THE AGELESS GERGEL

TO THE UNCAGED GERGEL: LONG MAY HE SING!

If you already know Max Gergel, skip this preface. You'll want to get directly to the *interesting* part of this book. For that matter, if you don't know Max Gergel, you can also skip this preface with very little loss. It's a rather fulsome declaration of affection for one of the world's truly unique, truly unforgettable characters. Life with — or even near — Max is never boring. The man's vitality is downright awesome, as is his cheerful zest for living and his enormous affection for his fellow man (and woman!) If Max is somewhat slowed up (as he cheerfully complains) in his present "youthful old age," it's not readily apparent to most of his colleagues. He continues to maintain a level of personal and professional activity that would wear out most of us just contemplating his current international jet-hopping.

I don't really think of Max as "growing" on someone — more accurately, he "explodes" on you and you are immediately a full-fledged family member for ever thereafter.

In a way, it's rather too bad that Max chose Chemistry as a profession. From Max's many lectures, the world is only beginning to realize that it lost a world-class comic in the process. No matter how many times I hear the story of Preacher's unpublished synthesis recipes, I laugh anew. To hear Max tell of his adventures and misadventures with his family, his employees, the government, his neighbors, his competitors — anyone with whom Max has had an interface — is to be reminded of the human condition and (tragedies notwithstanding) how, in Max's hands, never-endingly interesting it continues to be.

It's rather instructive to consider for a moment why Max is so good at entertaining us. It's not just the material — though Max clearly does have a thousand stories to tell us — but rather due to two special qualities that characterize his conversation: his impecable sense of timing (worthy of that of the master, Jack Benny) and the fact that the best of his stories are about people. I sometimes have my doubts as to whether they really are as interesting as Max makes them seem, but never-mind, just tell me more. Both of these features are clearly recognizable in this, the second of Max's books. The book is filled with fascinating anecdotes about interesting characters and Max's colorful style of writing — his choice of language, word order, sentence, sentence length, etc. — all add up to a kind of analogue of his style of speaking.

Perhaps it's worth underscoring that the book was not written as

a sociological treatise, not as a literary exercise, nor for the analytical of mind. it was written as an act of sharing, to be enjoyed by his friends. Only Max could have written this book and I am grateful that he has done so. Live long and Prosper, Max — and, please, tell us all about it!

JACK STOCKER
Professor of Chemistry
Louisiana State University - New Orleans

This book is dedicated to some great men,
gone forever and sorely missed:

Dr. Charles Grogan
General Mordechai Makleff
Dr. Earl McBee
Mr. Max Revelise
Dr. Leonard Rice
Mr. Jules Seideman
Dr. Philip Zeltner

R.I.P.

AUTHOR'S PREFACE

I started this book in 1979 as a sequel to my first book, **Excuse Me Sir, Would You Like to Buy a Kilo of Isopropyl Bromide** which was printed by Pierce Chemical Co. and edited by my dear friend Roy Oliver, more because they liked me than with any thought of profit. I had written it within a year but spent four years correcting it and writing my third book, **The Early Gergel.** A group of my friends encouraged me to print the book myself and I am indebted to Mr. Hiram Allen, President, Fairfield Chemical Co., Inc., Dr. Alfred Bader, Chairman, Aldrich Sigma, Dr. Roden Bridgwater, Maybridge Chemical Co., Pat Foster, PM Publishing Co., Jim Hardwicke, Hardwicke Chemical Co., Dr. James King, Army Chemical Center, Mr. Kermit King, attorney at law, Dr. Ed Trueger, Trueger Chemical Co., Dr. Ed Tyczkowski, Armageddon Chemical Co., Mr. Joel Udell, Pyramid Chemical Co., Mr. George Yassmine, Marco Chemical Co., and Fred Zucker, Fluka U.S.A., for financially helping underwrite the book and giving me their encouragement.

Giving unselfishly of their time have been my friends, excellent writers themselves, Kenneth Greenlee, Robert Murray, Steve Stinson and the late Philip Zeltner. These stories have benefited from their editing.

I would like to thank my dear friend Elmer Fike of Fike Chemicals for helping me find Ron Gregory, who could translate the Iliad; John Auge, who did my illustrations; and Bookmasters of Ashland, Ohio and BookCrafters of Chelsea, Michigan, who actually put our work into a finished book. Elmer has always been prepared to take time from sailing his own ship to help me sail my own.

The number of individuals and companies encouraging the effort are too numerous to list, Armageddon Chemical Co., Ben Gurion University of the Negev, Divex, Calabrian Corporation, Fairfield Chemical Co., Fertilizers and Chemicals Division of Israel Chemicals, Gaash/Sefayim Kibbutz, Holland Israel Chemicals Ltd., Giulini Chemicals, Mitsui, Moran Chemicals, Nir Itzhak Chemada, Wiley Organics who have employed me as consultant and encouraged my writing.

Jack Stocker of LSU and his wife Katy have helped with the Introduction. Pat Foster has joined me on the many information gathering trips. My mother, Mrs. C. Jules Seideman, has liked everything I have ever written and Clive Gergel has done yeoman secretarial work. I also want to thank three typewriters which gave

their lives in this cause. It has been a lot of fun gathering stories and telling them and I hope those who read this book will enjoy and share my memories.

PROLOGUE

The world of the child, of the young man, of the middle-aged, and of the old timer (lamentably I am a member of this last category is ever changing. I have visited Atlantic City where I lived when I was six years old, and found the streets closer together, the houses tightly packed, and distances much shorter than 50 years ago when I lived there.

In 1927, my father had died, and my mother, only 26 years old, was dating a Mr. John D. McCauley, sales manager of the Norwich Pharmaceutical Company. He was a large man, well dressed and very old. I disapproved of my lovely young mother dating this white haired man, although he was good to me, brought presents, and slipped spending money into my hands. A conversation with my mother on the eve of my departure for Norwich Pharmaceutical Company 50 years later revealed that Mr. McCauley was about 40 when I knew him; 18 years younger than I am now. I was making a speech for the American Chemical Society, and Norwich was the host. I checked with them, but no one remembered John McCauley. A diligent search of old records indicated that he was in charge or Unguentine sales in 1928. "Sic transit...."

In 1967, I was 46 years old, older than John McCauley when he courted my mama. I was president of one of the smaller chemical companies in Columbia, S. C., driven by fate to support three children and a collection of dogs and cats spread over three households. I also supported a number of charities that had my name on their lists, two lawyers, and a tailor. Harassed by all this supporting, I was losing weight. Israel, for whose Dead Sea Works Corporation I consulted, was about to have its "Six-Day War." I was heavily engaged in hostilities involving my second marriage. This in-between period was the "slack," as we say in sailing, during which tides, and often winds, shift. The chemical plant was doing neither better nor worse than usual. These were the halcyon days before the government commissioned an army of civil servants to regulate and nearly destroy the chemical industry.

Because I did not make enough money at Columbia Organic Chemicals to support myself, children, lawyers, dogs and cats, I took other jobs to supplement my salary: consulting for Beaunit, Beaunit El Paso, Dead Sea Works and Chemetron Corporation. I gave talks for the American Chemical Society and rented what property I had left for whatever it would bring. This consisted of a dilapidated house at Lake Murray, still smelling doggy from its former tenants, a bungalow

at Lake Murray, which I had built five years earlier, and finally a beach house 185 miles from Columbia whose ownership I shared with Pat Gergel, about to become my second ex-wife. I had an old car, old clothes, an old sailboat and an old dog.

I lived with my aunt, Mary Revelise, in the same house in which my grandmother and grandfather had lived before they died. My bedroom faced the highway, which permitted me to hear all the traffic of Rosewood Drive which rendered my sleepless and close to insanity. Fortunately I had a job as president of a small chemical company no one wished to buy, and my sardonic friend Alex Edelsburg, a warrior reduced to selling Fuller brushes. We passed the evenings with chess. I borrowed my philosophy from the Greeks. "Even this shall pass." Passing was my old friend Charlie Grogan, aged 47, his liver and kidneys, like those of most chemists, "et up." I consoled myself with the knowledge that my time of suffering would be short, and scanned the obituary columns to observe who had preceded me. I dispensed with women, devoting my remaining time to Science, good books and faithful friends. I purchased ear muffs and dug in to savor the tranquil life of the resigned recluse.

Columbia Organic Chemicals in 1966 was run by good and faithful employees with much help from God. My mother and aunt Ida ran the "industrials" division which sold soap powder, insecticides and toilet bowl cleaner. My chief chemist was Tommy Jacobs, who supervised production of our organic chemicals. My office, directed by Mrs. Jean Culley, ran about the same whether I came to work or not. The buildings were separated from the rest of Cedar Terrace by a large unclimbable fence (I climbed it on one occasion when I forgotten my keys, and nearly lost my...well, everything). This protected my mother's 50 or so cats from Cedar Terrace dogs and children, and vice versa. During the preceding, troubled year I had neglected the little company to mull over my personal woes. Now, having reached personal peace, it was necessary to devote more time to the company or I would be a *starving* recluse. One can tolerate an empty heart, but it is difficult, especially for me, to tolerate an empty stomach.

Chapter 1

Columbia Organic Chemicals in the early days had an unusual working staff. Out of gratitude for past services, I maintained the lame and the halt, almost all past their best performance. New employees were the dropouts and those fired by larger, local chemical companies, or those between jobs, or the very young, wishing to gain industrial experience.

A young man from one of Columbia's "better families," who toyed with the idea of adopting chemistry as a career, was in the latter category. He was tall, athletic, handsome, clean-cut, wealthy, polished and ambitious. For his first assignment he was to synthesize n-butyl mercaptan, a severe test for the budding chemist. It has a very bad odor, *eau de la skunk*. If he survived this, I would let him make an explosive, and then, after a few weeks would put him on regular production items most of which are toxic. My novice successfully made n-butyl mercaptan. He visited me at lunch time, stinking to high heaven, announced that he had changed his mind, and his ambitions. His mother telephoned after he went home to tell me that she had burned his clothes and consulted a local law firm. His uniform was returned by taxicab--collect. The cab driver furtively smelled his armpits while I borrowed enough money from the fellows to pay the fare. The uniform fitted another employee. Yet another employee, of about the same size, appropriated the departed's street clothes. He emerged five minutes later from the bathroom, which was also our dressing room, clad in shirt and sweater, blazoned with "Forest Lake Country Club," tennis shoes, and an ascot. Nonchalantly, the two men continued the synthesis abandoned by our former employee. The lawyers decided not to sue. Our men in 1967 routinely made evil smelling compounds and did not need uniforms. They could be picked out in any gathering by smell and appearance.

We had some fascinating chaps. Preacher, who made our 2,3-dichloropropene left us when his second wife found him living with his future third. He declared, "It's cheaper to live in jail, Mr. Max." They all called me "Mr. Max."

Bobby, who started with us when he was 16 years old and lasted for 20 years, could make bird songs through his teeth, attracting the plant felines, who followed him across the yard. They assumed he had birds in his pockets. Bobby was from infancy a devotee of John Barleycorn, and under his influence destroyed

many automobiles. He would come to work on Friday, already "under the weather," draw his pay (his creditors were in the car that brought him to the plant), distribute the money, reel into my office, thank me for my generosity and friendship, and beg for an advance on next week's pay. With the passage of time, Bobby's visit moved up a day and the amount of his paycheck diminished inversely in proportion to the quantity he drank. His personal debt to the boss steadily increased. When Steve Reichlyn took over as president of the company in 1978, Bobby was "knocking off" by Wednesday. He was at this time 40 years old and looked 60. His liver was amazing and when he took early retirement to have more time for serious drinking, he died not from drink but because a disagreement with one of his friends culminated with weapons.

Then there was General Robert E. Lee Jones (sic), not only a good bench chemist, but a latent thespian. One day he was assigned to crank the soap machine (in the early days it was cheaper to pay a worker than to buy equipment), and he emerged from the soap room bellowing, "I injured my privates." He was already the admiration and source of secret envy among his peer group for his use of them. Aside from possible legal problems should he sue, there was the possibility of bodily harm to Columbia Organic's president by some irate, frustrated sweetheart thwarted by our soap machine. We rushed him to Jack Alion's office and the next day Dr. Alion called to allay my fears. General Robert E. Lee Jones had clap. Our soap machine was innocent.

A survivor from many years' employment, Leon Hines, is still with Columbia. Fifteen years ago he was my height, heavy set and strong. He has not changed. Leon has a wonderful smile. In addition to being the plant's truckdriver for pickup and delivery, he works in the laboratory and helps make chemicals. He is my mother's amanuensis, i.e. he is cat feeder and cat cleaner-upper. The cats are fond of Leon, my mother is fond of Leon. He has been my faithful attendant during three marriages and as many divorces, keeping my quarters clean, gathering things to be washed and pressed, vacuuming bachelor quarters, and feeding dogs and cats left from aborted marriages. Leon is a Moslem and does not eat pork. He works hard for the plant, my mother and me, tireless and ever smiling.

Thomas Jacobs was recruited by Bobby. Tommy had just completed service in Korea and he joined Bobby and me in our jugwashing business. We drove the plant truck to various drug stores and picked up crates of empty Coca-Cola syrup jugs, washed the jugs, and sold them to Columbia Organic Chemicals to be used as

containers for liquid soap and insecticides, which the company sold to supplement its income. I washed jugs to supplement my own. This was the nadir of my existence in Chemistry, a part-time jug washer. Tommy joined our staff and became chief producer of methyl iodide and ultimately all of the organic chemicals. He had an encyclopedic memory for chemical reactions, although he had never studied chemistry and his formal training did not extend beyond high school. He scheduled the lab work and ran as many as 15 reactions simultaneously. I have had visitors from DuPont and American Cyanimid ask for chairs to watch him and his crew. Dr. Herbert Lubs, who was at one time head of the Chambers Works of Dupont, suggested that he pay Tommy a fortune to join DuPont and set an example! When Tommy was about 40 years old he was destroyed by a bullet, and all his knowledge and industry vanished in seconds. We shut down the plant the following day, so that all of us could attend the funeral. A former employee, "Doc," who is simple, led the parade past the open coffin and said in a loud whisper, "Jus' look at old Tommy! Somebody tell him there's a large order for methyl iodide out at Columbia Organics, and he'd rise outa the grave, man! Outa the grave!"

Pat, my second wife, has a brother, Joe Morton. Joe worked for us for almost 20 years. Like Pat, he is small. Joe is a quiet, gentle man, beloved by my mother. He helped Leon with cat feeding. Less important, he supervised our stockroom, handling the packing of shipments, and unpacking and checking arriving merchandise. Although the cats were forbidden in the stockroom, he would leave the door open on cold winter nights, or when one of them was pregnant. Kitties born in the chemical stockroom learned to walk around bottles without tipping them over. OSHA would have been aghast. Joe was sensitive to the chemicals. He was frail, and unable to see very well, yet he was the first to arrive at the plant in the morning, and one of the last to leave at the end of the day. Not wanting to trouble anyone, he would lift 55 gallon drums by himself, which usually brought one of my old-timers on the run. They loved Joe. As he grew older, his liver troubled him more and more. Because he could hardly see, we hired Joan to help in the packing room. She mothered Joe, who still wrote up the receipts for arriving shipments, swept and tried to do the heavy work. Because Joe was a veteran of World War II, he was entitled to early retirement and disability benefits. His pension as a retired man produced consternation among our laborers, almost all of whom, like Joe, were veterans. We faced a possible mass exodus into retirement by all of

them.

Ervie Lee, Tommy's brother, came to us barely past puberty. He was the ideal understudy, very quiet, a hard worker with a wonderful smile. After Tommy's death, he took over direction of the prep labs. I would pass him on my way to the main building to pick up my mail. By then I had retired and had an office in the little building outside the fence. I would holler into the lab,

"Work hard, Ervie Lee! Remember if you fellows don't make chemicals, I don't eat!"

This produced laughter from Ervie Lee and his buddies, almost all of whom were close to retirement, too. These men, along with Sonny, Ernest, Andrew and Cleveland Adams, plus Henry Leroy Jones in the research lab had been my comrades for years. We had survived fire and explosion. They were largely responsible for the very existence of Columbia Organic Chemicals.

On cold winter days, they would trudge around the plant, clad in rags, testimony to the nature of the work as well as our low pay. They never missed a day unless they were very ill. Even then they would often come to work sick. Their noses ran, their teeth chattered, and they muttered as they did their jobs. It is bad enough to work in the cold (the labs were unheated) but it is misery to work while cold with lachrymators (the eye killers), vesicants (the skin burners), inflammables and explosives. One is constantly spilling something on shoes or trousers, or having it splash up in his face or spray on his hands. Methyl iodide, our main product, first raises welts, then it deranges. Mercaptans render one so malodorous that smelling oneself is an abomination. Chlorinations and brominations sear the nostrils and throat. As my poet uncle, Max Revelise, used to say,

"It's a helluva way to make a living."

In the summer, when it was 102 degrees outside, the labs reached 110 degrees. My fellows stripped to the waist. This made them more vulnerable to burns and toxicity. Visitors were appalled. I told them not to feel bad; my fellows liked freezing cold and burning heat. They did not feel that I exploited them for I worked side by side, equally exploited.

They were loyal. Sonny, our distillation man, would redistil foreshots and residues (the first material to come off a distillation is called the foreshot and the stuff remaining in the "pot" is the residue) to get the last trace of "goody." He is now called Henry Jackson and is a grandfather, but the "oldtimers" and "Mr. Max" still call him Sonny.

Before he got a good paying job with South Carolina Electric and Gas, we had as one of our employees Ernest Dessausaure,

perhaps the last of the Dessausaures, an aristocratic Southern family whose name was taken by their freed slaves. He worked our evening shift. One day he had an accident and nearly tore off his thumb. We sent him to Dr. Alion; and were told that he needed to take off a few days. We were breaking in two novices for the evening shift and, remembering that Ernest was injured, I bolted down supper and hurried to the plant. He was sitting in front of the labs giving instruction to the two men. I asked him why he had come back when he should be resting. He told me he rested better at Columbia Organic Chemicals, and didn't have anything better to do.

Tommy and Ervie Lee worked on alkyl halide production. These are derivatives of an alcohol, such as methyl alcohol, and one of the elements called halogens: bromine, chlorine, fluorine and iodine. The main seller was methyl iodide, and they made it all the time. If we got an order for 25 kilos they would use two flasks. Occasionally we got orders for several hundred kilos and then they would have half the yard covered with little metal cans each containing a 12 liter flask full of raw materials, the flask packed in ice. One man loaded the flasks. He put in the iodine (carefully avoiding getting it on his shoes), poured in the wood alcohol (or methanol as it is technically called, which when breathed first befuddles and then blinds), finally red phosphorus over a period of several days. The red phosphorus sometimes caught on fire. One removed the rubber stopper, added a spoonful of the red powder, and tried not to breathe. Since the fellows did not wear masks, they had to avoid the methyl iodide vapors which drive you mad. Because they provided their own clothing and shoes, and wore them until they fell off, spilled chemicals reached skin fast. Several times a day one would hear a WHOOP as something hot or acidic made contact.

They were quick to laugh. When Daniel, of uncertain age, joined the company, he was first assigned to Leon as assistant cat feeder. The cats were my mother's pets and thrived in the environment of a chemical company. After this, he was promoted to yard man, also under Leon, and next assigned to Hank Tischler, who was in charge of industrial sales. He was then assigned to Bobby, who taught him how to make hydriodic acid, which would be his job for the next five years.

Before he made his first batch, my fellows described vividly to the impressionable Daniel the dangers inherent in handling the chemical, intimating that exposure to the liquid or its fumes inevitably led to loss of libido (not their words) and ultimately the loss of one's "privates."

"Hey, Mr. Max," they urged, "tell old Daniel that hydriodic acid makes you lose your 'peter.'" I assured Daniel that contact with hydriodic acid was injurious to skin. He was very respectful of the synthesis, and promised to take great care. I recall the words of Tommy on this occasion:

"Daniel, tell Mr. Max you ain't got much to lose."

The state of one's phallus and dangers to it were all important to my fellows. I kidded them about the effect of chemicals on the libido. All of them had large families.

"Now just look at Mr. Max. He's worked with all them chemicals and it shore ain't hurt him none at all."

They played jokes on each other, engaged in deadly serious games of whist at lunch time (all of them cheated), ate constantly and left a trail of bread wrappers, bologna ends and tin cans wherever they went. My men were all expert firemen and all knew the rudiments of carpentry, brick masonry and plumbing. It cost too much to hire professionals. They worked 40 hours a week and received time and a half for overtime. They turned in 50-60 hours per week according to the cards (one of them always punched the others in). The first hour was usually spent groaning about the heavy work and lack of sympathy from Mr. Max, who put in the clock "cause he no longer trusts us." They were allowed one half hour for lunch, provided free by the plant. They always punched in and would play whist all afternoon if I did not storm into the room raising hell.

During the second emancipation, the color revolution of the sixties, "Blacks" (they were no longer to be called "colored") were admitted first to the restaurants, then to the schools and finally to that *ne plus ultra*, the Y.M.C.A. Businessmans Club. Then my fellows struck. They had no union and would have avoided one if it existed, but they were overworked and underpaid. We hired a new chap from New Jersey, so intelligent and skilled that we wondered why he wanted to throw in with our "Toonerville Trolley" chemical company. He was a pal to the men, joined their games and told them about all the fine chemical companies he had worked for in the North. Deep conversation ceased when I passed by. The fellows became restive, safety conscious and began to complain about their working hours, lab conditions and low rate of pay. Any one concession would make us unprofitable, a combination would produce bankruptcy. Our main asset was slave labor which included not only the workers but the president of Columbia Organic Chemicals as well.

Hiram Allen, who was our plant manager and my right hand man, (he is now president of Fairfield Chemical Company and rides

his own airplane with his own pilot), brought me the news.

"Everyone's walked out," Hiram said, adding that they had left the labs after cutting off the bunsen burners and turning off the water in the condensers. "The only people left are you, me, Dave Starr and Leon."

Fate has a sense of humor. This crisis occurred on a day when orders were lousy and there were no telephone calls, except for a purity complaint and a message brought by courier that our friend and unwilling partner, South Carolina Electric and Gas Co., definitely planned to cut off our electricity unless we paid our bill. In the mail, mainly offers of distress equipment at bargain prices from defunct chemical companies, and bills and reminders of bills which had not been paid; there was one note marked "personal and confidential" written in a lovely hand, and this I saved for last. It had a delicate odor of perfume. I opened it luxuriantly and was informed that my water bill, **my personal water bill,** was delinquent, and if not paid promptly, my water would be cut off. A bad day, a truly bad day, and now to top it off all my men except three had struck.

I summoned Leon. He had not left because this would have doomed the cats and exposed him to the ire of my mother, Mrs. C.J. Seideman, far more to be feared than mayhem at the hands of his former fellow workers. He arrived, shaking with fear, only the whites of his eyes showing -- the rest focused heavenward. I told him to fetch my car and drive me to Tommy's house. He protested feebly but got the automobile. He was very unhappy and fearful but after some money changed hands, he drove me to Lovers Lane where all the fellows lived. They were sitting on Tommy's porch listening to the new man. He was, I assumed, preparing them for battle. I joined the group as he wound up his speech, in which he told them he had to go back North, I assume to ruin some other small chemical company. They nodded but were not very enthusiastic. The awful thought had no doubt occurred that this was Tuesday and that come Friday they might be payless. They no doubt were considering the possibility that if they didn't work they mightn't eat. I asked for attention, shook hands with the new man and told him how sorry I was that he had decided to leave, and presumably would take all my fellows with him for the good jobs in the North, about which he had been telling them. I told him that I was interested too, and would like to chat with him later about this, maybe we could all go together! I told them how glad I was that they had such a good future, for I didn't know how long Columbia Organics would be able to keep going; that Allied and GE, South Carolina's biggest chemical plants, were laying people off.

