coming out of the wrong test tube. Not until forty years later was there a good test. But I learned much about vitamin E, tuned into the vascular field by inadvertence and learned about rats. I set up my own colony, personally fed and autopsied them, and gradually came upon further evidence of my vitamin E—oestrogen equilibrium.

The next phase was Tew's and Watson's jealousy, as my studies practically took over the wheat germ oil field. I published my papers alone, lost my rat colony, could not get my slides blocked and cut and stained and threw them out. So far as I know nobody has since followed up this idea in the intervening forty years. But on the strength of what I had done I was invited to England to the First Vitamin E Symposium in 1939.

At that first International Symposium on Vitamin E I felt that I did poorly. One of the things to be noticed at the meeting in England was that medical men had a superior status to that of biochemists. Very few medical men bothered to attend a meeting which was organized by mere fundamental scientists. I made the first mention there of kidney damage as related to

vitamin E deficiency, as well as toxæmias, and I stressed the difference between habitual abortion and threatened abortion.

Then came the final tangle with Dr. Tew and Dr. Watson. When I returned from England Tew put an abrupt end to my academic career. This was a blessing in disguise. It released me from requiring their consent to publish any work, although it made the academic people distrust me ever afterward. What good could come from a man who had been expelled from a medical school staff? All one had to do was to enquire of my professional brethren about me, and a little deprecatory shoulder shrug would set the whole thing in the proper light. Generations of medical students in turn were trained to believe that Shute was odd and paranoid, somebody to learn forceps from if you were interested, but somebody to be ignored in hospital corridors as soon as you were off the service, someone you passed by on the streets. Being ignored like this at scientific meetings, medical meetings and such became so habitual that I eventually ceased to go to any. I felt the deep-freeze keenly.

Long quarrels with Dr. Tew, Dr. Watson and Dr. Fred Miller, the physiologist, were inevitable. I was a bad boy because I taught what I thought was right without regard to the accepted teaching of the department. Probably Tew should have fired me sooner for the "incompatibility" he mentioned when he finally did get rid of me. I must have puzzled Tew a good deal. It is of interest that the fellows who were my contemporaries and who complied in every way with their seniors, after 30 or more years have no more to show for it than I had at the time of my dismissal. None of these contemporaries achieved anything but Murray Barr, who took the straight and conventional academic road in a sort of parallel course to mine, found the Barr bodies, and was finally elected F.R.S. in 1972.

About this time Harry Simpson developed severe angina. Believing that vitamin E was a vasodilator I gave him a sample of wheat germ oil. It was foul to taste as it was a cold oil made in a linseed oil press. But he could take any amount of castor oil—or this oil—and on the theory that if some was good more was better, he soon drained the whole bottle and lost his angina. On my visits to him I would have to estimate how far my gasoline would take me as at that time I usually could not afford to buy more than 25 cents' worth at a time. We did not realize that dosage was the vital point, thought the good result was purely accidental, could not duplicate our result on smaller

dosage, and forgot about the matter until 1945. Then Skelton did the work on purpura described earlier and we looked about for a human patient with thrombocytopoenic purpura on whom to use vitamin E. We found Arthur Vogelsang's patient, Mr. Beaumont, whose heart responded to vitamin E at least as well as did his purpura and we were hot on the trail. We greatly relieved the angina and coronary disease in Simpson's son-in-law, in my mother and others. This was all due to Simpson's early reaction to wheat germ oil, to Skelton's summer at loose ends and his work on platelets in three experimental dogs, to the fact that Beaumont's heart was doing as badly as his purpura, to the fact that Roy Bicknell was desperately ill and knew his father-in-law had relieved his angina with vitamin E, to the fact of my mother's angina—one can count the probabilities and unlikelihoods here.

Meanwhile, my prolonged failure in 1933 and 1939 to win a clinical practice and to be allowed to perform any surgery on our staff patients undoubtedly cut down my skill and confidence in common obstetrical and gynaecological surgery. Perhaps it was natural that I turned against it, therefore, and concentrated on gynaecological endocrinology and such alternatives to operation as radiation for menorrhagia.