I told them they had my respect and sympathy. They were poorly shod, horribly clad, and ghastly underpaid. They had abominable working conditions and impossible work schedules. They had no chance for advancement and it was even possible that we might have to let Leon go (a groan from the automobile). I asked them to send a man to show me the reactions they had been running so I could take over. Our customers had to have their orders filled. I said I would work side by side with Hiram.

"You ain't goin to get much work done, jus the two of you," from the porch.

"Come on boys," I said, "pick someone to help your poor old boss. I'm going back to the bench."

There was shocked silence from my audience — then

"You is? Mr. Max? You know you can't work in them labs since you got sick from methyl iodide. It'll kill you for sure."

I am a thespian, easily moved to tears, as for example when facing a woman who has taken off her clothes and then, overcome by conscience, puts them on again. Or, as in the present case, facing the awful problem of making methyl iodide, my old nemesis. I thought about weighing out the iodine, adding the methyl alcohol, and then slowly adding the phosphorus. In memory I resmelled the pungent lethal odor of this devil which quaternizes the amines in one's cerebellum. I relived the loss of memory, the inability to write, to stand up straight, to enunciate. I choked up in horror.

"Look at Mr. Max, Tommy. He's feeling awful bad."

Mr. Max was not just "milking his lines," he was reliving his awful months of methyl iodide poisoning.

"Just send one man, boys, to show me what to do. I love you all. I don't blame you a bit for quitting. We'll always be friends."

"Come see me, boys, and if I am dead, stop by and see my mother. If any of you come home on vacation and have some free time stop by the plant and help Leon with the cats. My mama will be awfully grateful, boys. It's terrible to be poor."

"I know how hard you've worked. If it's cold in the North, I'll recommend you for jobs at DuPont and Westinghouse even though they're laying off good men and have a job freeze. Things will be better next Spring when the ice melts and you can go out without wearing three sweaters. Come see old Max, boys, if I'm still around."

"Goodbye, Williams. You are a real nice guy, even if you don't eat grits and porkchops like the rest of us. Guess you'll be catching a train to some other place so you can help pore exploited workers get decent treatment from bosses. If you stayed down South a while

you'd get thin and pore like the rest of us. Oh yes, we all have bellies, but that's from eating starch, Williams. Look at me."

Leon and I left. Part of the fellows showed up in about 15 minutes in Sonny's wretched automobile. He had purchased it from me after I bought it from my Aunt Ida, and it had been wrecked by my third wife. As with all the cars my fellows bought from me, Sonny made a small down payment, but never got around to paying again. When I suggested that he "ante up," he reminded me,

"When Mr. Alex was sick (a reference to my chess playing friend who had perished the previous year), who toted him in and out of the house?" This logic had no refutation.

The second batch of them came in Tommy's old car which was even more wretched than Sonny's. We were like a procession from *Peter and the Wolf*. Williams and his rented car was left behind. In a half hour we were once more polluting the atmosphere at Cedar Terrace.

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They were great at clearing a building on fire. Experience sharpened their wits and rendered them fleet. Each knew where the extinguishers were stored and when to use chemicals and when to use wet sand. They worked as a team, facing the flames completely without fear.

"Alright fellows — let's get this one 'fore it spreads. It'll take that Veterans Hospital fire engine too long to get here."

"Sonny, you get Old Big Boy" (the affectionate name for our largest fire extinguisher which like a cannon traveled on wheels).

"Ervie Lee, man, get a move on with that sand. Sand, fellow; not water! You know you can't put out a phosphorus fire with water."

"Here comes Mr. Max."

The oldest fire fighter at Columbia Organic Chemicals, grown plump from compulsive peanut eating (a stress panacea available to the poor), would grab a bucket of sand, or help man a hose as the firemen, accustomed to fires at Columbia Organic Chemicals, called for reinforcements to make sure that Cedar Terrace and its shopping center did not get involved in the conflagration.

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As civilization brought us into the 20th century and we gave fringe benefits, my men discovered our new insurance and filled the

hospitals with their wives and children, staggering the statisticians of our insurers. They consulted with the chief executive of Columbia Organics, now solvent for the first time in the company's history; we raised salaries, put them in uniform and vented the labs and stock room. We had grown old together, and it was time to reap the harvest.

I retired five years ago, but would return from time to time and pass them in the yard. There was always a shift working and everyone was in uniform. There were new faces and modern equipment. Reactors had replaced 12 liter flasks. The place was clean and, more remarkable, almost odor free. I would wave at them saying

"Off your butts, fellows, and get a move on. Make money so that I can stay retired."

They grinned and said, "Give um Hell, Mr. Max," and I felt the warm glow of friendship. A new generation of cats lolled in the yard. Leon, grown old like me, grinned from the cat house. A wisp of purple smoke came from one of the labs, just like in the old days.

Chapter 2

With the passage of time, Cedar Terrace, where Columbia Organic Chemicals did its thing for 35 years, has changed. It is no longer countryside outside the city limits; gone are the days when you dumped your by-products in the lush blackberry thicket next to the main building. But then there was almost no by-product, and the main building was consumed by fire in 1958, over 20 years ago; wastes are hauled away. The cedar trees which gave the area its name disappeared 25 years ago, and the street to the plant is now bordered by small look-alike houses with transient ownership.

When we moved here in 1944, the field was dominated by Jim Bolton's business, which was trucks and jeeps and ammunition carriers. There was a constant whine of diesels as he moved these from place to place, and brought in new stock and sold pieces to customers. He left 20 years ago. The Rothbergs gave up their warehouse on the other end of the field about the same time and it was taken over by the Gottliebs, who made jute bags, and then by B.C. Inabinet and his youthful Defender Chemical Company. B.C. was the largest man I have ever known and in the early days when his company sold industrial cleaners, it was rumored that he sometimes clinched sales by sitting on a reluctant customer.

The little red building in the center of the field housed Plowden Steel, which went bankrupt. It was purchased by Conray Fasteners, which waxed, to the delight of local investors, and then waned, bankrupting some of Columbia's outstanding citizens. Then it housed Joe Shway's Television Company, in which I was an investor (I had coached Joe in grammar school when he was six and I eight; my first consultancy), and it inexorably followed its predecessors in bankruptcy. It was taken over by my distant relatives, the Kahns, who stored building materials there. It is the original building on the field and looks as pretty as when I saw it first, 40 years ago.

Outside the fence of Columbia Organic Chemicals is the small, white building which I once owned, and lived in after I retired for almost a year. It had been occupied by relatives of Uncle Willie, whose brother owned most of Cedar Terrace, and these people with Uncle Willie's help, farmed the area which now includes the Cedar Terrace Shopping Center. Under the house lived Grayboy, a large German shepherd who guarded the area and the retired executive, threatening but never biting. He developed super intelligence and now lives with my old friend, Donald Auld, in a small building back of the plant and helps Donald with housework and driving. He cleans plates and guards the car. Don tells me that Grayboy has learned to talk but I do not press the point. He and Don patrol the plant property at night, armed to the teeth. Periodically they nab a visitor bent on crime or a snake so unfortunate as to be in the wrong place at the wrong time. There is usually gunfire and savage noises -- mostly from Grayboy. Nocturnal visits have grown rare.

The little house is probably far older than the plant. It may be older than I. Once when I was sitting at my desk, several years after buying it, three old people came in and I recognized them as former tenants, friends of Uncle Willie, who tended the houses on the terrace for his brother. They asked if they could look around, and were touched that so much of the old house, including an ancient bathtub, was still there. It had been a farm house when this section was open country and was left as terminal moraine when farmers, birds, rabbits and deer moved East to escape the suffocation of advancing civilization.

Uncle Willie kept ducks in those early days, large white ones, small mallards, lovely birds which he said were better than a burglar alarm. I had just moved into the plant, which was brand new, and would sit on the steps leading to the office and watch the ducks, and pray to God to send customers and save me from my creditors. The ducks quacked happily. Just watching them made me feel better.

One evening a pack of wild dogs came across the field and decimated the flock, leaving torn and bloody bodies, feathers everywhere. Uncle Willie, shotgun in hand, searched for the pack, vowing terrible vengeance. The leader of this band of outlaws was an old girl dog, blind and no doubt turned morose by ailments and loneliness, wreaking her wrath on the defenseless. I gathered the corpses.

Memory takes me on a journey to a time before my oldest daughter, Eleanor, was born, back before we moved to the city, before Tommy, Ervie Lee, Sonny and Leon joined the staff. It was 1949, and Max Revelise was the plant salesman. I was the purchasing agent, packing room superintendant, chemist and chemical staff. My stepfather, Jules Seideman, was alive; my mother, still a young woman. Clive and I had been married two years. We lived at Lake Murray in a 30 ft. by 30 ft. unheated, unlighted house, which had neither running water nor a bathroom. I purchased it when I was an instructor in the U.S. Naval Flight Preparatory School (V-5) and used it as a place to keep my sailboat. Now, when we were terribly poor, it was our home. I worked at the plant during the day and spent the evenings at the little house at Lake Murray.

Horace Stokes and I cleaned duck. He was my neighbor, an unemployed carpenter, living with his two dogs in an unheated shack. We boiled them one by one. Clive refused to look at the cadavers, much less clean them. It was winter, so the little bodies hung outside on the clothesline like so many washed shirts, stayed frozen and did not go bad. One can eat duck indefinitely -- if one has nothing else to eat. We had nothing else to eat.

Stokes was an alcoholic and drank his meals. When he wanted something more substantial, he would join us for dinner. He brought his own beverage in fruit jars which he offered to share - but we did not drink. He did not like duck. He ate it with reluctance because there was nothing else; after three days he proclaimed he would rather die than eat duck again. For a week he lived on okra. Okra and whiskey. Okra as a main course is rare, even for confirmed okra eaters. It is slimey. Clive and I ate duck.

Stokes was a great story teller. At night, with the room lit by what people now call a hurricane lamp, he would entertain with stories of his life and loves. After a while, we knew them by heart. Thirty years later, I recall the stories with nostalgia.

He was astonished when the President of the United States sent him a message in the early forties. It had as salutation: "Greetings," but there was no cheer in the message. It was simply a

summons for Stokes to show up on a particular day at his draft board. You could be drunk or sober. You could be a practicing homosexual with more love for fighters than fighting. You could be a victim of enuresis. You could be wretchedly thin or preposterously fat. Indeed, you could be like Stokes, a veteran of World War I, overaged, a confirmed rummy and former whiskey still operator. The "greeting" came, and by God you gave heed. Stokes, 45 years old, bleary-eyed, snotty, unshaven, and clad in torn, filthy overalls, was fetched to the induction center, examined and accepted. With unusual dispatch, he was processed, hurried through basic training, and assigned to a special unit in Saipan doing construction work, i.e., building outhouses, a job for which the Army needed master carpenters! Now Stokes was a talking master carpenter, which is to say he would interrupt putting up scaffolding or "German siding" to discuss his views on the Army, women, or gestalt psychology, with anyone who would care to listen. This included young Army lieutenants, far from home, scared and lonely. They found it exciting to supervise an ancient warrior like Horace E. Stokes.

The far off sound of bullets did not affect the flow of Stokes' rhetoric. He fascinated these young officers with stories from his colorful youth. Stokes, even middle aged, was handsome and charming. In the course of our own friendship, I counted 126 women who had given him their all -- some on a regular basis. During one of his soliloquies, he told the lieutenants about his unique ability to construct and operate whiskey stills.

Now the island of Saipan had only recently been retaken from the Japanese, and there were still former residents lingering in forests and caves, whooping down from time to time in banzai charges that terrified our men, or quietly slipping into the chow lines to queue up for food. This was unnerving to professional soldiers and the battle hardened; for recruits and the young officers, it was terrifying. While our Marines were gobbling up new territory, Stokes and his fellows were supposed to secure what had been taken, mop up the surviving enemy, and construct supply depots, barracks and outhouses.

The strange surroundings and uncooperative behavior of the remaining Japanese produced tensions for which whiskey is a well known and approved antidote. Beer was brought in by plane and rationed to the men, but there was never enough. In between flushing Japanese holed up in the outback, unloading supplies intended for island-by-island invasion and building a wooden city, the soldiers longed for liquid entertainment. Stokes was approached to

construct a still for which they had plenty of construction material. He was nothing loath and also agreed to operate the still, provided they could get him the ingredients for mash.

A deal was made with pilots of the large cargo-carrying planes. They brought in apple sauce and plums. Planeloads. With the aid of 55 gallon drums and radiators from destroyed Jeeps, Stokes and Benny, his assistant, constructed a working still. It was in a remote section of outback, cleared of residual Japanese with rifles and napalm. After a fermentation period of two weeks, initiated with yeast flown in from the states plus goat dung from the locality (excellent as a "starter"), they ran off their first product and delivered several drums of excellent home brew. The fame of their activity spread, and soon not only Saipan but Tinian and other islands in the Mariannas received shipments of Stokes' product. Stokes, exempt from carpenter work, and Benny, grown fat from testing the forerun, led lazy lives, their every need supplied.

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"Hell, I used to have nurses fly in and make deals," Stokes addressed the guttering flame of the hurricane lamp.

He contemplated his half-filled glass. It was ten years after the end of the war and his mind was back in Saipan at the time of prosperity. Outside there was the far off cry of hounds closing in on something and the muted voices of the hunters. Through the open window the moon shone pallid and cold. Clive was asleep.

"What happened, Stokes?" I asked.

He picked up the story. It seems an inspection party visited the area and, examining the drums of mash, found not only dead things that had been overcome by fumes and fallen into the sudsy broth, but, alas, in one drum an AWOL soldier. He had no doubt flavored countless drums of spirits. The officer in charge of the inspection party was extremely upset -- and vocal. Stokes, who has a bad temper, said things, too. The upshot was bodily removal of Stokes, who was placed in the stockade. The officer, according.to Stokes, was a Baptist and teetotaler, devoid of humor and friends. When he left Saipan, Stokes was released and production reinstated.

"What happened to Benny?" I asked.

Stokes was slow to reply. He struggled for words. His voice shook a little, he started several times to answer, choked up, then drank more of the corn whiskey from the glass he was holding.

"Benny got dysentery," he said in a voice so low and blurred

that it was hard to make out the words. "Probably from eating fruit. Spent all of his time in the john. He'd try to keep the fire going under the still, but he was awfully weak. I gave him raw whiskey, still warm from the receiver, but he got weaker and weaker and maybe that's why he couldn't fight back."

Stokes' head was sinking down on his chest. He, like the departed Benny, was getting weaker. He spilled whiskey on his blouse, his voice choked and he began to cry.

"What do you mean, he couldn't fight back?"

"Well, old Benny, he didn't come outta the john for one whole day and I hollered every now and then, but I was drinkin' and fell asleep. When I woke up, it was night and Benny, he warn't nowhere around.

"I went to the john..." There was a long, choking sigh from the narrator. "You know what? He was half way inside a snake! It was one of them pythons, and it had just about et Benny...just his legs and shoes a-quiverin' -- the rest of him up inside that reptile..."

The flame flickered. No doubt the shade of long dead Benny was sitting with us, ready to prompt his old friend, but Stokes was asleep, like Clive and the trees which now were silent against the moon.

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Stokes was helping me enlarge my house. I had purchased it when I taught V-5, from Mr. J. C. Huggins who no longer used it because he couldn't get gas coupons. I could get them from the kids. I paid him $500 and this included a nice lot with plenty of water front, a bamboo cane thicket and an outhouse. We had a laundry heater that burned scrap pine, and for ventilation we had God's fresh air and breezes off the water. When the outhouse tipped over after a visit from my portly relative, Mrs. Kahn, we used the woods back of the bamboo patch as our bathroom. There was no electricity, so I fetched water from Ballentine's and from Vonray Keith's spring. Two five gallon jerry cans provided a day's water. My BS in chemistry was of little help to its owner, so steeped in poverty.

Stokes, in charge of the renovation, worked for room, board and whiskey money. Because there were only three rooms in the little house and the back porch five feet by five, too small for the six-foot Stokes, he alternated between the couch in our living room, which he shared with our cat, and the ground outside, which was covered with pinestraw. Now Stokes was not a cat lover, and the

pinestraw contained redbugs (a small Southern monster which lurks in grass, climbs up legs and usually makes for areas that are normally covered, where it burrows in to the dismay of the host). His bottle was his saviour. It rendered him insensitive. Before joining us and before anyone could stop him, he shot his two dogs, Rosie and Beauty, part collies who loved Stokes drunk or sober.

"Jus' couldn't feed them," he told his horrified audience.

House construction and repair requires lumber and nails. We obtained our supplies by dismantling an old house in the woods, which had been abandoned before I was born. Because we could not afford new nails, Stokes straightened out bent ones.

I would catch my ride from the plant, arrive at Mr. Stallings' house which was very close to Ballentine's Landing, and walk the half mile to my place. I would find Stokes contemplating the house or the lake, lost in memory. I got out the tools, and we would start what was for me my second working day. It always lasted until dark. He would pause while driving a nail to recall some incident in his exciting past, usually sexual. He was a fascinating raconteur.

After two weeks we had a new porch and an adjoining bathroom. Then the two of us dug a trench to Vonray Keith's spring some 500 feet away. It went up and down hills, around trees and large boulders, through clay, limestone, and low thickets occupied by water moccasins and rattlesnakes. Fortunately, they were as afraid of us as we were of them. Stokes would curse softly when a blackberry vine raked his hide, or he tripped over a fallen limb, or stepped in a hole.

Our plumbing equipment was borrowed from old Mr. Millegan, who is undoubtedly in Paradise chatting with Stokes. Mr. Millegan had retired from plumbing and first tried to sell me the tools. After our work was completed, he took one look and offered them at reduced price.

Neither Stokes nor I were good at cutting and threading pipe. By this time the plant had purchased Charlie Stork's old Sunshine Laundry truck, and I used it to bring equipment and supplies. It was sturdy enough to carry soil pipe and terra cotta for the drainage lines. The truck had a defective tail pipe, so I accumulated a fair amount of carbon monoxide each day on my way to the lake. There I cut and threaded pipe under the instruction of my mentor. Later I put in soil lines and filled the trenches with porous boiler ash, nested in the terra cotta and put on a top layer of ash, or cinders as Stokes called it. Then I topped the trench with the same dirt I had shoveled out and tamped everything down with my feet.

Stokes was now doubly employed, for he had taken on the renovation of the house up the street for the "widow lady" who owned it. She was not a widow at all; she had never married and at 50 liked to relax at the lake from her business affairs. She visited on weekends with her mother. She led a busy life but must have longed for a protector and companion. Stokes was the proper age and had the necessary qualifications. He was, indeed, quite handsome with his gray hair, slim build, and lovely, disarming smile.

When we finished laying pipe and installing the drain fill; when we had flushed our commode for the first time, he took a leave of absence to help our neighbor. I gathered from hints that her libido had overcome virtue. For Stokes she was good meals, a comfortable place to stay, and a warm, appreciative audience. Her house nestled in the woods farther up the road. She and her mother would drive up weekends to bird watch, plant flowers, and repair screening. Now she had a man to cook for. The lights shone in their little house every night. It was smaller than ours and had no porch. Constructing a porch took most of Stokes' afternoon time, and he quit coming over to see us on evenings.

In those days men did not discuss their amorous activities. In my case, I was aided by paucity of experience. Stokes' need to discourse conquered any reluctance to brag. While we screened my front porch, he spun new tales.

In France,1917, a youthful Stokes and several companions, rushing madly to invest a reconquered town, had been greeted by an exuberant liberated populace of women and children. Their husbands were fighting, in German prison camps, or dead. Stokes and his friends were the first men they had seen other than Germans in a long time, and the townspeople were eager to show their appreciation.

Stokes and his group were bivouacked with a farm family. The husband had lost his life fighting Boche. The widow and her mother tended the farm and handled house chores. There was a young daughter Horace's age. The young men drew straws and Stokes got the grandmother. All retired early and Stokes described in detail what happened. We had been straightening nails. My nail lay unstraightened.

"Jesus!" I said, when he finished.

Stokes took another drink and continued to talk. It seems that his friends were transferred and Stokes was left with three generations to entertain. He left 1917 and brought me up to date.

"Now I am making love to *two* women, and neither knows I am

pleasuring the other."

I was thunderstruck. Stokes was having an affair with my neighbor and also her mother!

He continued, "The mother, she comes up early in the morning and lordy she puts up perling just like a man. When we get tired she says, "Now Horace you come in the house and I'll fix you a nice cup of elderberry tea."

"One thing leads to another, and, by God, she takes me off to bed and she is past 70! Then at 5:30, her daughter comes home and we eat supper and pack mama off to bed. Daughter asks me to tell her about the war, and I talk, she takes my hand in hers and starts stroking my palm and Godalmighty, Max, we go to her room, cut the radio up, and man-oh-
man!"

The listener, virtuous, shaken, attempted to straighten out a nail.

Chapter 3

It was Saturday night at Pop Jones' Landing, Ballentines. People drove in all sorts of cars. One of the Metts boys, who worked for Huckabee Transport, brought a big tandem axle truck. People came from all over: from White Rock, Chapin, Swansea, and Little Mountain. They brought their kinfolk, including some who were too old or too fat to square dance. There was a four man combo, led by Billy Metts and his bull fiddle. His cousin, C.F.R. Metts, played violin. I am not an enthusiast at square dancing, but in the fifties this was standard entertainment on weekends at Lake Murray and Pop's dances always drew a crowd.

Pop had come to the lake three years earlier with some money he had won in a lawsuit and some he had borrowed from friends. He took over O.D. Pollatty's old boathouse/restaurant which he modernized and put in a pool table and dance floor. He did a fair business in afternoons and the place jumped on weekends. We lived further up the cove and could walk or ride or row over.

The money crop was drinkers. They arrived thirsty and purchased beer up front; if they were known and trusted they could go back to Pop's private office which served as lounge for guests and for Pop's six cocker spaniels. In this private room one could purchase either store whiskey or moonshine. Pop, who consumed anything alcoholic was usually asleep on the couch. Old timers helped

themselves and stuffed money into his pockets. Clive and I bought Coca-Colas in the dance hall and attended square dances on Saturday nights.

Neither of us were dancers, and ballroom and square dancing have little in common. The crowd began to gather at dusk, and Billy would unlimber the bass fiddle and hit a few chords. Then his group would tune up and break into wild, unrestrained country music. Someone would call the figures, and an assortment of natives from as far away as Newberry would sway and shuffle through the prescribed patterns. The men's eyes were glazed with whiskey and the women's with excitement, for this was the social night of the week.

Pop did a brisk business in beer and sold pickled hard-boiled eggs and pickled sausages, equally malevolent in appearance. These came in gallon jars and were extracted with one's fingers. It may be noted that the fingers were not always clean.

There was general hilarity, and from time to time someone would slip back of the counter, visit the inner sanctum, and reappear red-faced and happy from illicit whiskey. There was a steady procession of guests flowing from the dance hall to the "two-holer" Pop maintained back of the premises. There was joking and "carrying on" between the occupants.

Pop was a perfect host. He knew all the customers by name, and most of them owed him money. The tables were rude, the chairs splayed, the floor uneven, and the electric light bulbs unshaded. No one cared. It was dirty, crowded and fun. There was a juke box for the afternoon crowd and intermissions, but Billy Metts and his men were the main show. Everyone was half drunk and happy.

Stokes, Doc. Morse, Clive and I sat on the front row, because Stokes liked to "spell" dancers and be as close as possible to the whiskey. Doc liked to sit close, because he was slightly deaf from all the explosions. He was a professional safe cracker, and did not care much for square dancing but liked to watch the crowds and from time to time chat with me about chemistry, which was important in his profession. Clive drummed her fingers on the table, keeping up with the music, content to be a spectator and rather glad that her husband did not dance.

From time to time one of the log busters from Chapin would lumber by with his date, barely keeping time with the music, hand-fighting playfully for access to her bosom. People danced, sweated and occasionally fainted from good spirit, too much beer or epilepsy. The wild, lupercalian atmosphere with the cadence of the dance continued. The crowd swirled around the fallen, and, in great good

humor, the couples would ring and twine, separate and reunite.

Moods are volatile, and sometimes there were fights. These were rare, mainly because the people knew each other, and there were enough women to go around. But with spirits high, accidents could happen. Normally this was limited to pushing and shoving, but if the men were really angry they would go outside and beat each other up, and have to be driven home by friends and relatives.

I watched a giant, Ab H., weighing at least 300 pounds, dance with his small, gray-haired lady friend, somehow managing to lower her head on his shoulder and be steered around the floor. He stumbled against Clive, and would have apologized in the next minute, but for some reason, Stokes arose and told him in Ballentine language to watch where he was going.

Now Stokes was tall and muscular, despite his age and the effects of strong drink and venery, but he was dwarfed by the logger. They exchanged insults. Stokes drew back his good right arm, and in one mighty swing, buried his fist in the jowls of the giant. Ab looked more surprised than injured. Quickly he raised one meat chopper fist, brought it down on the head of Stokes, and there was a thud which could be heard throughout the room. Stokes fell senseless. Doc sprang up like a second wrestler in a tag match. By this time, dancers and fiddlers had formed a ring and cheered on the combatants.

"Kill him, Ab."

"Hit him in the ---, Doc."

They circled each other warily. I noted Stokes was being doused with water in the area behind the band, and being checked for life by the local veterinarian. The two combatants continued moving carefully in a narrow orbit. Doc brandished what is called a "fid" or "billy," and every time Ab rushed, he side stepped and applied this smartly to Ab's head. There was a clinking sound, similar to that produced when metal strikes metal. Every time the giant rushed, he met the agile, dancing weapon. These taps slowed him down. Doc was everywhere, taunting, threatening and, again and again, applying the lethal club. The crowd was partisan and cheered the smaller man.

"Cold-cock him Doc."

"Give him what he gave Stokes."

Doc, smiling, would periodically wave to the crowd. Some of them were "carney," too. Ab was smiling, completely unhurt. Growing tired of the game, Doc threw the billy out the window, barely missing a spectator. He stuck out his hands, palm up. Ab picked him off his feet, hugging him fondly, then whirled him playfully around his head.

The flyer waved to the audience and called out

"Ain't he strong."

Everyone gathered around the recumbent Stokes, whose eyes were losing their glaze. In the excitement, Ab's sister, a large boned widow, urinated on my shoes. The music started again, Ab whirled his partner away and Doc cuddled the still groggy Stokes, giving him sips of raw whiskey, the universal antidote.

Dr. Morse was a chiropractor. It should be noted that this had been many years ago when Doc was a young man. At 60, he was an itinerant seller of aluminum siding. He traveled up and down South Carolina with a crew of men who did the actual installation. Doc did the selling. They provided a real service and the quality of the work was good but the prices charged were mind boggling and varied with the sales resistance and gullibility of the customer. Doc would visit some ignorant farmer, or recently bereaved widow and talk them into mortgaging their property to finance the renovation. He showed them lovely photographs of houses before and after treatment. He did not show photographs of impoverished owners gazing at Doc's work, wondering where they were going to get the money to pay for the improvements. His voice was so hypnotic, the pictures so impressive, that they assumed Doc would somehow make it right with the bank. Business flourished. Doc rented our house on Cypress Street. This is how I first met him.

We had moved from Lake Murray to this small house close to Valley Park. It belonged to C.W. Walker, Clive's father. I got Morse from Alcoholics Anonymous. We had moved to Ravenel Street and we advertised the duplex in the newspaper. Stokes was drying out and needed a place for himself and a friend. Doc was the friend. He promised to give me two weeks' rent and the security deposit "when his check came in." He moved in with his toothbrush and a small suitcase which rattled with the peculiar sound of glass hitting glass. This was in the period before the invention of the six-pack. After two weeks without pay, I went to investigate and saw him going into the back apartment followed by a troup of quiet, shuffling men, six in all; none of them with luggage. I feared for my rent; for wear and tear on the house. Doc told me a cab would bring their luggage -- and that the check was in the mail... The men, he said, were transients whom AA wanted to lodge for the night. He confided that he was retiring from chiropractic to save souls, and meanwhile kick his alcohol habit which had developed from the pressure of work. He told me that he was an executive in AA. Alcohol, unhappy marriage, unfair courts and business misunderstandings had reduced him to living in rented

quarters.

The men staying with him were "pigeons." He explained that "pigeons" were AA's freshly off the habit, paroled under supervision of a reformed drinker. He assured me that none of them would touch a drop, moreover they would effect such home repairs as might be necessary without cost to me. Late the next week, he gave me half the rent; by the end of the month he had paid the rest. I never received the security deposit, nor were any repairs made by the ever shifting group of "pigeons."

My neighbors complained of wild parties and ribaldry. On investigation I discovered several cases of empty beer bottles in the trash. I confronted Doc with this evidence and he admitted that some of the men weaned slowly. To prove this he took me into the house where a half-dozen euphoric transients offered me not only beer but whiskey as well, and marijuana, which in those days was called "reefers." Doc told me that this class was particularly sinful and hard to break of bad habits. He had a whiskey aroma. I feared for my neighbors and subsequent calls to the police. He promised faithfully to have my rent the next day, and try to control their weaknesses. He sent the men into the streets, some with crutches, some with a patch over an eye -- and with pencils and shoe laces. He had the rent ready when I called. Ultimately these men became aluminum siding salesmen. *Believe it or not, some of the men "reformed" and became* "solid citizens." Doc and the crew made so much money in the siding boom that they confined drinking to weekends, and met as a club long after Doc had "hit the road."

He came to me with the announcement that he had completely kicked the habit, that his class of pigeons had graduated and he would discontinue missionary work for AA. I had a rental for Cypress Street, so he moved in with Clive and me on Ravenel Street, where we had a spare room. He took his meals and sipped tea, read and listened to the radio. Stokes was a regular visitor for I was his bank. This gave him an opportunity to borrow without interest, and rarely did he pay back. I was currently making enough to support Clive and me, so that it was not missed. A healthy dog can stand a fair number of ticks. Stokes and Doc were great friends, and whether Stokes influenced Doc or Doc influenced Stokes, Doc backslid, and after visiting the honky-tonks, the two would stagger home late at night, providing gossip for the neighbors and a few complaints.

Naturally, they found a friend in my uncle, Max Revelise, who was in a non-drinking period. Max was in charge of sales at Columbia Organic Chemicals and had studied chemistry at the University of

South Carolina. He told them about the dangers of ethyl alcohol, both to the brain and to the liver. The two culprits squirmed in fear, each blaming the other for his deplorable condition. Then Max went on a real hell-raising drunk, caused by all this discussion of alcohol. The two pigeons, Stokes and Doc, now cold sober, lectured him severely. All three begged Clive never to let me drink. Doc told her I would be hard to control since I lacked his will power. While I listened to Doc, Max Revelise, with one eye pointing North and the other Southeast, sang a maudlin song.

Stokes was doing temporary work at the plant -- as repairman. In addition, he was building an office for mama and Jules Seiderman, my step-father, in the old building next to the Rothbergs which had been Gordon Manufacturing Company. This was a warehouse put up during the days following World War II, when the government encouraged young men to go into businesses, most of which failed. We planned to use this building for storage and production of industrial chemicals.

His job in the heat of the old warehouse left him exhausted by afternoon, and I suspect he drank a little too. We had to half carry him to the bus station. He stayed with us for several months and, when the job was finished, moved to a wild section of Columbia named Black Bottom. He lived there with a hairy woman with the unlikely name, Bill. Despite the hair, she was like mother and wife to Stokes, who now had that deplorable condition known as "DT's." For the support of their little family, Bill read palms and told fortunes. She grabbed my palm when I came to visit the derelict who was lying on a cot, staring up at an area he would likely never visit.

"Max," she said, "I see an old friend, down on his luck, who will likely ask you for a small loan."

Stokes moved, grinned weakly, and held out his hand.

Bill sold whiskey bottles and metal cans. When Stokes was finally admitted to the VA Hospital, she went with him, claiming to be his wife. They made the small red flowers sold on Veterans Day. When they were released (Bill was a veteran, too), they came to the plant. Bill read everyone's palm and borrowed from all. Periodically they visited me on Ravenel Street, and once, when I was not there, Stokes entered through a window and demolished my savings bank.

Then Stokes' wife in Florida inherited money and sent for him to join her in Okeechobee. He made a last visit, promised to send a check to pay all his debts and left my life. His last days, I am told, were cold sober. He accepted Jesus. He did not send the check.

Dr. Morse stayed on and on. I had discovered his secret by

accident. Periodically Clive and I would go to Lake Murray, visiting the little house where Stokes and I had done so much work. The purpose was to take my small sailboat, the *Dawn*, out for exercise.

On one occasion we could not open the padlock protecting the sail house. Doc picked it with a hairpin, and the combination lock which was a further protection by holding his ear close as he turned the knob, listening to the tumblers. I asked him where he had received his training, and his reply was "Leavenworth." Now Leavenworth was rest house for counterfeiters and bank thieves. I asked him what he had done to get into this exclusive establishment and he replied with a smile, "I was a bank executive taking care of deposits."

That night after supper, he told me the story of his life, advising that I should keep it confidential until he "shoved off" which would be soon. His alcoholism was cured, the heat was off in various places which took an interest in his whereabouts, and he had been studying my chemistry books. From now on he would dispense with crowbars, drills and wrenches. He would no longer work with nitroglycerine and TNT. From now on he planned to use Tetryl and Gelignite to blow up safes rather than the dangerous stuff he had used in the past.

He bade us goodbye and paid all he owed. Every month for years he sent me a box of cigars although I do not smoke. The parcels came from all sorts of out of the way places. Sometimes I would get an envelope containing a description of the Tetryl bandit who had struck again. Then we heard no more.

Since by now Doc would be past 95, I am sure he has joined Horace Stokes and Max Revelise -- and they are waiting for me -- somewhere. To paraphrase Clarence Darrow, "Whether it's heaven or hell you will have good friends in both places."

Chapter 4

In the early 1950's when I lived at Lake Murray, Ballentine's Landing was a popular place to store and launch boats. I had my sailboat, the *Dawn,* anchored in a safe part of the cove, close to my house. The rent for my mooring was $7.50 per month. This included transportation to and from the boat and caretaking by the man-of-all-jobs, Yank Quattlebaum.

Yank was a small, very strong black man of uncertain age and vast knowledge of boats. He was beloved by the clientele of Pop Jones; he was the right hand man of Warren Whitten, "the Dutchman," who ran the dock and water facilities. Pop handled the liquid and culinary needs of the guests. Warren housed and repaired their boats. In his large shop in West Columbia, the Dutchman built small boats and made parts for them such as rudders and tillers. He also fabricated Venetian Blinds and made furniture. He was deft with his hands. Many years ago he had constructed a huge vessel, an ark, which stayed afloat long enough to reach Ballentine's, where it subsided, permanently grounded. It became the living quarters for Mrs. Warren Whitten, from whom the Dutchman was at the time estranged.

This large, formidable woman had not met many Jewish people and asked me leading questions to establish if I were a devil. She had a lovely married daughter who periodically visited Ballentine's and stayed with her on the barge. In my late teens, this young lady produced day dreams on the part of the visiting "devil." She was not anti-semitic, just curious, and asked me in a low voice when her mother was out of the room, if Jews were like other people.

Yank had a fondness for the *Dawn* which he had tended in the days when she belonged to Major Nevil, a cavalry officer at Fort Jackson, and later when she was training ship for the Sea Scouts. Like the keeper of a horse, he was more attached to the boat than its owner, but we became good friends. He showed considerable skill in rescuing me and the boat from isolated coves, pulling us off sandbars, and after storms, dragging us back to anchorage, usually bereft of mast or rudder. He had a long, green rowboat with a 15 h.p. Johnson outboard engine which cranked on the first pull for Yank but no one else. Seeing Yank and the green boat, and listening to the drone of the engine are sweet in my memory.

Ballentine's Landing was on the extreme eastern shore of Lake Murray. It has not existed for years. If one continued past the buildings you reached a small bay in which we anchored our seascout ship, *The Highland Mary*, when I was real young. Facing west, about two miles from Ballentine's is Salem Point, which one reaches by boat, or by following Salem Church Road. My old sailing companion, Ulie Brooks Carter, has his house on the point and lives there with his wife, Helen, and his current large collie. I have shipwrecked in the sea scout cove, in and around Ballentine's and off Salem Point. Each time I was brought back by Yank, no matter how foul the weather.

The full force of the Nor'easter beat down the lake making

each sailing trip an adventure. When the wind freshened and the lake was covered with whitecaps, a little boat like *Dawn*, carrying too much sail (since she had no provision for reefing), leaned far over, or "heeled," as they say in nautical terms. The lake could get very rough, and I recall that the *Vixen*, one of our sea scout boats which had been sold to a local doctor, Bud Gay, never left anchorage after the day when she would not tack through the narrows, back to Ballentine's in a screeching wind.

The *Dawn* was spirit-rigged. I purchased her from Skipper George Sumner, who was acting as agent for the departed Major Nevil. The selling price was $200, which is equivalent to $1,000 today. She had canvas sails and was rather beamy. Once her old mains'l was hoisted and the jib raised she would dart out of the cove like a rabbit. She never shipped water, unless the seas were unusually rough. She normally sailed with a crew of two but often we would put four or five seascouts aboard, then she would ride low in the water, but still point well into the wind. *Dawn* had a flat bottom, which was lucky, for if the weather got really bad, one could raise her center board and slip her right into the shallows. A beautiful sight under sail, or at anchor with the shadow of her mast shimmering in the water, her movement about the buoy, flirtatious, I would stand off each time I rowed out to her, just to look at this fine old vessel. Once aboard, it took only a few minutes to raise her trapezoidal mains'l because it attached to rings on the mast. This is an ancient form of rigging, but *Dawn* was a very old boat. She had lost neither her looks nor her charm.

Warren Whitten, the "Dutchman," was a burly man weighing at least 200 pounds. He had been a famous wrestler, and always won his fights. It was a legend that on a bet he wrested a bear — and fought a draw. I once objected to the price he charged for replacing my rudder, and he advanced on me with his arms outstretched. I backed up fast. He contented himself with a threat to wrap the rudder around my neck. To make his point, he took a perfectly good oar, costing $4 in 1937, and broke it across his knee. He then broke each piece in half. The oar cost as much as the rudder. Over a period of years, we became very good friends as he methodically replaced various parts of the *Dawn* when collisions or dry rot made necessary.

Shortly before he developed cancer, he spent a tremendous amount of money modernizing the landing, putting in storage facilities, and building new docks. He added a dance hall, sending Pop Jones into an agony of depression. The entire structure rested on a thousand 55-gallon drums. This was an era before plastics

(polystyrene is far superior but had not been invented). His old buddy, B. M. Edwards, who was president of one of the local banks, and another, S. C. McMeekin, who was head of the South Carolina Electric and Gas Co. (which owned Lake Murray), moved their luxury yachts into the new slips. George Sumner brought his new *Soling* and an *E. Scow.* The surroundings were posh and and as Pop Jones feared, part of the drinkers moved to the dockside bar.

"He'll put me out of business," groaned the neighbor on the hill, surveying apprehensively the stream of cars and with anger the encroachment on his own parking area; visitors who walked down the hill, by-passing the pool table, beer, and pickled eggs and pigsfeet of the old man and his six dogs. Only the "faithful" still came for beer and refreshments (on credit), and to park back of the outhouse. However, so many people visited on weekends that Pop received the overflow, the juke box ran steadily, and the beer truck came every day, rather than right before the weekend. Ballentine's Landing was no longer just a place to store boats. In the midst of prosperity, Warren took a trip North, and when he came back several weeks later he had lost weight and looked very scared.

Not only had he received the awful news that he had cancer of the throat, but in addition, had been given two treatments with radioactive cobalt, the newest weapon in the hands of the surgeons. The treatment was a mop up after surgery, a good method of handling places a scalpel would not reach. They had not perfected their techniques nor established maximum doses. Warren was an early victim.

In the process of treatment with x-rays or cobalt, some healthy tissue is destroyed, and I am told that the pain is terrible. Warren sat ashen in a rocking chair, a smaller man, his blue eyes terrified. He took little pleasure in the crowds buying beer and cokes, and leasing choice berths in the super-marina. He was not fighting a man, nor a bear; his adversary was within his own body, an insidious, merciless invader, capable of winning. I am a chemist, not a doctor, but when one is thrown into rough water he will not be choosy about the life preservers and will grab anything which can keep him afloat. Warren questioned me about cancer of the throat. I discussed cancers, radioactivity and radioactive cobalt in particular, aftereffect soreness and depression as if I were an authority. He believed everything and was comforted. I came to the landing every day. He had me play the record again and again.

The ability to be a convincing liar is easy for any successful salesman. I explained that the terrible aching was due to the efforts of

the surgeon to make sure no neoplasia escaped (Warren liked big words). I told him that cobalt is a miracle drug and those wealthy enough to afford it almost always recovered. Warren beamed with happiness, telling me what I already knew, that he had spent his life working long hours and frugally saved his money. Now he could purchase health. Surely this was God's design. Like most religious people, he believed God was watching and had his best interests at heart. I assured him he looked better; he said he felt better. Kindness is inexpensive and lying is sometimes excusable.

I spent many hours with Warren as he grew smaller, as he fought to endure the unrelenting pain. He became more and more frightened and dreaded his visits to the Baptist Hospital, which contined the cobalt treatment. I assured him to the end that he was winning. He was reduced to a shrunken, agonized body and two desperate eyes. This is the mortification of the flesh. He died in howling agony, even as the marina like a ship without a skipper had begun to die.

Let me contrast the death of Warren Whitten, the "Dutchman" with that of my dear friend and physician, Dr. Hopkins. He had been our family physician for years although he was a bone specialist. I was fetched to his office at 15 because I had not grown. He examined me and predicted that I would be at least as large as himself. He was 5'2". I was overjoyed. He died of bone cancer before I reached my full 5'7". When he learned he had cancer, he accepted the fact, refused chemotherapy and died without fear. So much has been learned since then, and developing cancer is no longer a death sentence. New drugs fight its advance and relieve the pain. These men had the misfortune of living in the wrong era.

The dance hall was never used. People moved their boats to the newly-built Wells Marina. Soon most of the slips were empty. Yank's main job consisted of moving boats from Ballentine's to Wells, two coves away. The rot of the body starts with the limbs. Close friends of the Dutchman, embarrassedly told Jimmy, his son, that they were moving. Yank grumbled, moved their boats, pumped out those which remained, repaired the docks and replaced leaking drums. He was loyal and very moved by the loss of his friend. The enormous mausoleum toppled under a heavy load of snow and ice in the unusually cold winter which followed Warren's death. Most of the remaining boats, owned by friends of Warren and left out of friendship, were sunk or damaged. There was no insurance. No one sued. The drums broke loose that spring and floated up the lake. Wooden structure and metal sheeting fell into the water. The remains

of Warren's marina was an eyesore. Yank went to Wells.

Pop had the landing all to himself, but by then the crowds had moved away. People did not square dance. The beer drinkers found livelier spots. In the last year of his life he married a petite, lovely lady in her sixties and came to work for Columbia Organic Chemicals. We put him in the catalog room. He would peer at me kindly, over his glasses, and tell me I was putting on weight. They lived at the lake with the old dogs and every day he would drive home, and be back early in the morning when I came to work. They made a trip to see her folks in Alabama (amazingly, still alive), then he left to join Max Revelise, Stokes, Doc and Warren Whitten, in "The unnumerable caravan, which moves to that mysterious realm, where each shall take his chamber in the silent halls of death." [Thanatopsis by W.C. Bryant].

Even before we had the total fire in 1958, I had given the *Dawn* to Ralph Pelley, who had the company, Caribou Chemicals. *Dawn* needed a lot of work. She survived many shipwrecks and many owners. Ralph promised to give her tender care. He drove from Columbus with a trailer. We were erecting trusses for the new buildings virtually in ashes of the conflagration. He watched us working in the freezing cold, hitched up the trailer with *Dawn* securely strapped on, and headed for Ohio. I was shaken by the loss of my chemical plant and only later realized I had lost an old friend, a bit of myself. I had another sailboat, the *Star* , a bigger boat, still a little ahead of the dry rot quietly eating her planking. I did not need two sailboats and was trying desperately to save my business.

Years later I drove up to Ballentine's with Margie Hair, whose son, Bill Hair, helped me sail the *Soling*. We visited Ulie Brooks Carter and then I decided to drive over to see if there was anything left after 30 years. There is not one spot to indicate where Warren had his marina, where the old barge sheltered his growling wife, where Pop served the thirsty.

"They say the lion and the Jackal keep
The court where Jamshyd reveled and drank deep.
And Bahram, mighty hunter? the wild ass
Neighs o'er his head, but cannot break his sleep."
[Rubiyat of Omar Khayyam]

They are gone. Warren, Mrs. Whitten, Pop, Yank, the *Dawn.* "Oh lost and by the wind forgotten." And I am old, and my eyes are wet with nostalgia. The serene blue waters of Lake Murray roll without

care, and in the cerulean sky marestails dance, chasing each other, *oblivious to me and my memories.*

Chapter 5

I met Ulie (for Ulysses) Brooks Carter in the spring of 1948. Walking down to our makeshift dock to see whether the *Star* had sunk during the night (the dry rot was winning, and my boat leaked), I saw a large new sailboat in the cove. A black-haired man was sitting yoga-fashion on the dock, holding what sailors call a palm, which permits you to sew canvas. He was repairing a sail. I rowed over and he looked up from his work and, with a smile, invited me to come aboard. The closer one got to the *Damfino,* for that was her name, the bigger she looked. She had a galley, lots of deck and freeboard, and everything about her was gleaming new.

"Built her myself," Ulie said.

He had been a destroyer captain in the recent war, and his ship had been hit by a kamikaze, one of the Japanese suicide airplanes. He was a little taller than I, with blue eyes. Ulie was handsome. He knew a great deal more about sailboats than I and was more than happy to teach. From that day on, we sailed *Damfino.* The *Star,* left moored at the dock, gradually rotted away. One evening Harold Angel and I burned boat and dock. Wooden boats require constant attention and on inland lakes pick up dry rot, which inevitably destroys them.