Then the problem of presenting our findings to the medical profession. Our paper describing our preliminary work had hard sledding. It might never have seen the light had we not found an editor who would grant us the hospitality of print in his journal, the *Medical Record*. And even before that we were able to get a preliminary report into *Nature* which tacked down our priorities and then read the full paper before a tiny and insignificant medical society, The St. Thomas and East Elgin Medical Society. Thus we fulfilled all the classical demands of science as a preliminary to our work's release to the nonscientific world.

The Skelton episode was unusual. It illustrates that a prepared and searching mind must eventually find its opportunities. All my difficulties with the cardiovascular series of papers derived directly from my insistence that Skelton's name be put on the preliminary paper and the fact that I had to get Dean Hall's permission to do this. Then there was the foul episode of the rejection of the first preliminary paper by the *Canadian Medical Association Journal* and its editor, Dr. McDermott, within five hours of receiving that paper. We were

saved, however, by Dr. Stragnell and the *Medical Record* and I will never forget my obligation to that gallant editor and his now defunct journal.

I had forgotten Harry Simpson when I first ran across the effect of tocopherol as a vasodilator in 1942. I think it was Wilfrid who reminded me of him. I had been fortunate enough to retain, and still possess, his detailed case history. Another very fortunate thing that I did at the beginning was to have all of us, Wilfrid, Art Vogelsang, Floyd Skelton and me sign an affidavit stating the order in which everybody had done everything in the whole study. I vowed to myself that we would forestall any arguments and disagreements. I failed.

Another important item in the background story is my three appearances before the Ontario College of Physicians and Surgeons, once at a hearing and twice in answer to a charge. Surely no other discoverer was ever officially threatened with the cancellation of his licence for his achievement.

It was a long trail which led so indirectly to vitamin E and its consequences over the course of the years—from Peking to Montreal to Chicago to London; to chance conversations and unanticipated research problems; to Vogt-Moller, Watson, a Banting Scholarship; to wheat germ oil and oestrogen to purpura, Skelton, and the man who had both purpura and a coronary; to my mother's angina; and finally to publication. Such serendipity. Chance—a remarkable string of coincidences or divine guidance?

Moreover, by chance we found three great benefactors. The first was Garfield Weston of London, England, and Toronto. His mother-in-law became ill with a mild stroke. He had heard of vitamin E casually, thought something beyond mere bedrest was in order for his mother-in-law, and telephoned my brother, Wilfrid. Wilfrid suggested vitamin E, gave him the dose, and told him how much she would regain this and that movement, and prophesied when she would be completely asymptomatic. His predictions were completely accurate and Garfield Weston was sold on vitamin E. He became a great ally and advocate, called us repeatedly by intercontinental phone and contributed \$9,000 a year for ten years. He saved the Shute Institute. He concluded his generous support at the very moment when the Institute, after 22 years of struggle, finally achieved financial independence.

The late J. W. MacConnell of Montreal, owner of St.

Lawrence Sugar, publisher of the *Montreal Star* and one of Montreal's richest men, had vascular problems and no one he consulted could help. He heard of us and tried vitamin E. His legs improved so much that he could stand in the receiving line when he entertained the present Queen and Duke of Edinburgh at his lodge near Montreal. He gave us \$10,000 on two occasions. We can never forget his generous aid.

The third in our triumvirate was W. J. Gutterson of Toronto, who was a district representative for a small New York pharmaceutical firm when he heard of us in 1947. He has been our staunch friend in every adversity, has repeatedly thrown out the life-line financially, has given us loans without interest when we were desperate for dollar help, and has published *The Summary* for us once or twice a year for 25 years at a cost of \$3,000 to \$11,000 per issue. This we could never have done ourselves and yet *The Summary* has been the sheet anchor of our cause. It is the Bible of Vitamin E and is unique in its field. It told workers that although they were free to disbelieve the Shutes, hundreds of corroborative workers could not be brushed off so lightly.

Bill Gutterson has been at our elbow continuously since 1947 and has done more than any single man to advance the cause of alpha tocopherol in the commercial and scientific world. He himself has taken 8,000 units of E for years, both as a demonstration of his belief in vitamin E and as an experiment on his own health. He would fly to the ends of the earth if he thought it would help vitamin E or the Shute Institute. I remain very grateful to him.