Damfino was wood, too, one of the last wooden ships built in this area. One could sleep aboard, for there were bunks, but you risked galloping consumption because *Damfino* was always wet. Her sails were so large that they had to be winched aloft. Her mast was a heavy wooden spar, heavily braced and securely stepped. She had an outrig for an engine, always useful when docking or anchoring in strong winds; especially welcome when the wind dies and leaves you stranded up the lake. She was 28 feet long, sloop rigged (which means she carried a mains'l and a jib), and she had a bowsprit and center board. This was cranked up and down by a winch. One could single-hand her, which is nautical terminology for sailing a vessel by yourself, but this required you to often be in two places at once, as for example, when you had to raise the center board and lower the sails. I asked Ulie why he had given her such a funny name and his answer "Damfino," took care of the question. She was lovely, sleek and stable. Stability was achieved by placing steel bars on specially

designed racks in the bottom of the boat. This lowered her center of gravity and made it almost impossible to turn her over ... almost. Let it be said that any vessel sailed by a crew consisting of Doc Morse, Luther Byron Jones, and M. G. Gergel had to be stable.

We headed out of Ballentine's under a full wind coming from the southwest, which always blows hard. It has the entire length of the lake to develop force. At the helm was Doc Morse who had never been on a sailboat before but was enjoying it immensely. He was normally pink cheeked, and on this day his cheeks were red. So was his nose, but for a different reason. This was his last weekend with us, for he was leaving for the north to jeopardize the safes of a more prosperous region. He bellowed instructions to his crew; Luke Jones clad in a mackinaw and "sou'wester," M. G. Gergel wearing three shirts and two pairs of trousers. It was bone chilling cold.

We picked up speed as we rounded the point where Ulie Carter now lives and hit the main body of the lake. *Damfino* heeled smartly, and there was a clatter of loose gear hitting the low side. We zipped past two frozen fishermen, buried in coveralls, too chilled to wave. The sky was glorious with a gay sun and light puffs of cumulus. The water was the deep green of winter, which would turn brown in the spring when the bottom churns up. We sailed to the old sea scout base and saw George Sumner's new *Soling* he had purchased in Norway. It was straining at the buoy in choppy water. I would own it 30 years later. We sailed to Wells marina and waved to Yank, who now worked there.

Damfino was practically sailing herself. Doc barely touched the tiller. Luke, who was handling the jib, lashed the sheets down and kept his hands in his pockets. His breath was a small spurt of cloud in the crisp morning air. I was an all-weather sailor that winter and took her out even when there was ice on the deck. Ulie sold her to me for a trifle and bought a "Lightning."

It took three men to properly sail the *Damfino*, but you could put a dozen people aboard. She carried the extra weight with nonchalance. I sailed this lovely boat for two wonderful years, and then, on a quiet day with only moderate wind, Luke and I with some friends were sailing past Salem Point which has shallow spots and sharp rocks, and ran over a stump. It was early spring and at this season the waters of Lake Murray are low. There was a grinding noise, the bottom opened and we were "holed," and filled with water. The boat was close to shore, so we were able to drag her into shallow water. Fortunately the next day was Saturday and I was able to get Harold Angel, a specialist in boat repairs, to come put in a temporary

patch. This permitted us to motor the boat to Ballentine's.

Now the problem with wooden boats, especially those with pine planking or "strakes," as nautical people call them, is a tendency to dry rot and waterlog. This makes them vulnerable and shortens their life. The rip we had suffered was the "tip of the iceberg," for the illness was grave. Ulie, who had already replaced the mast, after I had gybed in a storm, shook his head over this new disaster.

I was sitting at my desk at Columbia Organic Chemicals reading my mail and wondering how I could find time to answer all the letters when a telephone call came from a sergeant at Fort Jackson. He introduced himself and told me that he had learned that I had a large sailboat. Sailing was his hobby. Actually I had two sailboats, both of which were afflicted with dry rot and a motorboat whose engine would not crank. He offered to look them over and perhaps buy the larger one. We met for lunch. He looked like the posters which recruit men into the armed forces. He was a drill sergeant.

It was his job to turn recruits into fighting men. He was a Boer from South Africa and confided in me that he was actually not a U.S. citizen. He had chosen the U.S. Army rather than the French Foreign Legion because the pay was better. Men like this have glamour — and are usually murderers. He was cold blooded but interesting.

I took him with me to Lake Murray where he liked *Damfino*. He was sure he could stop the spread of the rot. Finding that one could sleep aboard he made Lake Murray a second home although he had a perfectly good one on the Post with a wife and children. At Lake Murray he was very popular with the women and he destroyed several homes and played havoc with many hearts. He was callous about the broken hearted and forbade them to come to the dock where he was repairing our boat. I had the feeling that his friendship was a matter of convenience.

He took me to Fort Jackson to watch him train a company. The men were terrified, which he enjoyed. He confided that only two weeks ago one chap had castrated himself to get out of the military. An order brought results "on the double" whether it was to hold oneself more erect, or to fetch a beer for the guest. I found myself liking him less and less, but he was a grand sailor who knew boats. Together we raced Ulie's *Lightning* in the regatta, and came closer to first than I had ever come before. He offered to buy *Damfino* and when we reached a price he gave me the down payment in cash, promising to pay the balance the following month. This he did, as they say, to the penny.

He was aloof and uncaring, but to me he was respectful if not

friendly. I was happy to have it that way, and avoided Ballentine's, where he was working on the sailboat. One afternoon I went up to the lake to take the *Star* for a sail. I noticed my motor boat, which had recently been repaired, was not there. The chain was missing, too. With the aid of Harold Gibson's Chriscraft we cruised the coves and found her at the end of one of them, full of water. We bailed her out and took her home. There were two keys and I had one. I called the post and asked to speak with the sergeant. I asked why he had taken the boat without permission and left her in bad condition miles away from the cove. It took 50 minutes for a very angry drill sergeant to make it to Sharpes Landing, where I had my house. He faced me as if I were one of the recruits.

"Let us suppose," he said, "I took your boat, and let us suppose that I thought you were a friend of mine and I didn't feel I needed to ask your permission. Let's suppose that I had planned to go up to the lake this afternoon and get your damned boat and bring it back. Let us suppose that I don't like you, that you have insulted me, and as a result I knock the hell out of you."

I am normally inclined to find a large defender rather than depend on my own abilities. However, a boat owner whose boat has been sullied, like a dog whose yard has been invaded, is ready to fight no matter how large the opponent, although prudently he may not fight with the adversary's weapons.

"You are on my property, and have taken my boat without permission. You have threatened me, I am twice your age and half your size. I promise you one thing: if you lay a hand on me I shall report you to CID. If I am physically unable to, you will be reported by Mr. Gibson, who is listening. He likes you about as much as I do and if you do not leave this property, I shall summon the sheriff who specializes in men like you, and will be interested to know how you are in U.S. uniform when you are not a citizen."

Harold waved and called, "Having any trouble, Max?"

My adversary smiled and stuck out his hand.

"Lost my temper," he said.

On occasions when I would see him again he waved as if nothing had happened. When a chemical reaction goes bad, it's best to dump out what is in the pot and start over; with friendships that go bad similar philosophy applies. He moved *Damfino* out of the state, and out of my life.

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I am a veteran at wrecking boats, abandoning them to dry rot, or giving them to friends. My first boat, the *Pierre Loti* was stolen. The next boat, *Cli-Max* (from Clive and Max) was sold to a friend for a token, which he never paid. *The Jolly Roger* floated out of the seascout cove, or was stolen. The *Star* died of dry rot and was burned by my friends, V. C. Dibble III and Willie Auld. You know about the *Damfino*.

I had a partner in the *Star*, Barnard Moses. Barnard, after graduating from the University of South Carolina, left Columbia and went to New York City to study at the Stanislavsky School of Acting. He changed his name to Andy Bernard. He and I had been great sailing companions and went out in all weather. Often in late afternoons when we had finished classes at college we would go to the lake and sail the *Dawn*. When Hunter Gibbs put the *Star* up for sale we bought it together. He graduated from the University of South Carolina and before he went north, took a job at WCOS as announcer.His huge, beaklike nose made a great sound box, giving resonance to the happenings of the day, extolling deodorants, diaper services and why one should smoke Chesterfields. Andy looked like the grim Indian on the early 5¢ pieces.

Lorenz Kronrad, the uncle of Helen and Toby Kronrad, who were my companions when I was six years old, sailed with us. He was a plastic surgeon and took a fascinated interest in Andy's nose. He arranged to reshape it. Afterwards not only the nose but Andy himself looked smaller. He was handsome and his voice was pleasant but not spectacular. In the pre-operation days neither of us were very popular with coeds, for his nose was too long and my body too short. This gave us plenty of time to explore islands at Lake Murray.

I was dating a girl named Edith, a lovely brunette who worked at one of the record stores. She brought her friend Elizabeth as a "blind" date for Andy. They chatted privately. We rigged the boat, and they ceased their conversation long enough to get in. We tried to catch their attention, but they had lots to discuss. The sun lowered and the first stars came out. We were sailing past Dug's Island and the wind was fresh.

"There's Dugs Island," I said, and Andy nodded.

They were not listening. They sat in the bow holding hands and talking about classes and their plans. It was uncomfortable. We sailed back to Ballentine's, took down the sails, and rowed to shore. I cooked the steaks and Andy play acted, trying to hammer a tack with his fist. He and I laughed; they smiled. They were not very hungry. Andy and I ate steak. Tension was relieved by the appearance of J.

Droolington Blackwater, a hound who would eat anything. We fed him two steaks. They continued their conversation on the way home. Andy and I discussed Thermodynamics, which was giving us a hard time. We dropped them off at Edith's house and I took Andy home with steak resting heavy in my stomach.

After that, with no girl friend and Andy away in New York, I became a lonely, fearless sailor, ready to go out on Lake Murray in any weather. This was a good time to catch up on my reading and being a scientist and misanthrope, I frequented the Richland County Public Library getting out books on sailing. A tall, stunning girl with wavy brown hair was checking out a book.

"Are you Max Gergel?" she said, smiling. She told me that she worked at the ***Columbia Record*** and had heard from her boss, Jake Penland, that I sailed. Her hobby was sailing. "Do you have a sailboat?"

I told her that I did.

"Do you go sailing by yourself?"

I told her that there were not too many girls I knew who sailed. "Yes, I go by myself."

She gave me a smile and said, "Not any more."

I told her I was planning to sail that very afternoon. I had stopped by the library to get a book to take along, and if she wanted to go, I would be happy to take her.

"Splendid!" She took my hand and said, "I'm Tina Cannon. I am the assistant sports editor."

She was five-foot-ten inches tall. Had she stood erect in the harbor of Alexandria, vessels would have dipped their colors. She was beautiful. In five minutes my life changed; six weeks being a hermit had ended. I looked around the library and observed with satisfaction that people were looking.

She held out her hand. "Ready?"

Speechless, I walked her to the family car and we drove to Ballentine's.

From about 2:30, when Yank motored us to the *Star*, until about 6:30, when we returned to the dock, I luxuriated in the company of a lovely, intelligent, charming girl who knew sailboats and sailing. She helped rig, handled the tiller, and told me what a wonderful boat the *Star* was and how fortunate she was to find me before any of the other girls at the newspaper who liked sailing. She chatted about the newspaper work, and I listened with awe, not of her intelligence, but of her size. Tina was very, very tall. It was nice to sit in the stern, gently guiding the tiller, and look and listen. The prevailing

nor'easter was cold and steady. *Star* enjoyed it as much as the sailors. Deftly, Tina backwinded the jib to make a tack, and guided the boat through a shallow channel, avoiding the rocks. She seemed happy and excited, her hair was blown out orange and luxuriant. We sailed back to the landing, using the first stars and outline of Whitten's boathouse as markers. The small bit of red was Yank, smoking a cigarette and waiting to take us to shore.

We walked back to the car. She was barefoot, despite the cold. If I strained upward she was only two inches taller. She held my hand all the way back to Columbia.

She lived on Green Street, and at the door said, "How about tomorrow?"

Stunned by good fortune, I trudged back to the car. We sailed the next day and the next, then the demands of thermodynamics and physical chemistry competed, for Chemistry is a jealous mistress. When I called her for a date Saturday, it was too late, but she promised to join me Sunday. She said, "Go up to the lake and wait. I'll drive my car." When I got to the lake, she was waiting on the dock.

There were many sailing afternoons. We would sit close and she did most of the talking. Sometimes she would put an arm around me, but we did not kiss. I was the solitary soldier in Carson McCullars' "Reflections in a Golden Eye." She would laugh and say, "Why are you so quiet, Maxie?" and give me her hand.

Neither her laughter nor my happiness made me reach over and take this beautiful Diana in my arms. I was bashful. She asked me to take her to a sorority dance. I was horrified, for not only did I dance poorly, but she was so tall!

I drove to her apartment on Green Street, preparing to flee as I watched an immense, well dressed young man waiting outside the door. Obviously, she had mixed up her dates. Tina came out with another girl and told me we were double-dating with her room mate. The other girl was tall. Tina was barefooted. "I dance better that way."

This was the only time I took her out in the evening. There is a limit to the number of places one can take a lovely woman who is barefoot. Tina, wearing heels, was almost six foot.

We spent several afternoons each week sailing. During a particularly bad squall I was gazing as usual at Tina, who was watching the large black clouds. Cumulo-nimbus are dangerous for flying because they have up-drafts; for sailors, winds of great strength can develop. Back of the wind is blinding rain. Tina had the tiller and I was handling the jib and main sheet. She caught my eye and smiled. I noticed that one button of her blouse was unfastened, revealing her

breast. She was not wearing a bra.

She followed my eye and laughed, saying, "Maxie, sail the boat!"

The wind came up fast and we gybed. This is the very worst thing that can happen, because in heavy winds a gybe will break the mast. The boom whipped over to the opposite side, narrowing missing my head. There was a popping, screeching sound as the shrouds, the standing rigging supporting the mast, gave way. Down came the mast, narrowly missing her head. It was torn from its base in two jagged sections, which could have ripped her in two. She said, "that was close," and we pitched in to clean up the mess. We brought in the main, which was floating in the water, disconnected it from the boom and mast. We cut loose the mast and lashed it to the side of the boat. Then we jury-rigged the jib to the mast stump to which I had lashed the boom. As there was plenty of wind, we were able to sail after a fashion into one of the small coves on the north shore of the lake. There was no anchorage so we beached the boat, tied her securely, and walked to a farmhouse half a mile from the water. The people were sympathetic, gave us hot coffee and then drove us to Ballentine's. Safely back in the car, Tina gave me a kiss. It was the second and last time she ever kissed me.

I started dating Clive. When the engagement was announced, Tina telephoned and told me she would miss our sails, which had continued after I got a new mast.

I never saw her again. Years later, I spent an evening at the little house in Ballentine's now used as a summer retreat, a place to keep the sailboat and the paraphernalia of sailing. With me were friends from the fire department, whom I knew professionally for they rescued us when the chemicals misbehaved. We had the shades pulled down and were showing movies. Slouched on the couch next to me was Jake Penland, still sports editor of the ***Columbia Record***. He was feeling no pain.

The projectionist was running the film backwards, producing startling effects, and there was an appreciative, highly vocal audience. Jake was withdrawn, staring into his glass which he turned slowly. He looked at me.

"Max, you once cost me $100."

I asked him why. He did not answer at once. He was taking a trip backward in memory.

"Do you remember Tina?"

I told him that I remembered her well, had dated her ten years earlier. I told him how timid I was with her, because she was so tall and

lovely.

"Did you know she liked you?"

I told him I was sure she did and I liked her, too.

"She really liked you. We had a pool at the newspaper, which we called the 'Max will ask - Max won't ask pool.' We said you would, she said you wouldn't and she covered all the bets."

There had been something so wonderful and free about our friendship, something wholesome and eternal. I had never thought of Tina as a sweetheart; she was a pal! However, I felt happy to know that my old sea-mate had liked the skipper!

During the next 30 or so years, I owned in succession a Penguin sailboat, which we kept at Lake Elizabeth. (It deposited me fully clothed into the drink. My old friend and excellent sailor, V. C. Dibble III, took her out and suffered the same fate). Then I bought a "Y-Flier" and then at various times a Snipe, a Sharpie, a Lightning and a Catamaran. I bought Sumner's boat, the *Soling*, and finally a 30 foot Helms, the *Carolina*, which I sailed to Jamaica. I changed wives three times and sailboats six, averaging two boats per wife.

Marriage and divorce did not dent my love for women; when a boat died I loved its successor.

After the foundering of my second marriage, I went to live with my aunt, Mary Revelise, and sold my little house at Ballentines to one of the Wilkes kids and his wife; they had supplied us with water. The former owner of their house was the carpenter Vonray Keith, who took his trade to heaven. The Wilkes sold the house to some smart people who wanted the land. They lifted the house on a truck, along with the additions which Stokes and I had added years before, and took it God knows where. I never go there any more. For years I was homeless and boat-free.

Chapter 6

I was married to Clive when we sold the house at Ballentine's. We decided to find a large lot at Lake Murray and build a comfortable summer home. It had to be on the East shore of Lake Murray, for that would make us close to Columbia. After many weeks of searching we picked Sharpe's Landing, where there was a ten-acre section priced cheap. It had been cut over for timber. Twenty years ago, one bought Lake Murray property by the acre, not by the feet of lake front. Then I hired Luke to build my new home.

Luther Byron Jones, my crew on many sailing expeditions,

was an accomplished plumber, carpenter and inventor. He was brave, physically powerful, and a delightful conversationalist. He had been an orderly at the South Carolina State Hospital several years before we met, and his job consisted of washing and tidying up maniacs, i.e., he matched cunning with them, for they are, to quote Luke, mean and crafty.

They would soap themselves and wait in the shower for someone to try to get them out. Then they would bite, scratch, kick, and, as they say in the vernacular, "reach for the family jewels." Someone had to go in, and it was almost always Luke, for he had wits, strength and courge. He always won. After disarming the adversary ("I put salt on my hands to cut through the soap"), he would place a few well aimed punches in delicate regions ("the bastards have good memories."). The knowledge that punishment was inevitable, swift, and terribly painful made them less inclined to soap up and wait in the showers. Luke was the hospital's drill sergeant and, like these capable men, was given thankless jobs. Without the Lukes, the maniacally "disturbed" would spend the day in the showers — waiting. It should be mentioned that all of this was 25 years ago. Now, thanks to phenothiazines, the patients are as meek as sheep.

Like Gant in *Look Homeward Angel*, Luke Jones possessed deep, smouldering rage. His wife, Claire, was a warm Eliza, black haired, slim and beautiful. Luke adored her, and she loved "Lukie." His drinking spells were unpredictable and violent.

I recall taking him with me on a trip to New York City to visit customers. He was both the driver and the entertainment, excellent behind the wheel, a phenomenal mechanic if anything went wrong, and a story-teller par excellence. The trip up was fine. We visited Thiokol and Esso, and everyone thought Luke was an engineer and treated him with respect. At DuPont, he lectured to a fascinated audience on his inventions and novel ideas for plant construction.

In New York, we attended a party given by Betty Morton, the sister of Pat, who would one day be my wife. Betty was in government service and the party brought together many Columbia, South Carolina people who were living in New York. There was a great deal of whiskey; the fun of being with friends in the presence of all that booze produced euphoria in Luke.

At first he drank slowly from the cocktail glass. Then he started pouring the whiskey into a glass and drinking it straight. Then he dispensed with the glass — and drank direct from the bottle. When the first bottle was finished, he started on a second. The guests were astonished, and humorous observations died in their mouths as

Luke drank steadily — as fast as he could transfer.

When he was almost drunk, which took less than a half hour, he confided to me that he had buried a large sum of money in his cellar. He pointed to one of the guests and whispered that this was a secret agent sent to watch his movements. Their plan was to grab him when he left the apartment and by torture discover where he had hidden his treasures. Frank, Betty's fiance, was their leader. "Have you joined them?" he whispered. "I saw you talking to the two of them, and if you are my friend, you won't tell them anything."

Tears filled his eyes. "I was saving it for my old age, and for my children."

Then he gripped my elbow fiercely, his eyes bright and steady. I would have sworn he was sober, but four empty pint bottles and several glasses filled with melting ice attested otherwise. The pincers held fast.

"You won't tell, even if they torture you?" he demanded.

I assured him that I would not. Such was his insistence that I looked once more at Frank, who was looking at us, probably totting up how hard it would be to control this nut. I tried to reassure Luke that there was no one outside the door. Then there was a knock and, not waiting to see who it might be, Luke released me, jumped up, and rushed in a crazy zig-zag manner across the room, colliding with guests, overturning a chair, and screaming

"They won't get me!"

He plunged through a window, shattering the glass. Fortunately Betty's party was on the first floor. We rushed to the window, and he was a small speck, blocks away, weaving in a mad run through the falling snow.

Someone said, "He doesn't have a coat."

Most of the men left to chase Luke, but he was gone. We called the police, who acted bored, assuring us he would return, or they would pick him up, and left, promising to send a wagon to search for him. I waited for two hours and then called Claire. She was upset but not too surprised.

"Lukie will find a place to shelter," she said.

I returned to Andy's home. He was my friend of the long nose who lived in a perfectly dreadful neighborhood somewhere in the East 60's. The two of us knew Luke from sailing days, and both of us were friends of the Mortons, who had been our hosts that evening. We went out to search once more. The streets were deserted and covered with soft snow.

I woke up early the next morning and made preparations to

leave without him. Part of the job was moving my two suitcases from Andy's pad around bulging trash cans and threading my way through a hallway full of filth out to my car which was parked on the snow-filled street. The door was unlocked, and Luke was asleep on the front seat. He stared at me with wild eyes, snatched the lapels of his coat together, and peered from the cave thus formed.

Andy said, "Hello, Luke," but got no reply.

I said my goodbyes, and Andy gave me a sort of "good luck" you say to someone you don't expect to see again. We started for home. Luke said nothing, just stared at me. It was unnerving.

There was snow and ice everywhere. I took a crosstown route to 10th Avenue and the tunnel out of the city. The familiar U.S. 1-9, the main artery south in pre-Turnpike days, was a welcome sight and I relaxed. We drove through Elizabeth, Linden and Rahway, and then on snow-lined road to Trenton. I asked Luke if he wanted anything to eat. He just shook his head and continued to stare alternately at the road ahead and then at me. His hand snaked down to his trouser pocket and, suspecting he was reaching for artillery, I was about to hurl myself from the moving car, but the hand reappeared holding a flask. He tilted the bottle and transferred the contents to his gullet, rolled down the window, and consigned the empty to the highway. With the back of his hand he rubbed off his mouth and continued his vigil. I was scared, as they say in the vernacular, ----less.

"Luke," I said, to liven things up a bit, "What did you do after you left the party?"

My voice trailed off. He didn't bother to answer. We drove and drove, by-passing Philadelphia, on to Baltimore, on to the outskirts of Washington. I had to make a gas stop and a telephone call. While we waited for the attendant to fill the tank, Luke left, visited the john, and disappeared into a whiskey store next to the station. I had an appointment to see the celebrated Jonathan Hartwell at the National Institute of Health in Bethesda, Maryland, which is on the outskirts of Washington. Dr. Hartwell was working on cancer research, and we were supplying some of his raw materials. I promptly got lost. I always had trouble finding Silver Spring and Bethesda when approaching from the North, and I was unnerved having Luke as monitor slouched beside me on the front seat.

Arriving late, I found the right building and left Luke locked in the car. He did not seem to mind. I chatted for an hour with Dr. Hartwell, pleasant, learned and a good customer of Columbia! When I said my goodbyes, he offered to walk me to my car. I told him this was not necessary, but he insisted. I could only pray that Luke would be

on his good behavior. We walked to the car.

Something large and ominous was propped up next to the driver's seat in the process of transferring a full pint of whiskey to its mouth. The bottle was inverted and we could watch the level go down until the container was empty. The apparition rolled down the window and uttered an oath. The bottle sailed in the direction of the National Cancer Institute. There was a meeting of eyeballs.

"Jesus!" Hartwell said.

I got in the car.

Luke spoke: "Don't stop any more."

This was not a request. It was a command.

My stores were limited, consisting of two candy bars and half bag of salted peanuts. There are 475 miles separating Bethesda from Columbia, South Carolina. When we left it was 4:00 p.m. I have heard of really fast drivers who claim to have driven from Washington to Columbia in eight hours. Add another half hour for the leg from Bethesda, and if I stayed awake, we would be home by midnight. I did not relish the idea of being with Luke after dark. Just as apprehension took over he spoke.

"Give me some of them peanuts."

I handed him the bag. He washed them down with one mouthful from a fresh jug, opened the window and sailed the partly full bottle into the dusk. A few miles down the road, just when I was beginning to relax, he said,

"Stop the car."

It was a lonely section and I despaired. What a sad way to go. But he only wanted to relieve himself on the side of the road.

He returned, saying, "I feel better now."

I was happy. Such a wonderful, cozy, safeness. ***One day in the Life of Ivan Denisovitch.***

Luke was no longer angry and told me he no longer felt like drinking. We stopped outside Richmond and ordered steaks.

I was still driving. It was 9:00 p.m. and I had driven ten hours since we left New York. Luke offered to spell me. He assured me that he was cold sober. He looked disheveled, but his voice had lost the alcohol slur. He took over the wheel. We were well into North Carolina when there were signs of distress from the engine. This was a helluva place to have automobile trouble. Luke listened to the racket and announced we had blown a head gasket. He apologized for not having his tools with him.

We found a garage. Luke and the mechanic replaced the

gasket. The owner of the garage kibbitzed and offered Luke a good job, a place to stay back of the building, likker money, and the suggestion that there were lots of women in Sanford who would follow Luke around with mattresses on their backs. Luke told this cheerful night owl that he had only one vice and he preferred to humor it in Columbia.

It was 11:00. Luke asked me as we drove about our conversation at the party. He wanted to know if there had been any mention of hidden money. I told him that we had discussed only his life at the hospital and his inventions. He seemed to believe me. We reached Columbia without further problems and Claire was delighted to have Luke home.

We remained friends. Clive and I took evening meals with them and their boarders on Green Street; then Luke worked for a time as construction foreman at C.O.C. when we had our DuPont project. He obtained a patent for a tool; he became a grandfather, and he indulged his habit. He blamed his problems on diabetes and confided that whiskey helped overcome the pain. The patient, loving, non-drinking Claire died first. Luke survived her by about five years.

Chapter 7

John P., who would be for many years my tenant, my employee, and my friend, was, like Luke, a devotee of John Barleycorn. I was coming in from a long sail late one afternoon, planning to moor at Ballentine's Landing, even though there was not much going on since Warren Whitten had descended to Davy Jones' locker. John and his wife were holding each other up and play-fighting over the remains of a bottle of rum. They welcomed me to the dock with drunken good humor and offered to help take down the sails.

Before I could object, John stepped onto the boat, leaving one foot on the dock. With the perversity of sailboats, the bow eased away, and his feet were pulled further and further apart, until both feet followed by the rest of him were in the water. Half laughing, he confided that he could not swim and went under. We fished him out. His wife threw her arms around me, telling the world and two other drunks who had ambled over to watch the drowning, that I had saved her husband, and that she was prepared to do anything to show her

affection and appreciation. She offered me a drink, but the glass was intercepted and its contents consumed by my newly-rescued friend.

The well-soaked John P. and the grateful Mrs. P. were new to Ballentine's, at least I had never seen them before. They were the friendliest people imaginable and insisted on driving me to my house at Sharpe's Landing. I left the sailboat moored at the dock. Their old automobile, like its owners, was very poor. It did not want to crank. John gave me an exaggerated wink, got out, and kicked it, whereupon it cranked immediately. He told me that this treatment was good for wives, too, and his wife agreed — from the back seat.

He was terrible behind the wheel, and we lurched along U.S. 6, with his wife playfully tickling the back of my neck. We turned at Crockett Road and drove the mile to my little cottage. John's wife confided that she had always wanted to meet a chemist, had always loved sailboats and sailors, and that she had been married to John P. for 15 years.

We parked at my house. They walked around it, explored the rooms, the refrigerator and the single bedroom.

Once more the John P. wink; "Bed is sagging a bit in the center." His wife, unblushing, plopped in and said, "It feels fine."

They were ecstatic and never had the little bungalow had such admiring visitors. They offered to rent it, but admitted they owed money at the place they were living, and had decided to temporarily live with friends. John was unemployed, and his wife, a secretary at one of Columbia's construction companies, was the breadwinner.

They talked steadily, John with his rolling, low-country voice and his wife with the twang of the old South, but with something added. John was six-foot-three; His large-boned wife was at least five-foot-eight. She held herself erect, except when she had taken on one too many, as they say. John, after a careful search, agreed that I had no alcoholic drinks on the premises and said he would go off and get some. First he borrowed $5.

The wife, after chatting with me about their early life and their desire to find a place to settle and raise dogs, yawned and said, "I guess he run off the road, got sleepy, and crawled in the back. He won't be coming soon."

We had one bedroom, as I have noted, and she commandeered this. With unblemished virtue, I slept on the couch. The next morning, one of the locals brought John in sober, with the news that, as predicted, he had run off the road, crawled in the back and slept the night.

I had just purchased the old house across the street, and it had some ancient residual furniture. John and his wife considered it a mansion and moved in the same day. This necessitated another trip by John, the last trip the old car would ever make under its own power. He came back with a single trunk, some exhausted furniture ("Gave the rest to the natives."), and a huge, ravening, mange-ridden beast named Old Blue who immediately chased the one cat living at Sharpe's Landing up a tree and started after me (I was seeking one more climbable).

"Stop, you brute!" commanded its master, and the beast, foaming with bloodlust, paused, eyeing me with malevolence.

"Dislikes strangers," announced John, unnecessarily. "He'll get used to you."

Old Blue was not only mean, he was a victim of what was once called in the soap ads, "BO." So was the automobile in which he had been fetched, which was his bedroom.

The three of them moved in, and when I came to the lake the following day, there was a rickety fence around the property, which had undoubtedly been appropriated "down the road." Confined and at home, the monster was eating a reptile.

"Gets his own grub," John confided.

John P. had graduated from the University of South Carolina and spent two years in law school before his hitch in the military. He was extremely bright. I introduced him to my uncle, Max Revelise, who was in charge of our "Industrials Division," and within a week Max had him calling on all the small restaurants, service stations, and pool halls in the city. They became drinking companions and Max arranged for the plant to sell John his Frazier, a car that had been developed at the time but never became popular. John kept it three months before it, too, refused to run.

John was a war hero. He was one of the "expendables" left on Corregidor when General MacArthur retreated from the Philippines. His group was taken prisoner, and many died in what history calls the "death march." He told me about his war experiences, and I did not quite believe all he said, most of the stories being related in a heavy atmosphere of alcohol. John shared the tendency of all story-tellers to make a good story better. The vivid details of the ordeal, the cruelty of Japanese captors, and the heavy toll of men seemed simply "whiskey talk." I discounted it until one day a medal-blazoned officer drove by the plant to see his old buddy and in private confirmed most of what John had told me. John was part German and part Irish. His wife was part Austrian and part Greek. They had one

child, a daughter living with John's sister. And they had Old Blue, who was part wolf according to his master.

John became our man of all jobs. He was an excellent secretary and worked with "Miz Gennie and Miz Ida" after my stepfather, Jules Seideman, died. He was also Max Revelise's understudy in selling detergents, disinfectants (he never used much of either on his person, his premises or on Old Blue), and toilet bowl cleaner. He was the only man at the plant who could operate our multilith and, using this old machine, he produced a catalog of our products, and then made up letterheads, announcements, and throw-away ads to stuff in with correspondence. John wore glasses. He had an owl-like face perched on a long neck, which was somewhat scabrous, giving him a striking resemblance to a turkey, and in some ways to Old Blue. He always wore a shirt with the collar open. It was always dirty. There is a type of vulture called a condor, peculiar to mountainous regions of Peru, Chile, and California. Perhaps more than like an owl or a turkey, John looked like a condor.

He lived at the little house for nearly ten years, commuting daily to town, destroying through exhaustion at least three cars. When Don Marvin came over from Germany, he moved in with the them and Old Blue, now Ancient Blue, a mass of bones and sores that still staggered over to the fence to menace visitors, rending the wire with what was left of its teeth, because it could not capture and eat them. John, his wife and now Don had Old Blue's odor.

When Don left to become business manager of the chemistry department at Emory University, he sent for them, and they resigned from the old house at Lake Murray as well as John's job at Columbia Organic Chemicals. Old Blue had expired earlier of an aneurism. John re-entered law school and, according to the reports which reached us, did quite well.

It was therefore a surprise to see them at Ballentine's Landing about six months later. I had sailed over and they were supporting each other, quite happy and quite intoxicated. They welcomed me as affectionately as they had a decade earlier. She was once more a secretary. John intimated that he was a gentleman farmer without a farm, this accompanied with good-natured laughter. He was planning a new career, running whiskey in broken-down automobiles, from bootleggers. He would be permitted to drink as much as he wished on the way. If they got caught the old car wouldn't be worth much. Cupping his hand so that his wife could not hear, he said, "I am et up with cancer and I ain't long for this world."

He gave me a typical John P. wink, so I could not be sure

whether he was serious or not. I offered him a loan, but he told me he didn't have any use for it. He and "Ma" were doing well; he had a little pension and they were renting ("We don't pay the bastard") and gave me another exaggerated wink.

A month later he made the obituary notice in the state newspaper. Mrs. P. disappeared, and I never saw her again.

Chapter 8

John and Don Marvin were post-1958 employees of Columbia Organic Chemicals, joining us after the great fire and Jules' death, working with us during Max Revelise's illness and staying on after his death, during our "reconstruction." This was a difficult time, for we had lost our main building, most of our inventory, and all the equipment. Within two years we had lost two of our three founders.

Marvin had joined us to work on our catalog, but was pressed into service in production and shipping. He was brilliant and extremely hard-working but moody. I had met him in Germany during one of my sales trips and was fascinated because, aside from being co-owner of a small, financially insolvent chemical company, he was part of a fascinating family, consisting of himself and his two business associates, who were husband and wife. The wife was beautiful, the husband a former SS man down on his luck, performing abortions to supplement his regular income. My friend's enthusiasm was the business's raison d'etre; his fascination for his partner's wife produced understandable annoyance in the husband, who from time to time beat Don up.

I am not sure whether it was the poor sales of the company, or the unresolvable problem with his two associates which led Don to give up and come with us. He corresponded with my uncle Max, who offered him a job and when he came over we now had three steady drinkers rather than two on our payroll. Fortunately, they did not all drink at the same time. However, it was always exciting to head home after a sales trip to find out what new catastrophe had occurred. For, as I gained back-up personnel at the plant, I traveled more and more, selling for our company and consulting for others.

Chemical companies and dogs get sick. There is no doctor to whom one can take an ailing chemical company. In 1966, Columbia Organic Chemicals, where I had earned my bread for more than 20 years, was in critical shape. We were no longer unique. New

companies with aggressive management, adequate capital, and modern equipment had formed to compete for the research dollar. These companies were purity conscious and had analytical equipment I would not have been able to operate if we could afford to buy. Because we purchased more than half of the chemicals we sold, and because it was well known that we lacked means of analyzing, I am sure that many of these fine, new companies sent us their rejects, so that we were crucified for other people's sins. The chemistry department at the University of South Carolina was indulgent but could not be forever checking our samples. When one delivers a defective chemical to a customer, he frequently converts him into a former customer.

We had several things going for us. Above all, cheap prices, because I and my employees were wretchedly paid and miserly about purchasing. We appealed to the thrifty. We also excelled in preparing chemicals so toxic that only the desperate, staffed by the ignorant, would care to make them. We had many friends. People ordered from us because they liked us, no matter how long they had to wait. They were indulgent when they had to redistil a borderline shipment of chemicals. Usually they didn't even bother to tell us.

No matter that the product we sent could have been purer. No matter if they ordered a kilo and got 100g because we forgot to put the incompleted back order in "open orders." This may have produced early coronary damage to desperate graduate students but seasoned Columbia customers shrugged it off. No matter if we sent a kilo when someone ordered 100 grams causing a muckup in their accounting system, the departmental records and the computer

These faithful customers were indulgent, liked us, and wrote fan letters. Many are in heaven, a special chemical heaven where the yields are always 100% and the product one peak on a gas-liquid chromatogram.

I recall a letter from the celebrated photochemist, Gary Griffin, a professor at Louisiana State University.

"Dear Max," it said, "Because of our desperation, we ordered ten grams of *cis*-stilbene at a perfectly awful price of $35. My graduate student on examining the bottle, found immersed therein a very large spider. We have filtered the solution, which is fairly good *cis*-stilbene, obtaining 8.2 grams. The spider has been dried and weighs 1.8 grams. We are returning the spider by U.P.S. and ask that you replace with authentic *cis*-stilbene."

Or, "Dear Max," reads another letter, unfortunately forever

engraved in my memory. "We have received a bottle of trifluoroacetic anhydride, tightly sealed but empty."

Yet another, "Dear Max, we have received 100 grams of trifluoroacetic anhydride, which is pure or at least has the correct boiling point but has a red color."

In the first case, the closure was defective — net loss to Columbia about $10 plus good will. In the second, one of my minions had probably distilled an iodide and neglected to clean the column before the next distillation. Cost to Columbia $10 plus good will.

Another letter comes to mind: "Dear Max, we have received a bottle of your carbobenzyloxy chloride, and my technician, in attempting to remove the cap which was frozen to the bottle, could have been decapitated, or at least lost his eyes when he attempted to remove it, because of an explosion. Fortunately he was working in a hood. Don't you think you should use a warning label?"

Max Gergel had forgotten to inform the packing room to put on a warning label, which has to be attached to containers of this dangerous compound, saying that the stoppers tend to freeze, and the chemical has a tendency to release phosgene and build up pressure.

These were the early days of GLC, or gas-liquid-chromatography, a fantastic piece of equipment utilizing a mini distillation at very high efficiency to determine how many constituents may be present in the compound you are analyzing. Every organic chemist overnight was, or fancied himself to be, an expert in the analysis of organic chemicals. This was a special problem for us, because our products were mainly alkyl halides and polyhalides. These have tendency for halogen shifting when passed at elevated temperatures over a packing that catalyzes decomposition of the rather heat-unstable compounds. It made our products look bad. When natural instability combined with lack of experience on the part of the analyst, we looked terrible. There was little we could do but publicize the tendency of our products to misbehave on GLC and sit back and suffer, with letters like the following:

"Dear Max: I am your customer and your friend (and will continue to be your friend) and I was distressed to note that the 2.4-hexadiene you sent to our research labs at Esso exhibited three peaks of about equal area on GLC, indicating that there are three components present in about equal ratio. I would be content with two peaks predominating in the stuff I ordered, but this is too much."

The letter went on to tell me politely that Harry L. would no

longer be a customer; a friend, yes. With wisdom purchased expensively, I explained as tactfully as possible to Harry that he was picking up *cis-trans* isomerism in his printout, and three peaks were to be expected. He wrote and apologized. My blood pressure would temporarily elevate after an experience such as this.

Mortality is high among producers of organic chemicals. If their products don't get them, public relations knocks them off over a period of time. One can stand a healthy amount of criticism if business is good, but we were not making money during those lean days, and had we been able to afford an accountant to check our books, I would probably have opted for selling shoe laces.

Our working crew during those dark days was Tommy, Ervie Lee (his brother), Sonny, Bobby and Andrew. Only two of them had finished high school, yet they performed miracles with our indifferent procedures and our rudimentary equipment. Tommy could eke good yields from sorry preps, and Sonny could distil in his pitiful fractionating columns to purity that even now would be considered respectable. We operated in vile conditions with medieval setups.

In the winter our operators worked in everything they could wear: two shirts, two pairs of britches, goggles, hoods, rabbits feet, worry stones. They were so warmly clad that they could hardly move. With them worked the proprietor, a much slimmer Max G. Gergel, similarly clad, wondering if providence would relent, would cease the punishment for unknown sins, even produce a miracle, a very large order for something easy to make at high profit. Preferably I would have liked a chemical for which the raw material was costless; for which the absolute minimum of labor and equipment would be required. I promised myself that should this happen, I would purchase a ticket, destination Timbuktu. One way!

Adversity is not statistical. It singles out the haves and the have nots with impartiality. Over a period of sufficient time, the goods will equal the bads, but few of us can wait for statistics. Witness the gambler at the casino, whose chances are almost as good as the house's, but whose back-up money is insufficient; or the owner of a small chemical plant, armed with a fine product line and a nice mailing list of customers who may or may not order; who faces eating or not eating. Luck does not seem to fasten on the unfortunate. A friend of mine, shocked by the news that his wife was unfaithful, rushed to his car to go home and confront her. His progress toward his home was interrupted by a Mack truck which snuffed out his life and simplified hers.

The Bible, infinite in its wisdom, says, "To him who hath shall

be given, and to him who hath not, it shall be taken away."

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My second wife announced the impending arrival of my third child, who turned out to be another daughter. This reinforced a rule that I have observed that organic chemists produce more girls than boys. Babies of either sex produce bills. This came at a time when the plant could not afford what small salary it paid me.

In times of financial distress I have done many things to produce money. I once organized a crew to wash Coca-Cola jugs which we sold to the plant. I pocketed a small amount of money, hating myself and my fate. I taught chemistry to young people who had fallen behind or simply could not grasp the subject. I have sold my stamp collection and mortgaged my sailboat. In 1966, none of these options were open. While I totted up my debts and estimated the amount of time I would have before they converged, I had a telephone call from a good friend.

Dr. Richard Heitmiller, who is now a consultant, having left a position with Dr. Arthur D. Little as director of polymer research, is brilliant, successful, handsome and witty. He and his only wife, Dianth, have produced a plethora of children, most of them sons. Dick, it may be noted, is a polymer chemist rather than an organic chemist, and he took his Ph.D. with the legendary Reynold C. Fuson at the University of Illinois.

Dick is a wonderful chap, a sort of adopted brother to me. Historically, he has been a harbor when the sailing gets rough. Physically, he is a tall man with sandy hair. He smiles a lot. Dick is a first class chemist and a first class executive.

At the time of my problem, he was vice president in charge of research and development for a company called Beaunit, in North Carolina. Beaunit was a textile conglomerate, with processing plants not only in North Carolina but in Tennessee as well. They had a joint venture with El Paso Natural Gas for the production of hexamethylenediamine and its use in the manufacture of nylon 66. They had decided to modernize by putting up a research center and had picked Research Triangle Park outside Durham, North Carolina, as location.

This was the reason for his call. He needed to hire an entire staff. He had money. I knew lots of people and could help him hire. I needed money. The result? He hired me as a "consultant." I visited him in his cubbyhole outside Raleigh, where he was quartered during

construction, and we discussed how we should solve the staff problem.

One hires chemists by visiting universities where they are "born;" or by attending employment sessions of the American Chemical Society, where people go to get jobs and companies come to interview them; or one raids. Young men hired just after they have gotten their degrees (usually a Ph.D.) have the advantage of theoretical knowledge, youth and enthusiasm. They are ready to conquer the world. Those men obtained through interviews may be fresh graduates, but are often people who, for one reason or another, have left their last job or are about to leave.

Given time, Beaunit would have used normal methods of recruiting. In order to get first class talent in a hurry, because it could not visit the spawning grounds or select desirables from the tide of those seeking new employment, Beaunit had to raid. This was my job. We needed a research director, a half dozen chemists, and a stock room supervisor. I had to hire these people for jobs that did not yet exist, in a location that consisted of a pretty picture submitted by the architect. It was a real challenge, but there is no stimulant which compares to financial worry.

The Germans express it nicely: "Hunger ist der bestens koch," which means that a hungry man at table will not complain about quality.

I hired Van May from Peninsular Chem Research in Florida and Lamar Miller from Chemstrand. I hired Ed Tyczkowski from Hynes Chemical Company and Curtis Jackson from the storeroom of Georgia Tech. Heitmiller was delighted. These men and others were the nucleus of a team that could have done much for Beaunit, had it managed to survive the tides of good and bad fortune in the textile world.

During the last stage of my second marriage and the "slack" period between marriage number two and marriage number three, I drove up each month and was paid a retainer and expenses. I watched the research building and pilot plant take shape. They had an amazing mini-scale polymer plant that could duplicate production and problems experienced in the operating facilities. There were fine laboratories with excellent equipment. After the building was completed and the people put to work, my job was to check with the director of research, discussing projects and people, and to help with procurement of supplies.

I also consulted to Chemetron and once every other month would drive to Asheville, North Carolina, and then up the road that

borders the French Broad River to Newport, where they had their Rock Hill Research Laboratories. Dr. Hulse, to whom I formerly reported, was gone. His place was taken by Cy Nield, who was a holdover from the acquisition of Specific Pharmaceuticals, later by Jim Brader. My job with Chemetron was to discuss new projects and help with company problems. One of these was the discovery that an employee was systematically looting them of valuable raw material.

With a family now consisting of a wife, an ex-wife and three children, I needed the income from Beaunit and Chemetron to survive. In addition, I visited Israel every eight months for my consultancy with the Dead Sea Works, made sales trips for Columbia, and gave my first talks for the American Chemical Society on a subject not coincidentally close to home, "How to Lose Money Running a Small Chemical Company." I was in full flight from bill collectors with my "stun'sls" out and crowding on canvas. The plant was functioning well and my spirits were high.

I used my consulting trips to Israel as an excuse to do promotional selling for Columbia Organics and would always stop in Europe before visiting the Dead Sea Works. In late 1966, I returned via Germany, planning to spend a few days discussing an important project for Columbia and one for Beaunit.

It was a cold night in Munich. There was a light snowfall, which ground under my feet as I walked the deserted streets. From the beer "stubes" came the warmth and good cheer of after dinner happiness. I had dined with Walter Griesmeir, who would next morning join Fred Kober and me for breakfast.

Walter is an authority on hydrogenation, and this was involved in the problem which Beaunit faced and for which he might hopefully have a solution. He had been my friend for many years. Fred was working for WASAG, a firm which does nitrations, and Columbia was interested in a compound in which nitration was involved. He had been a member of the Herndon-Gruendemann research team at Ohio State which worked on fluorochemicals and polymers for Olin.

Beaunit's assignment was to follow up on a visit that I had arranged for Walter at their Texas plant. They had purchased an installation for manufacturing an amine which was large, lovely, and well designed, but which would not produce product. Walter had found the problem, involving the catalyst used, and this made them very happy. Now they had some new problems for me to discuss with him. At dinner he had promised to help.

I was tired and a little gloomy. At 46, I could not look back on much accomplished in my life. My plant was struggling to compete

with a host of sophisticated competitors. I was not wealthy. My automobile was aging and needed a ring and valve job. My financial situation would send most men screaming into bedlam. I was 6,000 miles from Columbia, South Carolina, in a city that had staged the early days of Hitler. True, I had a luxury room, paid for by Beaunit in the Bayersche Hof, with a big bed enough for three. My stomach was full — and I would have breakfast next morning with three old friends, but I felt lonely — and decided to take a walk.