Then, by chance, the public interest and press and magazine interest in our story that occurred in 1946 to 1949 was almost duplicated in 1972 to 1973. Patients in the second era had lost confidence in the medical and biomedical professionals and their negative comments and were disgusted with the whole endless and repetitious debate. Probably this was because at this second burst of interest there were so many convincing books on the market and Americans, in particular, had become very health conscious and well-informed. This was still not true in Canada, a country which is far from being alert in matters of health. Even when I was invited to speak to medical groups at the University of Vermont and the University of Minnesota in 1971 and 1972, I had a scanty turnout of interested doctors which shows how long the

fight against tocopherol has persisted. However, though physicians have deterred many patients from trying vitamin E, by 1972 doctors' criticisms were losing prestige and people simply ignored them.

Are we surviving? All that mortar and woodwork at the Shute Institute, standing there year upon year, means that we are succeeding. "They must have something," is the natural public reaction. Our critics originally underestimated us and underfought us. They should have burned us out, literally. Fearing that very thing, I raised our fire insurance as high as we could possibly afford as early as 1948 and 1949.

One of Parkinson's later laws he called "the law of delay." This says that "delay is the deadliest form of denial because there is no appeal." This we realize now only too well. There is no answer for delay and it's a really effective counter-maneuver. It's like saying, "Wait until I finish my telephone call," while a man drowns outside your window. Now everyone knows someone benefitting from taking vitamin E and it is quite useless to thunder official denials of its value. Some critics still do, for a habit dies hard and trying to destroy us is easier for them than public apologies and retractions. I would not like to be in my critics' shoes; there must be some apprehensive experts abroad. All this story is now in writing and can never be erased whether years or only days be ahead of me. The pen wins.

Punishment for our critics, as bitter and mendacious as they have been? No. For most of them were honourable men, however narrow, vindictive and wrong-headed. But because of their errors, how many people have suffered or died needlessly? I hope that in future confrontations of this sort the cause of justice and truth fares better.

Epilogue

Evan Shute died at home on October 31, 1978, after a prolonged battle with Alzheimer's Disease. By 1974, when he had completed a draft of these reminiscences, working from diaries kept meticulously since adolescence, he had substantially reduced his practice, gradually turning the clinic over to the younger physicians. One of them, Dr. Edward Desaulniers, succeeded him as medical director in September of 1976 and continues in that capacity. Coincidentally, Garfield Weston also died in 1978, his vital benefactions to the clinic continuing until that date. Wilfrid Shute carried on speaking and writing about vitamin E until his own death on December 11, 1982. Wallace Shute continues to practice in Ottawa, still vigorous and enthusiastic.

Apart from a legacy of unique memories and good deeds for family, friends, patients and associates, Evan Shute's bequests to this country, his profession and his world were and are quite extraordinary. He published two medical books, a book on the theory of evolution, over 120 medical papers, ten volumes of verse, two books of children's stories, a book of essays and edited *The Summary* from its inception. He left several unpublished play manuscripts, unpublished poetry and correspondence of voluminous proportions on a remarkable range of concerns which some future biographer may mine to round out the life and presence of a man whose own memoirs are so spare and whose inner life was so private.

Most dramatic and probably most durable is his contribution to human health. If, as now seems apparent, coronary disease is on the wane, who can doubt that the enormous acceptance of vitamin E by people—with or without their physicians' concurrence—is one major reason for the decline? If so, then Sir Christopher Wren's epitaph in St. Paul's could also apply to Evan Shute: "Si monumentum requiris, circumspice"—"If you wonder where his monument is, look around you."

At my father's memorial service, the brilliant cellist whom he admired so greatly, Tsuyoshi Tsutsumi, played unaccompanied Bach. Somehow this seemed appropriate for one who in life had been forced to travel lonely and unaccompanied. Though he tried to play by the rules of medical science and despite impeccable credentials, he felt rejected and the disillusionment stayed with him. It was my mother who provided

perspective and gave solace from the storms and struggles. For even beyond the medical attacks were the unwarranted assaults on his personal integrity. From the millions made from vitamin E sales by the pharmaceutical industry he profited nothing. He and Wilfrid placed themselves on a salary at the clinic and established it on a non-profit basis so as to distance themselves from any potential commercial interests. My father's only motive was to share information about the benefits of this remarkable vitamin. His fundamental shyness never allowed him to enjoy the combat as Wilfrid did, for he was not a warrior by inclination. The unending vilification took its toll; his final bitter comment is appended to his will:

As during my life-time my Country, Province and City, did nothing to aid or recognize my medical and scientific work, I desire no such recognition after my death. I do not care to be another Bethune. Therefore, I urge and request my descendants to give no countenance to such recognition if it is later attempted. Canada is too careless of her sons, and does not give them the help they need when they need it. Here is my last protest against this viewpoint and I hope it will help others in their struggles. More governmental and scientific bodies should read and digest Dr. Johnson's letter of reproach to Lord Chesterfield.

Here are two excerpts from Dr. Johnson's 1755 letter in response to Lord Chesterfield's belated recognition of Johnson's dictionary:

Seven years, my Lord, have now past, since I waited in your outward rooms, or was repulsed from your door; during which time I have been pushing on my work through difficulties, of which it is useless to complain and have brought it, at last, to the verge of publication, without one act of assistance one word of encouragement, or one smile of favour.

...The notice which you have been pleased to take of my labours, had it been early, had been kind; but it has been delayed till I am indifferent, and I cannot enjoy it; till I am solitary, and cannot impart it; till I am known, and do not want it. I hope it is no very cynical asperity, not to confess obligations where no

benefit has been received, or to be unwilling that the Publick should consider me as owing that to a Patron, which Providence has enabled me to do for myself.

Anyone wishing to pursue the parallels and ironies which Evan Shute saw in Johnson's letter may read the whole letter and Chesterfield's reaction to it in James Boswell's *Life of Samuel Johnson*.

Yet despite all, research on vitamin E goes on and the medical profession is gradually becoming more aware of its benefits. In recent years the growing emphasis on holistic medicine, prevention and primary health care, nutrition and diet, megavitamins, reforms in medical education, exercise, altered lifestyles and consumption patterns have begun to have a pronounced impact on western society. Evan Shute advocated all of these improvements to human health. Clearly, in contributing to new thinking and behaviour, he was more successful as a physician and teacher than he himself ever thought. Now, we hope, readers of these memoirs will come to know him better.

Since this is his memoir, I end with words he wrote about his friend Quintin Warner after his death in 1955:

He could be wounded—but never vitally. He could be swept away—but never permanently. He could go out of sight for a moment, but never lost in the night. Where he was and where he is there is no night.

GLOSSARY OF MEDICAL TERMS

- abruptio placenta*—premature separation of the placenta prior to delivery
- achondroplasia*—dwarfism
- adnexa*—uterine tubes, ovaries, uterine ligaments
- aneurysm*—abnormal swelling in an artery
- angina*—acute chest pain, often associated with coronary disease
- angiogram*—X-ray of blood vessel
- aphasia*—loss of speech
- arteriosclerosis*—thickening or blocking of arteries
- Buerger's Disease*—an inflammatory and painful disease of the blood vessels, especially in the legs
- bundle branch block* (or heart block)—a delay or impairment of the heart's normal contractions
- chorion epithelioma*—a tumour of the outermost envelope of a fertilized ovum
- choroiditis*—inflammation of the choroid coat of the eye
- claudication*—pain while walking which usually disappears after rest
- colitis*—inflammation of the colon
- congenital anomaly*—deformity or abnormality present from birth
- congestive heart failure*—prolonged inability of the heart to maintain adequate blood flow to the body
- coronary thrombosis*—formation of a clot in the coronary artery
- corpus luteum*—the cells in the ovary from which the ovum is discharged
- dermatomyositis*—an inflammatory disorder of skin and underlying muscles
- Dupuytren's Contracture*—contracted condition of the palm and fingers
- dysmenorrhoea*—painful menstruation
- dyspnoea*—shortness of breath
- dystocia*—slow or painful childbirth
- eclampsia*—convulsions or seizures associated with pregnancy
- eclamptic retinitis*—inflammation of the retina associated with eclampsia
- ectopic pregnancy*—a pregnancy occurring outside the uterus in an adjacent organ
- embolism*—sudden blockage of an artery or vein by a clot carried by the bloodstream from another site
- emphysema*—a disease of the lungs
- empyema necessitas*—collection of pus in the chest cavity