In the early evening in a strange city the streets look alike, the hotel is lost behind you and you are a ship proceeding slowly through the fog. An automobile blows in time and you run back to the sidewalk having nearly solved a great many personal and plant problems. It was then that I decided to call home, not intelligently returning to the hotel to relax in luxury but in a strange booth on a strange street with a contraption that gulps up coins making a desperate whistle every time feeding time approaches. I had plenty of DM, the local coinage, and determination to hear a familiar voice. In Munich it was 9:00 p.m. In Columbia it was mid afternoon. I made the call station to station and had the pleasure at great cost of talking to Cora, our maid who was the nurse for the children.

"WHERE IS PAT?" It is understood that Pat, in addition to raising two children, one of whom is barely broken to the bottle, is supposed to be by the telephone — should her 6,000 mile away husband decide to call.

"She's playing bridge with the Jacoby's." This is preposterous. Here I am freezing to death in a telephone booth in Munich and the mother of my children abandons them to a maid and goes off to play bridge. I am pumping in DM and berating Pat, who after asking me how I feel and cautioning me to keep warm, mildly resents a lecture from a man who does not have the day-to-day chores of keeping up a house and putting up with a maniac. She has two results of being a good mother requiring constant feeding and diaper changing, and when she goes off to recover sanity with a little friendly game of bridge she faces a wildly upset husband whose main problem is that he is homesick and another, not known to her — that he is not sure he can find his way back to his hotel. Not knowing the desperation of her husband, her "Irish" rose. Pat is one half Irish — and soon we were having a completely unnecessary argument while the German telephone system applauded and whistled for more money.

The predictable happened. I was told to stay in Germany or find some even more remote place, and I faced the problem of getting through the night with jangled nerves, assuming that I could

find my hotel.

It was two miles away. The cold was a distraction. It had begun to snow very hard, and there was wind blowing cotton soft flakes into my face. I remembered my German class at the University of South Carolina. We had read the trilogy written by Erich Remarque, which begins with "All Quiet On The Western Front," continues in "The Way Back," and concludes with "Three Comrades." Feeling better — after all there are profound experiences in literature which dwarf the problems of a poor manufacturer in a strange city whose family does not appreciate him, I continued my walk. The hotel loomed through the falling fleece of heaven, blue gray and solid. I went to my room. There was a knock at the door. Romance? Perhaps a lovely lorelei had seen me coming slowly, bowed with grief through the snow, and had followed me to my room so that we could discuss Remarque and Reiner Maria Rilke.

Alas, it was the bellhop with a note, "Herr Gergel, you forgot to sign your bill for lunch."

I checked the time, 10:00 p.m. I am sleepless, but in my suitcase is the antidote, my old friend, "The Road to the Ocean." This is a fantastic novel written by the Soviet writer Leonid Leonov, and it was the Stalin prize-winning book the year it came out. Peculiarly it is a savage allegorical attack on the Communist state. The heroes are all political outcasts, and after reading it fast a month ago, I have cherished the re-reading when I would read slow. It starts at night on a bridge ...

In the morning my three friends were at the table. Walter Griesmeir with his curly musician's hair and a cigar; Fred Kober, looking a bit older than when I had last seen him, smiling warmly; and a surprise, wonder of wonders, my old friend Gerhardt Ottman, who had driven 45 miles for this rendezvous. We discussed what had happened during the years since we had last seen each other, and what had happened to Columbia Organic Chemicals.

We discussed 1, 2, 4-butanetriol, which I needed since we had potential sales. Fred could potentially be a supplier. We had taken over the production of this item from GAF Corporation. It is used for making pharmaceuticals and also in a special explosive for the Navy. WASAG, his company, was a leader in nitrations. He agreed that it was feasible and promised to take it up with his people. We rose from the breakfast table. There was the warmth, the handshaking of old friends reunited on another planet. Kober and Ottman had long rides to reach their respective chemical plants. Walter tarried behind.

He smiled and said in his halting English, "You are smiling, Max, but I think you are sad."

I explained my problems — what can one do for a suffering chemical plant when one also has to worry about the support of two families. He nodded, and did not seem to be surprised. We had been friends for years. He asked to be excused so that he could make a telephone call.

He returned, still smiling, and told me that we must hurry, that we had to pack bags and make the train. He had booked me in first class on a train across Germany which would take me to Kassel via Frankfurt. I told him this was quite impossible. I had a reservation on Lufthansa to take me back to the states. He told me that he would cancel this, that he had phoned Kurt Niedenzu, who would be waiting for me. The journey across Germany would take ten hours.

We packed the bags and hurried to the station. The train was waiting. We embraced. Long ago we have "Bruderschaft Getrunken," as the Germans say, and are brothers. We mounted the steps to the train. He accompanied me to my seat.

"Next time you are in Europe, you and I will meet Hans Spitz," he said.

There was a whistle. The trains are prompt. He left and through the window I saw him smiling as the train pulled out of the station and picked up speed.

There was a tap on the door of the compartment. I am in "Erste Klasse," which cost a bit more but avoided contact with crowds and their baggage. The bankrupt in heart can be spendthrift with money. The tap was the conductor accompanied by a soldier. Wild alarm! I am being apprehended for breaking some law! It was merely the customs. However, this posed a grim problem. I am forgetful, and in the excitement of departure, I had forgotten where I put my passport. I was frantic. I searched the briefcase. It was not there. My coat, the pockets of my jeans — it was not to be found. With my eyes, I implored mercy. They waited, smiling indulgently. I was not the first passenger to whom this had happened. Happy day! The passport was found. It was holding my place in "The Road to the Ocean." The two men smiled briefly, clicked their heels and departed.

I was diverted by the lovely scenery. The Bavarian countryside in winter is charming, the little villages seemed to rush by. Passengers boarded the train, blowing through wool stockings, which showed only their eyes. At one of the station stops a "wurst wagon" supplied the hungry. I discovered an unexpected appetite, got out, and purchased three "weisewursts," which are the same

color and shape as enormous grubs, and rushed back to the train, which was tooting. We stayed at the station another five minutes. The toot was a greeting to a friend.

The day passed. Outside, it was cold, but inside the train it was warm and comfortable. I relaxed but did not feel like reading, just wished to sit and think. I did not wish to think of Columbia, South Carolina. Try not to think of a white polar bear and your mind fills with visions of white polar bears dancing in the snow. I tried not to think of the terrible cold weather no doubt locking us in and isolating us from the community.

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The ice sheet stretched from building to building. Tommy appearing carrying a 12 liter flask full of crude methyl iodide. At $10/kilo this represents $125 to Columbia, and I feared for him in the chilling cold. I cautioned, "Take care, Tommy," but his foot slipped on the ice. He tripped, fell. The contents of the flask spilled on his ragged shoes. His foot burst out into horrible blisters while the methyl iodide, our profit for the week, spread on the ice and snow.

He looked up, his eyes caught mine, and he implored, "Help me, Mr. Max, help me. It is cold here and making methyl iodide is so hard, and my foot is killing me. HELP!"

Ashen and completely absorbed in the nightmare, I rushed to help but the ice broke, a huge crack appeared and into this slipped Tommy and the flask and one by one all of the buildings, and my automobile which needed new rings and gaskets — everything. It was the end. No matter how many orders we would get Monday, the plant and Tommy were gone.

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Tormented by furies I awoke and rushed out of the compartment and into the arms of the ticket collector, who blew his whistle for help, thinking that I was attempting to escape from the train without paying my fare. This was the end, true blistering madness. I slunk back into the compartment, sank into the warm cushions and watched the snowflakes whirl by.

I dozed. I was home confronting my daughter, Tanya. She was silent, accusing, unhousebroken. Her sister, Shawn, less than a year old, appeared. She had the same problem as Tanya and both were hungry. They stretched out their little hands and cried, "Daddy,

Daddy!" I jolted into wakefulness and gave the conductor my ticket.

Relaxing with candy and peanuts, the problems of home behind me, I reopened "The Road to the Ocean." Quickly, I found my place. It was close to the beginning and there had been a train wreck. Our hero, Arkady Arkadievitch, stumbled from the wounded train. It was a chilly, wet night and some of the cars had overturned. The fear of fire sent passengers fleeing into the night, the hissing of released steam, the flashing of lanterns created a scene of chaos. While I read the train reached Frankfurt.

The day had flown and it was late afternoon. There was an hour wait before I boarded the train to Kassel. If I were fluent in German and prepared once more to brave the German telephone system, I would contact someone at Hoechsts or try to reach my friend, Dr. Grubhofer at Serva, but instead I remained in the train, read a bit more in the book, and leisurely gathered my suitcases and walked out on the platform to find the train to Kassel.

There were 30 tracks or "gleisen" in the train station, and the destinations were clearly marked. None read, "Kassel." Then I remembered that the city of Kassel is not large, and probably I needed to take the Hamburg train. With ten minutes remaining, I sought the Hamburg Express and a terrible accident occurred. Hurrying with more luggage than I needed, more weight than I could normally lift, more stuff in each suitcase than the safety limits of the manufacturer allowed, my largest suitcase burst and spilled its contents on platform and track. The crowd, like its counterpart in New York, avoiding a drunk or a cadaver, surged around the obstacle and its hapless owner. I looked up to the heavens, imploring divine aid. Two burly U.S. soldiers came over and one, miraculously, produced a rope. They bandaged the suitcase after restoring its contents, and helped me to find the correct train.

It was an hour's ride to Kassel, and once more I was absorbed in **The Road to the Ocean**. Deniken has seduced the lovely daughter of the builder of the railroad, who is herself beloved by Arkadievitch. She is named Tania, which is short for Tatyana. She adores Deniken and has no thought of Arkady Arkadievitch, who is sleeping, or rather attempting to sleep in the next room. The springs are noisy and Arkadievitch gnashes his teeth. I have a warm attachment for this poor man, his anguish made permanent by the writer. I shared his frustration — and, while he plotted all sorts of dreadful things for Deniken, the conductor announced, "Kassel."

A few people got off the train and rushed to waiting friends and warm automobiles. As I unloaded my donkey burden to the

platform, I saw my friend Kurt, in his greatcoat. He gave me a hug, and lifted the suitcases into a Mercedes.

"Normally I have a chauffeur," he said, "but at night I let him go."

Kurt was director of inorganic research at Wintersals, the potash division of BASF. He weaved the car swiftly and gracefully through the fog.

"Evelyn has supper ready," he told me, "You will stay with us for a week."

I protested. I have a plant and two families that require attention.

"Now that we have you here you cannot leave. Kassel has an opera and we are close to Fritzlar where Evelyn's family lives, and where Jupp Faupel wants to talk with you about opening a chemical plant."

This did it. No matter how many indignities an entrepreneur may suffer, he is sustained by the hope that tomorrow will be better. If he does not have his optimism, he ultimately becomes an ex-entrepreneur. Kurt told me his plan.

He is an excellent inorganic chemist, world-reknowned for his work with boron compounds. He had friends at various universities who would make the chemicals for the new company, and would buy from us, too.

During the next five days, we formed Columbus Chemie to manufacture and distribute chemicals. It would be located in Fritzlar where Evelyn had property, in a little park between the railroad and the river. One could walk along the pathways and see East German soldiers called "Vopos" on patrol, but here all was serene. One of Kurt's former graduate students in Durham, North Carolina had come back to Germany and gone to work in his father's firm, which manufactured laboratory glassware. We would have the opportunity to represent them in the United States. Kurt had made other contacts. Our business manager, because Kurt was busy with Wintersals, would be Jupp Faupel, who coincidentally was the tax collector for the region.

It was all very exciting. When I was not with Kurt or Jupp, I strolled around the lovely, old city, ate its *wursts*, and visited the ancient statue of Hercules, which overlooks and protects the city. I made no telephone calls and wrote no letters. The plant was no doubt disintegrating, but I was diverted. Kurt and his family treated me like a convalescent and after a week, my adrenalin was back to

normal, my stomach back to rotundity and I was ready to return to being head of a business and a household.

There was a goodbye visit with Peter Fritz and his family at their home in Hofheim am Taunus, and we dined on wild boar shot by our host. His home contained the grinning heads of other victims. Full of boar, schnapps, and good cheer, I was driven to the Frankfurt airport and soon was reading Leonov on the plane back home.

Chapter 9

Shortly after my return from Europe, Columbia began the production of hydriodic acid, still one of its most important items. We had a visit from a friend of mine, Curtis Herald of Sun Chemical Company. They had a patent for its preparation, and, more important, a fat list of customers hungry to buy, for Sun had discontinued the production.

Curtis came to see us in late 1966. Pat and her friend Katherine (who would shortly marry the noted Columbia barrister, Kermit King, famous for winning divorce actions — such as one for his friend, M. G. Gergel) joined Curtis and me. They were fresh, lovely Columbia ladies and Curtis gallantly gave us the contract to make HI on a royalty basis after two hours discussion of why Northern men like Southern women.

Hydriodic acid is best made by someone you don't like; when the explosion comes, as it almost invariably does, the financial loss is usually accompanied by the resignation of the operator. In practice, one makes HI by adding crude iodide to red phosphorus in water. The mixture is cooked and the product distilled. If one does not distil far enough, the yield is low and, because iodine is expensive, one does not make a profit. If, on the other hand, one tries to bleed out the last drib and drab, there is a generation of phosphine, a colorless, highly inflammable gas. When this hits air, there is a lusty explosion and the shattering report is enough to unnerve the most seasoned technician. There was usually a quantity of purple vapor, which spread over Cedar Terrace where our plant is located, and often a visit from the fire department.

At this time, because I was getting a bit old, we decided to hire a director of research and development. The candidate had a Ph.D. from a Southern university and was recommended to me as a very fine bench chemist, which is chemical jargon for someone who likes

to make chemicals and would, in fact, rather make chemicals than make love or play bridge or fish. Bench chemists are growing rare. We needed new blood, new ideas, and above all someone who would work hard and help us make money. The plant had been existing without a skilled Ph.D. and little or no instrumentation. Our new man would bring us into the 20th Century. His salary would exceed my own plus that of my secretary. Our new man was small, friendly, and immediately popular with the fellows, for he never went into the labs to bother them. He cautioned me that yelling at my fellows would lose their respect and cause me problems with my heart. He was soft spoken, always dressed in shirt and tie. He made no chemicals. He did no research. I had to work harder than ever to support the plant plus this fine, intelligent, charming man.

The climax of his employment was the construction of his personal lab, plus stocking it with equipment and instrumentation he never used. This gave him a more airy region in which to read his newspaper and warn me of the stress to which I subjected my heart. The workers, whom he loved, made me a proposition I could not refuse. We accepted the resignation of this prodigy and divided his salary among them. A Ph.D. in chemistry is testimony to hard work and the ability to learn. It fits the owner for assignments in which his superior knowledge is important. In our case, we needed something else.

In late 1966, we hired a working non-Ph.D., Stan Hesse of Marstan Research Labs, who was an expert in thiophene compounds. He was recovering from a divorce and felt that a change of scenery might help him forget the deep gashes in his net worth inflicted by the decision of the courts. He had acquired while in shock (a phenomenon with which I am familiar) a new wife, and she accompanied him to Columbia. The two of them took over the guest house. Now to the normal odors of the plant we added thiophene and its compounds.

The fellows loved Stan, because he worked hard and didn't bother them with details such as cleanliness and the segregation of reactions of raw materials (which might fuel a fire) and finished product (from which we made our living).

Our men cooked their lunches in pots, which were never cleaned, in at atmosphere high in chlorine and bromine. Sometimes a piece of ceiling, or soot from some former fire, would fall into the open pots, and be eaten.They washed their lunches down with coffee made from condenser water and with whiskey smuggled into the labs. They looked pretty healthy, but I would not have bet on their

internal organs. They never cleaned the labs unless I threw a tantrum. Then they would remove enough empty cans, bread wrappings, and fish heads to make the place look awful but not impossible.

We had a surprise visit from Dr. John Kice of the University of South Carolina, who was a specialist in sulfur compounds (which should have made him tolerant of our atmosphere) and a regular customer. He was struck dumb by the appearance of the labs in which we made his compounds and the sight of my boys, stripped to the waist, carrying open beakers of sulfuric acid, pouring 30% hydrogen peroxide from carboys without safety glasses, and running like hell from one of the buildings in a cloud of purple indicating that one of the HI reactions had "blown." He told me it was a miracle that we could produce such pure mercaptans under these conditions. He congratulated us and continued to order — from a distance.

Gradually, with the aide of Hesse and uniforms, we produced a metamorphosis at Columbia Organic Chemicals, transforming the plant from something resembling the primitives in the steel engravings of Tartaglia and Count de Ramelli to a functioning chemical company producing consistently pure chemicals in reasonable periods of time.

This was accompanied by a change in my personal life from that of happy bachelor grazing the meadows of the unmarried, to "connubial bliss" at Camelot in the Hills, where resided my future third wife.

My evenings were devoted to handling business correspondence and studying the complexities should we have a business drought. My worrying continued into the night.

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I was at the plant just ahead of the main fire engine, the type we called in the old days a "hook and ladder." There was much shouting and running to and fro in the partly lit yard. Most of the light was from the flames.

Bud was calling hoarsely, "Get outa the way men, that wall is going to go!"

Chief Marsh drove up. (Never mind that Chief Marsh died several years ago).

"Having a bad one, huh, Maxie?"

The fire chief was sending for more pumpers. This fire was a bad one, and was licking its way into our holy of holies, the stockroom. If this burned, I would be ruined. I led the firemen into the

main laboratory, which is burning everywhere. Rafters were falling; bottles of liquids exploding and sending out cascades of fire. We got the long hose stretched and a mighty spear of water ate away the base of the flames. Some of my workers arrived, and they looked pretty glum, for their jobs required an active, producing chemical plant, and this one was doomed. In a terrible, searing, roaring crash, the wall collapsed, just as Bud had predicted, and I ran as fast as I could but the flames and falling roof were faster and I screamed, all on fire — and woke up.

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In 1970, the early morning ritual of preparing oneself to go to a chemical plant that is losing money starts with prayer. You silently invoke God, Yahweh, Wahwahkonda (if you are a Cherokee Indian) or Jesus, depending on your preference.

Then you do sitting up exercises. Hold your hands above your head, reach down and touch your toes without bending the knees, then crouch down 20 times, which is supposed to reduce the stomach. Then jump up and down a few times, check the scale, and find that you have lost no weight. The day has started badly.

You make coffee, or a small breakfast. God forbid that your wife, whom you support, should get out of bed to make breakfast. Then another prayer, this one to gain absolution for the bad things you have done and a request that He watch over and protect your children and your mama. You do not mention the sleeper; it is a private revenge. For yourself, you throw in a request for good business, a day without purity complaints, a day free of fire, explosions, visits from the authorities; for all your workers to be healthy and sober. Now you are ready to put on your clothes.

In the winter, you put on a sweater and an old coat. In the summer you wear a T-shirt and short-sleeved top. You get into your car, hoping that it will start, and drive out to your chemical company where there is activity in the labs (i.e. the fellows are smoking on your time, burying the glass flasks slaughtered the day before, quaffing whiskey, smoking pot, or discussing the stinginess of the boss). You go to your office, your den, your tomb, it is all three, and face the problems of the new day.

"In the kingdom of the blind, the one-eyed man is king."

You are king of a very small kingdom. The day of a small chemical company has small and large emergencies. You must handle all as they happen. You are far from competent. You just

happen to be the best available.

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I had to make the decisions as to what we produced, and how we produced it. The decisions were not always rational, sometimes they were colored by necessity. A fire can be put out with a bucket of water that is close at hand but it may burn out of control while you fetch the hose 50 yards away. An order for some horrible, death-dealing chemical can be accepted, provided you are sufficiently desperate and prepared to risk your life for the indulgence of your stomach.

We took a job once, when business was really terrible, to distil OMPA which is the abbreviation for octamethyl pyrophosphoramide, a chemical as evil as it sounds. The customer, a well known pharmaceutical house, offered me $100 ($500 in 1985 currency), provided I would sign a "quit claim." This meant that should something unpleasant (e.g. fatal) happen to me, neither I nor my heirs would make a claim. This accomplished, they warned me that one drop spilled on the back on one's hand could be fatal.

I set up a small distillation flask, attached a vigreux condenser, and was in the process of transferring the yellow, oily liquid, when there was a "boom!" from somewhere in the plant, and about ten drops coursed down my arm and wrist. I howled with terror and raced for the sink, where I washed and rewashed my hand and arm, muttering prayers to all the gods.

There was no paralysis, no blurred vision, no racing pulse — all definite signs of impending checkmate. My liver, carefully conditioned to handle obnoxious chemicals, had handled this insult routinely. The boom was simply one of the hydriodic acid preparations "blowing," and we did not even lose the flask.

On another occasion, we were distilling tert-butoxycarbonyl azide-called "t-BOC azide" by those who use it. The chemist was Ed Hunter, who had an illustrious career with Esso and Nalco before joining us. He had made a large amount of tert-butyl carbazate and had reacted it to the azide, which is not hard to do, nor dangerous. Cleaning up the product is the problem.

Now the textbooks tell us that azides are tricky and will explode. Ed was skillful and, proceeding with great care, introduced the crude product into the distilling flask a little at a time, so that there would not be a large amount present to detonate. Alas, the joint of the dropping funnel was defective, and too much crude material

flowed in.

Promptly the chemicals, the flask, all the apparatus on the table, the table, the room, and part of the ceiling flew in a thousand directions. Ed had been in the doorway, holding an empty cup, which he planned to fill with coffee in an adjoining building. He sailed in a parabolic arc, the cup tightly held. I watched him go by. He never moved a muscle of his face. He landed in sitting position in our one grassy area. Our Sikh, Davinder Singh, hurried over and filled the outstretched cup, receiving an almost inaudible, "Thank you" from Hunter.

We were jealous of other chemical companies who had large equipment. If we had had reactors we could make things in bulk and impress visitors. There were two problems that restrained us, the first being lack of cash, and the second lack of guts. I had heard grisly stories of large reaction vessels "taking off" and propelling the operators into space and the owners into bankruptcy. But then we got an offer we could not tum down.

Union Carbide had a QVF on sale at its Tarrytown plant. The QVF is an all glass pilot plant developed by Corning's affiliate in the UK. If permits one to make chemicals in bulk while seeing what is going on in the reaction flask, like a person with a window over his tummy. You get a peep at the contents in either case, and can make adjustments if something is going wrong.

A seasoned chemist with wisdom born of experience can feel when there is trouble, and take to his heels. The fleet survive. Small reaction setups are normally housed and heated in large mantles, and one cannot see the contents. The QVF is all transparent glass, and like the funnel of a tornado, the angry surging of a reaction which is misbehaving gives flight time. My fellows were fleet and no one was fleeter than the boss.

We bought this beautiful, intricate collection of flasks, valves, condensers, and addition units, which had cost Carbide at least $9,000 (today it would cost three times this), for $3,000. We spent an additonal $3,000 "putting it up," building a concrete pad to hold it, and piping in water and electricity. For the next few years, we showed it to visitors; I did not have the courage to operate it. Later, when Steve Reichlyn became president, the unit was used to make a host of compounds. A larger unit was purchased, and then an even larger one.

The amount of material charged into a flask was no longer determined by how much the operator could lift! In early days, a 1,500 pound order for methyl or ethyl iodide would use a total of 75

flasks, each of which produced 20 pounds of product for us, with the rest distributed in the atmosphere and in concentrated form introduced to the lungs of the operator. Statistically, of these 75 flasks, at least two would break, spilling the contents on feet and knees, and sending the unfortunate victim screaming to our doctor, or comatose to his lawyer. With the QVF's and later, large, metal-clad reactors produced by Pfaudler, we could make the same 1,500 pounds in a day.

We completely fenced the plant. This minimized the number of dogs roaming the property in search of cats (we had about 60 at the time — fed by Leon and my mother), and kids roaming the plant at night and on Sundays in search of explosives. It also produced with some regularity a spectacle that can only be appreciated by one who has had it happen — that of Gergel, who, having misplaced his keys, climbs over his own gate at night; gets part way up; eyes with apprehension the barbed wire strands to the top, climbs down, looks around to make sure he is not being watched; attempts once more, this time from a neighboring tree that has a limb dangling over the fence; looks down on a yard strewn with broken glass and a gully containing chemical residues (this was pre-EPA days); climbs down the tree; attacks the lock with a hammer and wrecking bar, curses and, almost out of his mind, gives the fence a kick — and at this very moment the police car that patrols to discourage nocturnal visits drives up.

We hired John Bocking. John was a co-worker of my friend Frank West from Yorkshire, England, and like Frank was taciturn. He was great at starting something and staying with it until he was successful or the proprietor was bankrupt. One evening on a hunch I drove out to the plant and saw two fire trucks pulled up and an assortment of firemen assembled outside Dr. Clarke's laboratory which was on fire. He had been working with hydrazoic acid which is explosive and catches fire when exposed to air, had left his reaction cooking, and it misbehaved. The firemen were reluctant to get too close so I got two of the braver ones and we went in with a hose and cooled off the sides of the room, the ceiling and floor and let it burn itself out.

As the flames guttered and went out, John came in and told me that he had called a dozen places trying to reach me, to tell me the building was on fire.

He was persistent, as had been mentioned, and if the experiment did not work right he would repeat it. Again and again. He would work on some obscure and probably impossible reaction long

past the point of unprofitability. For him it was a challenge to make unworkable reactions work. I could go back to the labs at nights or on weekends — and John would be working away. It was comforting.

Frank West and I spent an afternoon in Otley, which is one of the small Yorkshire towns, and he showed me an old two-story warehouse on the outskirts. He pointed to the upper floor.

"That's where Bocking had his plant. He had an old anvil up there, left by the former owners when they vacated, and it must have been 200 years old. Whenever reactions didn't go just right, Bocking would pick up a sledge hammer and beat on the old anvil."

Many of the reactions did not go too well, Frank went on to say, and the townspeople heard a lot from Bocking. At that moment we heard a terrible clatter upstairs, and I was sure John had returned to England, but West told me they were tearing down the place.

We got a large order for Iodine monochloride, an evil compound. I was in Europe and John made about 200 pounds, corroding every metal piece of equipment in the plant, and freezing hundreds of dollars worth of glass joints. I asked him why he had not put iodine in acetic acid and passed in chlorine because the people wanted an acetic acid solution.

He told me, correctly, "You wanted iodine monochloride. You did not ask me for the solution."

From us he moved to Camden and went to work with Bill Wannamaker making mercaptans. It takes a man of purpose to devote three years of his life to this thankless job; his predecessor liked making mercaptans but behaved strangely after a few years. John did not mind the odor, liked the remoteness and far from getting strange became an actor in the local theatre. Reflecting on this years later, I perceive a connection.

Chapter 11

We made our living from routinely producing four or five hundred compounds advertised in our catalog, sometimes in small lots and sometimes in bulk. From time to time we were involved in fascinating projects making compounds which were not in the catalog: sometimes we succeeded and sometimes we did not. Chemistry is a science that affects our food, our homes, and our medicine cabinet. It determines the structure of the autos we drive and the fuels they burn. It affects our bodies, our wives' bodies and their appearances!

Hirsute women have achieved no place in history. Few are the men who are attracted to wives with whiskers. This made the visit from the director of research of a leading cosmetic house so interesting. These people had come up with a product to remove hair.

Now women who are so afflicted face several bleak alternatives. They can yank them out a hair at a time, which is painful and puts them out of sorts, affecting supper and your evening's relaxation. They can use a device which burns them out — and you know how bad this smells. They can purchase a number of creams which are on the market, most of which tend to injure the skin because they are alkaline and you might as an experiment cover your face with laundry detergent and shave, and you will get a similar effect. There is an awful alternative — and this is to lock the bathroom door and shave. This is best done when your husband is at work. But once one starts, it is like a lawn and lawn mower. The effect of the mower is to increase the luxuriant growth of the crop. Enter our friends from the cosmetic house.

Their chemists had developed an inexpensive method of making Cleland's reagent which is dimercaptobutanediol, named for the chemist who discovered that it characterizes sulfhydryl linkages. They had a far more important application, the removal of body hair. Such compounds are called depilatories.

Usually they are alkaline in character as mentioned, and women's skin is particularly sensitive. A salve that removes not only the hair, but part of the woman as well, or produces horrible redness or the other manifestations of dermatitis helps neither the sales of a company nor the serenity of its public relations department. Hairy women traditionally do not find favor in men's eyes; pulling out the hairs one by one with an electrical gadget is troublesome and not always successful, for they can come back. Hence the popularity of the depilatory. My clean-shaven visitors explained all of this to me, and enlisted the aid of our company.

Their chemists had discovered that Cleland's reagent acts as an acid rather than as a base. The pH, chemists' jargon for the measurement of acidity, establishes this compound as definitely on the acid side; it does not produce dermatitis and, most important, it removes hair. My visitors mentioned that Cleland's reagent, although a mercaptan, has little or no odor, another advantage of a compound used for topical application. One can smear a little on, and wherever the reagent touches, the hair drops out. The problem was the cost. Cleland's is expensive. Since the product would be sold door to door and the company prided itself on low budget products, they wanted

not only good quality but low price. The traditional route to make the compound, dihydroxydimercaptobutane is from 1,4-dibromo-2-butene, one of the worst lachrymators (tear producers) known. No wonder the stuff cost almost $1,000/kilo. Our customer's chemists had developed a route using the reaction of butadiene diepoxide with hydrogen sulfide. This works fine — on paper. There are certain other drawbacks.

Butadiene diepoxide is not only difficult to prepare but has an electrifying odor. One sniff and your head nearly shoots off the body. It is almost certainly carcinogenic. Hydrogen sulfide has the odor of rotten eggs and is one of the most poisonous gases known. For obvious reasons this customer preferred to get someone else to work with these two very bad chemicals.

We were a small company, accustomed to making chemicals with bad odors, and potentially cancer-producing. We were expendable — and not expensive. The visitors placed a substantial order at an attractive price (sufficient to drive the hungry wolf from our corporate door) and departed for home. The amount of material they said they would need was mind boggling, indicating the vast amount of superfluous feminine hair. Now we had to make the compound.

My cunning conceived a modified synthesis. I would make 1,4-dibromo-2-butene, react this to the epoxide which I would open to form the diol, and then transform the bromines into thio groups, using the techniques developed by my illustrious mentor, Dr. E. Emmet Reid. Or I might make my butadiene diepoxide from bromination of 1,4-dihydroxy-2-butene, available at the time from GAF and proceed as mentioned.

I rushed to the library to see if others had thought of this route. They had. Robbed of a possible patent, I worked out, using my slide rule, the cost accounting for the Gergel method compared to that proposed by our visitors and, indeed, mine was cheaper and a safer route. If we made the epoxide from 1,4-dibromo-2-butene, we would avoid butadiene diepoxide, and highly-toxic hydrogen sulfide. I would need only butadiene, an epoxidizing agent, and thiourea. Happy, hairless women would be singing my praise.

Fired with enthusiasm, I purchased a tank of butadiene and ran my first bromination. The reaction was vigorous and an oil was obtained, mixed with lovely white crystals. I hummed a tune, washed the product, and put it aside to dry. Then I washed my hands and face and prepared to leave for the day. I noticed a tingling sensation on my palms and cheeks. Within an hour my eyes felt full of sand and I was howling in the agony of conjuntivitis. I telephoned Dr. Alion and he

invited me to join the rest of the staff, all similarly affected and in terrible pain. I had rediscovered the wheel — i.e. that 1,4-dibromo-2-butene is a bad, bad chemical. I telephoned the customer and they told me they, too, had blinded several chemists before opting for butadiene diepoxide.

Two days later, with our eyeballs recovered, Sonny, our distillation man, started cleaning up two large drums of butadiene diepoxide, which had been donated to us years ago by Pittsburgh Plate Glass Company when they ceased its manufacture. The odor at Columbia Organics was suffocating, no wonder PPG had quit making it and our customer for Cleland's been so eager to "farm out" the work. A stupefied Sonny delivered two kilos of virulent liquid. Jim Clarke converted it to dithiobutanediol using H_2S and we sent the product to the customer, who was delighted and wanted more. We distilled the rest of the PPG dregs, and then had the problem of getting additional material.

I am a bromine chemist and have made hundreds of bromine compounds. I have insight into their character. The logical way to make butadiene diepoxide I had postulated previously; we brominated butenediol. It went easily. Then we tried to dehydrobrominate it to diepoxide, which works well on paper. The literature confirmed that others had similar lack-lustre results. Jim Clarke had a large cylinder of hydrogen sulfide waiting, accumulating deposit expense and the customer waited, equally impatient. By redistillation of the remaining PPG material, we staved off disaster. Time was running out; I was due to leave for Israel on a consulting trip the following week. I sent up prayers to Yahweh, patron of all who are in trouble, and planned to invoke him again the following week from Tel Aviv, where the lines are shorter.

Comforted by the knowledge that my fate was in the hands of the Almighty, I put aside further work, planning to discuss the project in Israel with experts in dehydrobromination. I mentioned it to several, all of whom gave me advice and also copious amounts of sympathy. They had their own problems and mine was of low priority. I visited entrepreneurs in Israel, Germany and England and while they were interested they could not or would not brominate and dehydrobrominate. A few went to the trouble of making trial runs of diepoxide, but had my same miserable yield on the dehydrobromination step. After totting up the time and materials required, and weighing the potential bladder cancer, they wrote nice letters saying, "No."

We had two alternatives: make the material and bankrupt the plant (and our health), or give up. We gave up. Better men than we would have to dehair their womenfolk. The customer was disappointed but kind. Note to entrepreneurs: the cosmetic industry is still waiting. Somewhere there may be a keen researcher prepared to tackle the problem. I am prepared to be middleman.

Our adventures in chemistry were more often successful. For years we supplied key chemicals to a metal-organic chemist at the Savannah River plant of DuPont. They separate plutonium isotopes and manufacture heavy water. Dr. Siddall had developed a series of compounds called bidentates, which have the ability to complex actinides and lanthanides. These are degradation products from nuclear reactors. Persons exposed pick them up from the air, from unwashed vegetables, and from the product of Old Betsy converted from the grass on which she feeds. The proportion of fission material in the host can be quickly ascertained by the use of Tom Siddall's diethyl butyl carbamoyl phosphonate. This reacts with the dissolved fission products present in the urine of the person exposed, and permits measurement. It is a simple test for one's having picked up radiation—and how much.

I have a very intelligent friend, Al Meyers, who met me at an ACS meeting in Atlanta between Cleland's compound and Siddall's bidentates when my spirits were low. He and his friends, Gary Griffin and Rollie Pettit, set about cheering me. One fast generator of good cheer is money. In Reece Williams' office (he is my lawyer), there is a sign saying, "There are three faithful friends: an old dog, an old wife, and ready cash!" Good business and checks dispel gloom. I listened with excitement while Al told me of his work reacting n-butyllithium, oxazines, and an alkyl halide to produce aldehydes. He needed a small subsidy for his research. As we were poor, this made us poorer, but within a few months we had steady sales for the product.

Chapter 12

From time to time I toyed with the idea of buying into some small chemical company in Israel. I consulted for Dead Sea Works and visited every year, and this would give us another base. Dr. Alfred Bader of Aldrich and I had helped form Zion Chemicals in Yavne, but when I asked Dr. Arjeh Galun what he would charge for an interest he quoted a price so high that one could buy two Columbia Organics for

less. I considered finding a location, building a small plant, and settling down in Israel. This idea recurred during times of stress such as poor orders, poor production or poor cash flow. Surely there was a need for such a company. Graduates of Israeli universities found limited industrial and teaching jobs available, many sought employment overseas and this produced a "brain drain." To form my own company I would have to live at least half the time in Israel and two weeks away from Columbia always made me frantic; then there was the possible trauma to my three daughters of having their daddy away half the time. I did not live with them but they saw me regularly and I enjoyed watching them show genetic influence: a great interest in peanuts, compassion for dogs and cats, a ready flow of conversation. No, they needed a father and Columbia Organics needed me close at hand, so I visited Dr. Galun many times but never bought part of Zion Chemicals, nor formed a lonely outpost of Columbia Organic Chemicals in the Negev Desert.

Visiting Israel always included time with Arjeh. Sometimes I would stay with him in his house in the outskirts of Tel Aviv. This is a distance of perhaps 60 km, and would take me normally an hour. In Israel, where one must be even more careful than in South Carolina, it would take me an extra 15 minutes; Arjeh made it in less than a half hour. Now I have driven with Walter Griesmeir on the autobahn from Frankfurt at 125 mph; I once made a wild drive with Nick Grubhofer from Heidelberg to Frankfort airport (40 miles) in 30 minutes. I have survived the trip from Leonardo da Vinci Airport to Via Luigi Pulci with Guido Promontario, smoking his Alfa Romeo, destroying animals, and devastating pushcart operators. These people are conservative drivers compared to Arjeh Galun, who drove with one hand, at lightning speed, while the other held the inevitable Israeli cigarette, and gesticulated. A further distraction — he maintained eyeball contact with the passenger during the drive.

Our friendship did not cause him to lower the price he asked for Zion Chemicals, and he ultimately sold out to Koor, which is one of the many operations of the Histradut or Israel labor party. They used his plant to make chemical warfare agents. Arjeh is now a professor at the University of the Negev, drives new, faster cars, and has retired from making chemicals.

The mail brought an announcement of a new company in Israel, Jerusalem Fine Chemicals. I had not heard of them, nor had any of the people at Dead Sea Works when I wrote. I asked for a price list. They sent me a small catalog, which offered many interesting compounds, most of which are deadly. A specialty was

thiophosgene, which is so toxic that one drop on the wrist of a rival or creditor will do him in. At that moment I was only a few weeks away from taking my annual trip to Israel, this time accompanied by my wife.

Jerusalem Fine Chemicals had moved its plant from a house on the edge of Tel Aviv to a condominium complex in Jerusalem 40 miles away. I first visited the house, which still smelled musky. The note on the door told me where the tenants had metathesized. I had done my homework. The director had studied chemistry in Munich. He had fought in the Seven Day War as a paratrooper assigned to help displace part of the famed Arab Legion from positions outside the Old City. The owner, chief chemist was blond (this startles visitors to Israel, who expect to find small people with curly black hair), talkative and friendly. He took us to the battlefield, not far from the new home of JFC and described the ferocity with which the highly-trained Jordanians withstood the Israeli attack. We then visited his plant. I marveled at the indulgence of the landlords who permitted a chemical company to manufacture in the same complex in which people lived. He told me they were absentee owners who lived in the U.S. If they had known what was happening to their walls and floor, they would have "Shreid Gvalt" (which roughly translates as an urgent appeal to the heavens). There was an evil odor of thiophosgene. The two workers carried out activities in slow motion, probably already toxified by the fumes. I assumed they were new immigrants, so happy to be away from the warrens of Yemen that they would work anywhere and do anything.

My wife retired from the laboratory coughing and wiping her running eyes. She was revived with fruit juice and compliments. My host was a diplomat. Me? My lungs and liver will tolerate almost anything, so I made a tour of the labs with the owner. He told me they planned to move the plant to better quarters in Petach Tikva. I might comment that the Bedouin have a similar tendency to stay in one place until their sheep and goats have denuded the vegetation and then seek "greener pastures." Woe to the complex owners when they visited their property after JFC moved. They were interested in selling a part of the company, and this is why we had come. I promised to take the matter up with Bill Abramowitz and Ariel Ginsburg. Bill owned part of Columbia, Ariel was sales manager for Bromine Compounds Limited for which I consulted.

I had discussed with Bill his taking over a part of our company for some months, visiting him several times in Swampscott which is right outside Boston, and having him as a guest in Columbia on two occasions. He was a fascinating man, successful in business, a noted

philanthropist, and deeply committed to Israel. He was almost truncated by paralysis in both legs. He walked with two canes. His badly crippled body had made it difficult to find work when he graduated from college, so he formed his own company, dealing in plastic intermediates, and made a success. Then he bought small companies, and made money from them too. He had a golden touch. His specialty: buy a company which was not doing too well; merge it with another company; get it profitable and then sell. There was some question as to whether the owners of the two merged companies made anything, in fact there were hints that the only one who made anything was Bill.

My friend, Jules Lindau, who at one time ran Southern Plastics and now heads Lindau Chemicals summed it up. "When you have finished shaking hands with Bill Abramowitz, count your fingers." He liked Bill personally, but warned me to study my contract.

I met Bill through Chezi Rappoport, right after he acquired a large bloc of stock in Millmaster, which was involved in producing meprobamate, one of the earlier mood controlling agents. He had learned of us through Chezi, and thought a merger with Bromine Compounds Limited might be worthwhile.

Bill's plan was to join the companies, add additional capital, and then go public with the stock. He had, as mentioned, done this with others, putting together a and b to form c (plus something for Bill Abramowitz). Had I taken his advice, I would be a very wealthy man for BCL has flourished into a very large company indeed.

He had piquant humor. We were eating at a restaurant in Swampscott. There was a line in front, but this did not bother Bill. He waved a crutch and was immediately taken to the head of the line.

"I tip well," he remarked.

We ate heavily, shrimp, lobster and scrod, for which the Boston area is famous. Since Bill was a devout Jew, I was surprised, for shrimp and lobster are shell fish and forbidden.

He grinned and remarked, "I will send an extra donation to the Rabbi."

Somnolent from too much food, I was brought to attention by a hubbub from the kitchen.

Ten waiters emerged holding a birthday cake aloft, bellowing, "Happy birthday, Mr. Abramowitz."

I apologized for not knowing that this was his birthday, and my host smiled indulgently. I did not suspect the joke until the same thing was repeated the following evening at the Waldorf. He was a millionaire who liked free desserts.

We decided that we could not afford the BCL merger. Bill was mildly upset but decided to buy a half interest on his own. He invited me to join the group gathered in Chezi's office. Present was the legendary General Meir Elan, who had succeeded General Makleff as head of Dead Sea Works (of which BCL was a division). The purchase price was $250,000 for 1/3 of the company, all of which they would sell, probably a tenth of what the same 1/3 would cost now.

Meir's hand was extended to take the check, when Bill said, "Hold it a minute. Let Maxie hand you the check. Maybe some of it will rub off."

Meir Elan had been a top officer in the Israeli army and had been involved in strategy planning for the "Six-Day War." We all addressed him as General Elan, even Bill. I would meet him on two other occasions before his sudden, unfortunate death in 1971.

He visited New York regularly and asked Chezi to invite me to a meeting. We chatted about the Phosphates and Chemicals Division of Dead Sea Works in Haifa, and General Elan hired me to consult for one year to the group, supplementing the work I did with BCL. I saw him the second and last time in Tel Aviv.

I had driven to Haifa with one of my cousins, a dropout from a kibbutz, a graduate of the Hippies, now safely married to an Israeli.

I had an appointment to see General Elan at noon. While waiting, I met the chemists and discussed their work, which included defluorination of phospate rock, as well as producing a number of organic compounds.

1:00 p.m. came, and there was an uneasy silence, the chemists had run out of conversation, everyone was hungry. Someone checked to see if General Elan was ready to see me. He was in conference. We lunched together and continued the discussions with less enthusiasm. They were skittish, fearing that they might have to entertain me the rest of the afternoon. I told them I had friends in Haifa I wanted to visit and left, to their relief. Consultants can be nerve-wracking when they stay too long. I checked with the General's embarrassed secretary, who informed me that he was still "tied up." I drove around Haifa for an hour and returned. No general, but there was a message: "Go back to Tel Aviv. Leave a message where you are staying and I will see you this evening. Elan." We drove back.

That evening, a half-dozen of my cousin's and her husband's friends gathered in their apartment, curious to meet the man who had helped plan the "Six Day War." By 10:00 p.m., they had all left, and we were nodding. There was a tap on the door. We rushed to open it

— and shook hands enthusiastically with an astonished security guard, who explained to us that the General would arrive shortly. The guard checked the apartment for hidden Arabs and booby traps.

Then Elan entered, even more tired than we. He sat down, and we poured his schnapps.

"Maxie," he said, "I am sorry, but I have only a few minutes."

He explained that he was en route to Beersheba and would leave immediately for S'Dom to check on the potash plant.

"When will you sleep, General?" I asked.

He told me he would catch a nap on the way. He asked me how the day had gone, whether I needed any help with the plant problems, and when I would be coming back to Israel. "Keep in touch." Led by several capable-looking army types he left the apartment, and I never saw him again.

His end came on the highway between Haifa and Tel Aviv. This is almost an autobahn and people drive too fast. He had ordered his car to stop so that he could buy a hamburger and insisted on crossing the road himself to get it. An "Oleh hadash," a new immigrant more familiar with camels than cars, ran over him and removed a very colorful man from an extremely useful life.

I met many interesting men through Bill, who knew the leaders in Israel. He once asked me who above all I would like to meet, thinking no doubt that I would say Golda Meir or General Dayan. I asked him if he would introduce me to Rothschild. The Rothschilds donated heavily to Israel. "Whom would you prefer?" was the answer, "James or Edmund?" It was agreed that I would come to Israel the next spring on my consultancy and meet James, but Bill died before then.

We got together from time to time to discuss strategy, that is, for him to present me with contracts to sign for the purchase of part of Columbia Organic Chemicals. Any of them, if signed, would convert me, my wife and our children into indentured slaves of William Abramowitz. Finally he weakened and one day when we were both at the Weizmann Institute over coffee, he bought a one-fourth interest in my company on terms proposed by our lawyer rather than his. He smiled and said, "I do it for love," and this last adventure was probably just a "fun experience" for the old warrior.

He and I were walking from the Chemists Club to the Waldorf on a rainy day. As Bill used crutches, we had to walk slowly. I asked if he would like to seek shelter, and he answered that if I were tired, or too wet, he would get us a cab. I told him that catching a cab in New York on a rainy day required divine intervention.

Bill looked at me and said, "I will bet you $20 that I can get us a cab."

Foolishly, I accepted, and he raised one crutch. A taxi miraculously appeared. The driver opened the door and greeted my friend by name. With darkening suspicion, I listened to them talk in Yiddish. When we arrived Bill told me to give the driver $20.

The cab driver opened the door for us, saying, "Shalom, Mr. Abramowitz, I hope you will need me again."

Neither Bill nor I said anything. We were joined at dinner by Chezi Rappoport, who told us he would have to leave right after dessert. We accompanied him to the lobby and could see that it was raining heavily.

"I'll never get a cab today," said Mr. Rappoport.

Immediately, and with a wink at his fellow conspirator, Bill said, "Would you like to make a bet...you know the rest.

As the cab departed, Bill called out, "Remember to give the driver $20, Chezi."

As I mentioned, before Bill bought his Columbia stock, he sent me a number of contracts, any one of which would have made me an employee, probably a janitor. The penalty clauses would probably have had my wife working for him and Mrs. Abramowitz as a domestic. Grown weary of the game, since the coffee was hot and the sky was blue, he signed my own contract and from then on he called me at all hours, day and night, invariably collect, to determine how the company was faring. He drove me nearly amok with suggestions for making it more profitable. Had I heeded his advice my residence would have been Atlanta, Georgia, which has a federal penitentiary; and my occupation would be reducing the size of rocks with a pickaxe.