encephalomalacia—abnormal softening of the brain
endocarditis—inflammation of the membrane lining the heart, marked by shortness of breath and rapid heart action
endometritis—inflammation of the lining of the uterus
endometriosis—the presence in abnormal location of the tissue lining the uterus
episiotomy—surgical incision enlarging the vaginal opening to ease childbirth
epithelioma—skin cancer. Squamous-cell epithelioma is skin cancer consisting of scaly cells.
ergographic studies—studies of muscular exertion
fibroid—fibrous tissue, sometimes malignant, in the uterus
fistula—an abnormal opening or connection between organs and body cavities
ganglia—cysts or tumours near tendons or joints, especially in the hand
haemophiliac—a person suffering from a bleeding disorder in which the blood does not clot normally
herniotomy—surgery to repair hernia
hypernephroma—kidney tumour
hyperplasia—excessive formation of tissue through abnormal cell multiplication
hypertrophy—the enlargement of an organ
hysteroscope—instrument used for visual examination of the uterus
indolent ulcer—a painless ulcer
infarct—area of necrosis in a tissue resulting from obstructed circulation
labyrinthitis—inflammation of the inner ear
lesion—pathological or traumatic loss of function in a body tissue
ligation—the tying off of a blood vessel
lupus erythematosus—a chronic skin disorder of unknown origin characterized by red patches
mastodynbia—breast pain
mazoplasia—a painful enlargement of breast tissue, akin to mastodynbia
menorrhagia—excessive menstrual flow
metastasis—the transfer of malignant disease from one site in the body to another
myeloma—cancer of the bone marrow
necrosis—death of cells or tissues
oedema—abnormal accumulation of fluid in tissues
oestrogen—female hormone
pancreatitis—painful inflammation of the pancreas
peritonitis—inflammation of the lining of the abdominal wall
phlebitis (thrombophlebitis)—an inflammation of the vein owing to impaired circulation

pneumococcus—a bacteria causing pneumonia

primapara—woman who has had one pregnancy

prophylaxis—disease prevention

proteolysis—biochemical alteration of protein

pruritus—an itching condition

psoas abscess—an abscess in the lower spinal region

pyelitis—inflammation of the kidney

pyelovenous reflux—abnormal passage of fluid in the kidney

pulmonary fibrosis—progressive fibrous tissue formation in the lung

purpura—hemorrhages in the skin and mucous membranes. Thrombocytopaenic purpura is a purpura associated with a decreased number of platelets per unit volume of blood, affecting clotting capacity.

senile vaginitis—post-menopausal inflammation of the vagina

stenosis—constriction or narrowing of a duct or canal

submucous resection—removal of connective tissue in the facial mucous membrane

sympathectomy—removal of the sympathetic nervous system

tenosynovitis—inflammation of a tendon and its sheath

thyroidectomy—surgical removal of thyroid gland tissue

toxaemia—a form of blood poisoning; toxaemia of pregnancy occurs in the latter half of pregnancy and is a series of pathologic conditions which can result in eclampsia

uraemia—toxic kidney condition produced by the presence of urinary constituents in the blood.

varicose veins—veins that have become abnormally stretched or dilated

vasodilator—a substance causing dilation of blood vessels

villi—minute projections from the surface of a membrane

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THE VITAMIN E STORY

The Medical Memoirs of Evan Shute

Evan Shute

The Vitamin E Story is an engrossing account of the life of a precocious, brilliant, and innovative Canadian physician. It is clear that **Dr. Shute** believed he was responsible for a great medical discovery – the recognition of the value of a high intake of Vitamin E for the prevention and treatment of cardiovascular disease.

Dr. Shute began to work with Vitamin E in 1933. Being an obstetrician/gynecologist, he intuitively felt that this substance might be of benefit in his own medical practice. Within a short time, he realized that the use of this substance extended far beyond obstetrics and gynecology to encompass treatment for burns and a number of cardiovascular conditions.

In 1948 **Dr. Shute** and his brother Wilfrid established the world-famous Shute Medical Clinic in London, Ontario, which continues to thrive and remains to this day a major force in the clinical use of Vitamin E.

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AUTOBIOGRAPHY