Then Bill had open heart surgery. Refusing to slow down, this small dynamo among entrepreneurs took the long trip. I was in Mexico when word reached me and I hurried to Boston, but he was dead and buried.

I had maintained correspondence with Jerusalem Fine Chemicals. They were prepared to sell a part of their stock and I now had a group ready to purchase it. Looking back, I feel sure that had we made this purchase, Bill, as one of the purchasers, would have died of aggravation. My wife and I attempted to locate the new home of JFC in Petach Tikva.

This city sprawls. I think it is laid out to annoy and confuse an invader. Trying to find his way back to the Tel Aviv-Beersheba road he would die of frustration and exhaustion.

We tried to locate JFC using a map which the president had drawn for me. The streets were helter-skelter; no one spoke English. We drove aimlessly. The signs were in Hebrew. My wife gave me the cold stare reserved for times when she considers me an idiot. I was hopelessly lost, we were outrageously late. I stepped into a store and using English, Yiddish, French, sign language, and limited Hebrew, I got enthusiastic nods from the proprietor. I held my nose to emphasize the character of the place we were seeking. He held his and gave a little dance of delight. We laughed uproariously, and he gave me directions in mixed English, Yiddish and Hebrew which took me in five minutes to the Peach Tikva kosher abattoir, which smelled awful but did not make chemicals. My wife stared ahead. I drove wildly and, by sheer luck, 15 minutes later arrived at Jerusalem Fine Chemicals.

They were oblivious to our late arrival, for they were having problems. When one expects a visitor, especially someone who is going to place a large order, or offer to buy part of your company, things go wrong. They were going wrong.

A flask containing material they were brominating was producing HBr faster than their scrubbing system could remove it. The workers were coughing and gagging. My wife in the hermetically sealed car, coughed and gagged and gave me the familiar disgusted look. An old brominator, my internal ventilating system immune to hydrogen bromide vapor, I waded through the fog looking for the director. I felt kindred sympathy. My plant, too, misbehaved at embarrassing times like the puppy who defecates on the visitor's shoe. He tried to unstop his condenser (the cause of the problem), control the fumes, curse the help and welcome the visitor all at the same time. There was a terrible blast in the next room and a chemist rushed out, his hair and shirt on fire. He looked up at the heavens, as I do when two catastrophes coincide and then gave me the weak smile of a businessman in extremis. From outside, muffled by the closed doors, my wife protested the odor.

The ebullition subsided, the fire was put out, the worker examined and found less than mortally injured, and they fetched Israeli "pop" (which is vile). He sent a bottle and a glass containing ice to Mrs. Gergel barricaded in the car. He left me to pay personal attention and coaxed her out with great patience and many compliments. I asked him about business and he told me it was great. We made a quick tour of the plant, quick because there were only three rooms. A husband/wife combination did research and ran the controls. They seemed competent. The burned man discussed

his project on the blackboard; they gave me a copy of the new price list.

My enthusiasm had dampened but I was prepared to go ahead and buy a part of the company; however, like the Lebanese merchant whose wares inflate in direct proportion to the enthusiasm of the customer, he hedged. There were other potential customers. He smiled constantly like the idiot girl in *La Strada*. It was disconcerting. Why put us to the trouble of visiting this little hell-hole if he had made his bargain with someone else? The smile. Coyness. Maybe the deal was not complete. He really wanted to work with us but the other party offered so much money. Let him have the weekend to think it over. He would telephone us.

I am used to this sort of crap, but now to make matters worse, we got lost trying to find our way back to the Tel Aviv-Beersheba road. Actually my God, closer to me in Israel than in Columbia, South Carolina, was being kind. I needed JFC like a loch im kopf (a severe blow on the head). In the years which followed, their best customer was the insurance company and its fellow victim the steam ship company, which often jettisoned the JFC portion of cargo. In one of those business mergers that Bill Abramowitz dismissed as the wedding of a $5,000 dog with a $5,000 cat, JFC merged with Zion Chemicals, and ultimately both disappeared.

During the years 1954 to 1972 I made a dozen trips to Israel. My contract with Dead Sea Works permitted one trip each year with all expenses paid. According to my dear friend, Shaul Tchetchik, the treasurer, I was part of the budget. I could take along my wife, and each of them came at one time or another. Sometimes I would go with someone from the New York office. I recall going once with Gershon Segelman. We had an assignment to buy two tape recorders and an expensive camera and equipment. The tape recorders were for General Makleff, the camera for Chaim David at kibbutz Kfar Menachim, Gershon's friend. We were singled out of line where suitcases and handbags were inspected and brought to the personal attention of a courteous customs attendant.

"Do you have a tape recorder?" he asked Gershon.

Gershon confessed that he had forgotten to declare it and, given the choice of paying duty or having it detained, he paid.

My turn was next. "Do you have a tape recorder?" I shook my head.

"He does not speak anything but Bulgarian," said Gershon. Immediately, to our surprise, he addressed me in a strange, slavic sounding language and I decided to pay. In the excitement, they did

not check on the camera and equipment.

On the next trip we carried portable typewriters. They passed Gershon but questioned me.

"What do you have in your suitcase?"

I did not respond.

"He is a mute, and dimwitted; he knows no Hebrew."

I drooled and rolled my head, and peeked at the attendant with one eye. He waved us on. I had to repeat the performance for General Makleff.

Usually en route to Israel I would break the trip with a stopover in London, because the direct flight from New York to Lod airport takes 14 hours. The plane leaves at 9:00 in the evening (usually), and in about three hours you see dawn. Seasoned passengers find an empty pair of seats, wrap themselves in blankets and manage to sleep. If the plane is crowded they do the same in one seat. I never got seasoned. The adrenaline saturated first timer, or the unfortunate who awakes in the babel of conversation with frequent interruptions from loud-speakers droning in Hebrew, French and English is starkly awake.

I have made the trip many times, and because I cannot sleep on the plane find it easier to land in England, check into a hotel, and get some rest. Then one can travel to Israel via Rome or Athens. In the early days I traveled El Al, and the food was kosher. The waitresses were proud and argued with passengers who became grumpy. Now at least four airlines make the trip and I take Lufthansa and fly by way of Frankfurt.

After my first non-stop trip I opted for London. The plane lands there about 6:30 a.m. and heavily laden with luggage, you ask one of the taxi drivers to take you to Poyle Trading Estate in Colnbrook.

He scratches his head and says, "I don't know where that is, governor."

You go to the next cab and the next, and finally you find one who knows Slough (pronounced "ow") for that's where Poyle Trading estate is located.

Ultimately you are visiting Koch Light Laboratories, the domain of Phil Koch, formerly the company of Sir Henry de Laszlo. In the old days, when I was first making the trip, I would see Henry. We were old friends, and I was fond of his wife, Isa, who is now a director in the firm.

Usually I stayed in London for one night, returning to Heathrow the next morning to continue the trip four more hours. It was invariably chilly in England and warm in Israel. We would straggle

out of the plane into an atmosphere sweet with the odor of orange blossoms from the nearby citrus groves, or "parsidim" as they are called in Hebrew. One's first experience actually being in Israel can be overwhelming. It is like Mecca for the devout and some of the passengers were coming to live, not just visit. For them this experience was especially emotional.

There is the story of a newly-arrived immigrant who, overcome by the odor of the orange blossoms and the knowledge that at long last he was actually in Israel, left the plane, climbed a tree, and proceeded to peel and eat an orange.

The owner of the grove materialized and berated the man. "Oh wicked one, don't you know it says in the Bible that thou shalt not steal?"

The immigrant smiled up at heaven and said, "What a lovely land. You climb a tree, eat an orange and listen to the word of God."

Awaiting the newcomer who has survived customs is a smiling, vocal sea of faces, all looking for loved ones and friends among the passengers. I would see Gershon or Ariel or Big Salim, Makleff's driver, and we would start the 60 mile trip to Beersheba via Kiryat Gat or Ashkelon. Later, when I became familiar with the country, they would leave a rental car and I would drive to Beersheba by myself.

Chapter 13

Finding one's way around in Israel is not difficult, providing, of course, you read and speak Hebrew. Most of the signs are bilingual in Hebrew and English. Unfortunately some are Hebrew and Arabic, and then woe be to one whose language is only English. Distances are all given in kilometers and are accurate contrasting to roads in South Carolina and some other states which tell you it is 40 miles to some place and you drive five miles and it is still 40 miles away.

It helps to learn a few words. *Sleecha* means please, *adoni* is sir and *ehfo* is where. *Beersheba* is the same in English or Hebrew.

Put them together and you have the following Hebrew sentence: *"Sleecha, adoni, ehfo Beersheba?"*

This translates, "Please, sir, how do I get from here to Beersheba?"

Now the reply (the Israeli is quick to help and younger ones have learned to speak English, but let's assume that your informant does not speak English, and perhaps is Arab): "Yochar" (straight

ahead) or "smalle" (left) or "yamin" (right). Two "yochars" usually interpret either as two blocks or two miles, and the same applies to the lefts and rights.

You are now able to travel from Lod airport to Beersheba. Once in Beersheba, you must have command of a few more words: "Malon," hotel; "Desert Inn," Desert Inn.

Now put them together, and you have *"Sleecha, adoni, ehfo Malon Desert Inn?"*

This will amuse the Israeli who speaks Hebrew fluently and immediately perceives that you are not Israeli, probably because you wear a tie. You will get directions back to the Desert Inn, which you passed going into town and assumed to be a sumptuous palace, which indeed it is. The staff is bilingual so you can add only such luxury words as "Boker Tov," which is a really nice "Good morning" and "Lila Tov," which is a truly nice "Good night." Under no circumstances announce in English or "ivrit," "I am Max Gergel and donate regularly to fund raising drives for Israel." I was a consultant for the Dead Sea Works, the chief employer in Beersheba, so my room was already reserved and there was usually a note from Ariel Ginsburg, or Josie Epstein or Israel Sachs, welcoming me back to "Eretz Israel," the land, which is expressed beautifully in the songs of Solomon, "Eretz zevat, cholov, udvash." "A land flowing in milk and honey."

In the early days, Gershon Segelman or Chezi Rappoport would meet me at Lod. The Israeli males are demonstrative, and you get kissed and hugged. They put your bags in the waiting car. I was always so excited to be back in Israel, the country of my ancestors, conversing with my good friends, that I was oblivious to the speed as we raced through the countryside avoiding soldiers, civilians, and wild life — and the occasional donkey, camel or bedouin.

The Israeli drives fast, and the roads are fairly good. The walkers, human and animal, are adept at getting out of the way. As one enters the Negev, in the southern part of the country, the road narrows and there are fewer side roads and these lead to a kibbutz or a *moshav*. The difference is that in the former the settlement is collective and the ownership is shared by all, in the latter you can accumulate personal money and possessions. There were, in the days before the Six Day War, long stretches without towns or military establishments, but on my most recent trip in 1982 there was continuous cultivation, and giant sunflowers nod and dance in the wind where formerly the sands covered courts where Omar's "Jamshyd reveled and drank deep." In the old days, military

establishments were put up in the wastes overnight; by morning the men and equipment had moved and the desert was serene. The army, like the bedouin, is stealthy and moves into and out of an area, usually at night. The possibility of running over a mine or being stopped by Arab marauders added a soupçon of danger in the old days, now the greatest danger is an approaching Israeli car. Then ahead, in the gloaming, you see the twinkling lights of Beersheba and the warm solidness of the Desert Inn.

You are just North and West of Beersheba. The offices and plant of my employer, Mifale Yom Ha Meloch (literally, "the company of the sea of salt") were on the other side of the city. They paid for the food and lodging and the room was comfortable, the food delicious. Because it was always "off season" when I visited, I was sometimes the only guest in the hotel. The lounge and registration area is luxurious, the hotel colorful and exciting. It has ruined several successive owners and is now owned by the state, which also owns the Dead Sea Works.

You follow a porter with the bags. He is an Arab or a new immigrant. On the way to your room, you observe a series of very large photographs of the local bedouin tribe, the gradual transformation of a sheep into food. First, the sheep as a group of woolies, pleasantly snipping the sparse grass of the Negev, attended by a little boy or girl, or maybe the old wrinkled grandfather. The second scene depicts the murder of the sheep by a group of bedouin. The photograph, horrible as it is, pales beside the third scene, the dissection of the corpse. The fourth shows all the tribe surrounding the community pot, waiting for chow, the whole captured by the photographer, the sniffs of pleasure, eyes rolled backed in the heads with delight at the feast to come. The fifth and sixth photographs show the eating orgy, in which parts of the sheep are mixed with rice, moulded into a ball and swallowed whole. In the final, horrendous scene, a visitor, probably an Israeli tax collector is handed an eye from an outstretched hand and tries to get it down. The audience is mirthful, relaxed and getting ready for night which can include visiting neighbors or stealing their camels.

The porter unlocks your door, and checks the air conditioner, then, like his counterpart in the United States, waits patiently for his tip. The room is small, there is little furniture and the beds have no mattress to compare to those which we use. They are extremely narrow and extremely hard. It is rumored that the beds of Israel toughen her soldiers. Night falls suddenly in the desert. After a hard day's driving and visiting chemical plants, one has little trouble falling

asleep.

"Boker Tov!" You get this greeting from the grinning young man at the desk; from the chamber maid who is North African (Israelis other than those from North Africa would prefer to die than to make beds and serve meals); from the good-looking young lady pouring tea. She supervises a buffet consisting of green olives, tomato, bread, cheese (two kinds), eggs (cold hard boiled and not hard boiled), butter and pickled herring. I reply, "Boker Tov!" and carry my laden tray to one of the tables where DSW personnel are sipping tea or coffee.

These men may be from the potash plant or the bromine plant, both located in S'Dom, about 40 miles from Beersheba. They go to work early, because the heat in S'Dom is intense and the driving uncomfortable. Some are workers from the methyl bromide plant, or the general products plant — and some work for Machteshim, which is a very large chemical plant producing insecticides. Their director at the time was Zwi Zur, whom I had met at General Makleff's home. Always there are management people from the Potash House, which is the nerve center for DSW. They are young and handsome. All of them smoke. There are no women. They chat in Hebrew, but when someone catches my eye they shift to English. You feel warm and happy.

There was complete liberty to do as you chose on the consulting trips. On my first visit, after visiting the plants and meeting the people, I drew up an imposing list of suggested changes. Everyone nodded and agreed that the suggestions were logical. Nothing was ever done about them, but for that matter most of the plants in the area have been moved south of Beersheba and although I have not visited them, I am confident that they are safer.

In the morning I would get up early and walk around the gardens of the Desert Inn, with the Negev Desert as a not too distant backdrop, an assortment of colors predominantly yellow. The Negev, except in the rainy season, is severe and desolate, but the range of hills overlooking the Dead Sea and the Mountains of Moab, on the other side in Jordan, are lovely yellows, reds and purple. Sometimes one sees bedouin grazing their herds to the very edge of Beersheba. Usually I would take a swim, often as the only swimmer, and then off to the Potash House to start my day. It is quiet. Only in summer when tour groups come to the hotel is there any noise.

The labs open early, and because I have a company car, I would visit Dr. Epstein and Reuven Zaharia and then the director, Dr. Nitzani, and the sales manager, Ariel Ginsburg. Usually I would then

try to visit Dr. Rudy Bloch, the world's authority on salt, who had his own offices at the Arid Regions Research Laboratory, which is close by. Then I would drive to the Methyl bromide plant and chat with Israel Sachs in their labs. Alas, they have now moved the labs further south and my friend Sachs is presiding over the production of a vitreous enamel business in the suburbs of Beersheba. Sometimes I would join a group of workers going down to S'Dom for the early shift, or, if I were lucky, I could drive with the director, Abraham Shamir. There was always someone to talk with. The secretary, Ora Taranto, was Egyptian and very bright. She helped me with my reports. Sometimes I would see General Makleff or the treasurer, Shaul Tchetchik. Sometimes I would have a chat with Ted Weil, who had left FMC to join our labs, or the Yemenite gardeners, or the old man with his heavily laden donkey, or two astonished bedouin whom I greeted with a hand wave and honk of the car. There was an intoxication about the sky and the clean air and the wild west atmosphere of Beersheba, and I loved every minute of it.

I say the sky is cloudless. It is almost all of the time except during the early rains and "latter" rains referred to in the Bible. The exception is Chamsin, or sand storm, which makes it impossible to see, and lasts for days.

Sometimes I would leave Beersheba and drive to Ashkelon, Ashdod, and even Yavne. It would be early afternoon and I would be excited for each trip was an adventure, back through time and into a country duplicating the landscapes of Cezanne and Van Gogh. Then I would be at the sea, the Mediterranean, completely timeless, impersonal, the beaches without footprints and covered with brightly colored shells.

Often on my trips to Israel, I would be accompanied by a fellow Columbian. A close friend for many years is Oscar Seidenberg. When my stepfather, Mr. Seideman, died, Oscar joined me for the 11 months of kaddish, the prayers which are supposed to be said three times each day for a father or mother. He was eager to come to Israel, and his enthusiasm was contagious. It was fun to take him around and introduce him to friends. We stayed at the Desert Inn; he loved it, relished the food, made friends with the waiters and the people at the front desk, and took lots of pictures. I brought him to the Potash House and introduced him to Enzo and Ariel and the other people there, then took him to the potash plant in S'Dom. Shamir, one of the oldest executives in Dead Sea Works, who, like General Makleff, had fought in the British Colonials, took us for a tour.

They put a helmet on Oscar, and he clambered around the

high platforms and storage tanks, entranced to be in Israel, delighted to be accepted as a friend. Josie Epstein gave a party attended by chemists from the atomic energy plant at Dimona, where the Israelis have their reactor.

There were lots of bright scientists of all ages, plenty of food and schnapps and everyone chatted with Oscar, welcomed him to Israel, and made him feel at home. Evening parties in Israel are warm and friendly, with kids coming up to be stroked and the older boys and girls listening from adjoining rooms. Oscar put on his yarmulka, which is a skullcap, and asked Josie if he could offer a prayer of thanks. Incredulous, the young scientists put on yarmulkas, and Oscar prayed fervently, everyone joining in the "Amens."

Next day I visited the labs and Josie remarked how much everyone liked Oscar. Later that day I took him with me to visit Dr. Galun at Zion Chemical Company in Yavne, between Ashkelon and Ashdod. We had a company car, there was almost no traffic and could see new settlements, forests and the ocean when the road came close and the trees thinned. We stayed too late, ate too much and were sleepy when we left for the trip home. It was a lovely, star-filled night and, while chatting we drove out of Israel and into the Gaza strip which at that time was bounded by fences of barbed wire. As we backed out, Oscar commented that signs reminded the indiscreet that the area was mined. Thoroughly alert, we took the back road close to Nir Yizhak and within an hour were once more in Beersheba. I would revisit Nir Yizhak 12 years later when they built a large chemical plant. Oscar returns to Israel from time to time and has been an asset to their tourist board.

On the way to Israel I would often stop off in London and visit Palestine Potash, which acted as a wholly-owned sales agency. At the time, its offices were at 62 Pall Mall, in Picadilly, not far from Trafalgar Square. This is theatre district and close to the Royal Palace, so there are always lots of tourists watching the scarlet-bloused guards on patrol. Leonard Monk, the director, intimated that they guarded not only the queen, but Palestine Potash as well.

In the early days I would stay at the Regent Palace, a splendid old hotel in the heart of Picadilly. It has a lovely lounge, excellent small dining rooms, air conditioning (in the lobby), and no private baths. Later I learned that the Chemists Club of New York City had a counterpart in London with which it enjoyed reciprocity, so for several years I would stay close to Charing Cross and the Thames. The fine old building was shared with the National Liberal Club so one could see life size paintings of Winston Churchill and other famous

members of Parliament.

Actually the Dead Sea Works had its beginning at 62 Pall Mall when Leonard was a young man. It was here that the Russian mining engineer, Novamaisky, had his headquarters during the ten year fight with the English government for the right to mine the Dead Sea for its mineral content. His history was fascinating. The family had been exiled to Siberia, like other political dissidents. Such was his father's ability as a mining engineer that he made money in this bleak area and was able to send his son to Germany for an education. Novamaisky observed that the mineral content of rivers and lakes was richer in winter when much of the water separated as ice. He theorized that anything which removed water could aid in mineral recovery, that evaporation was as effective as freezing. He looked around for an area where there was sustained evaporation and found it in the Dead Sea. The Jordan flows into Lake Tiberius and from this lake it passes into a *cul de sac* from which it cannot escape except through evaporation. As it flows through the country it dissolves mineral matter from its banks and the solution evaporates gradually in the Dead Sea with the logical precipitation according to solubility such that the first thing to drop out would be salt which is the most abundant and least soluble of the dissolved minerals.

Novamaisky had available a gigantic chemical mine of dissolved minerals with solar energy available to facilitate the separation. His tests indicated that as the salt dropped out the water became richer in potassium and magnesium chlorides. He appealed to Britain which had mandates on the "Holy Land," and after many years of tireless effort he secured a charter to built a plant and extract the valuable constituents from the brine. His struggle to secure these rights is told in his autobiography, **Rendered Unto Salt.** Somewhere I have one of the remaining copies. Monk, a jolly, ruddy faced man with blue eyes had worked under Novamaisky.

His associates in the London office which handled almost a third of the overall business of Dead Sea Works included Gordon Osborne, George Bebell, and the very efficient secretary, Mrs. Evans. There was another lady who handled the telephone and two young secretaries who giggled. The offices were on the fourth, fifth and sixth floors, reached by an ancient elevator, that sometimes stopped midway, producing a moment of panic for me, but taken very much in stride by whoever was trapped with me at the time: "I say there, the bloody lift has stopped" then repeated after an introductory "Can anyone help us?" Usually we jiggled the switches and the old "lift" would start after a few jerks. Arriving on the fifth floor,

I would go straight to Leonard's office, to be joined by Gordon, and Mrs. Evans would bring in tea.

Gordon is tall and slim and a few years younger than I. Like Leonard, he has white hair. I am convinced that this was a result of their occupation, the transport of bromine from Israel to the UK. Bebell himself, then a youth, was showing a bit of gray. Gordon's pipe was always lit and accompanied him to Holland and Beersheba, and to his bathroom and bed I presume. he had worked with the British firm, Berk, which makes pharmaceuticals and bromine compounds, before joining the staff of the Dead Sea Works. His supervisor at Berk was the well known bromine chemist, Jollies, who book is classic. Gordon's main job for the moment was directing the small production plant in Holland. Through long, lazy afternoons, Leonard, Gordon and I would discuss the production and sale of bromine compounds, and they would fill me in on what was happening to the various colorful people we knew:

"You do remember your friend West. He has gone into the soap business with Tchetchik's friend Yadgarov. It's a question who will toss the other into the cooking pot first. They really don't like each other."

I always learned new chemical tricks from Gordon. He interested me in halogen exchanges catalyzed by aluminum chloride.

We had a problem at Columbia Organic Chemicals making the compound 1-bromo-2-chloroethylene. When we got the order, I checked the literature and found that the only reference involved halogen addition to acetylene in low yield, usually with accompanying explosions. This was obviously not a way to make it for our labs. Using techniques suggested by Gordon, I heated a mixture of acetylene'tetrabromide and acetylene tetrachloride in the presence of aluminum chloride, washed the product which was a mixture of bromine and chlorine derivatives of ethane, and dehalogenated. The desired bromochloroethylene was obtained in excellent yield by distilling the mixture.

From Gordon I learned to react molten phosphorus with an alcohol and bromine to produce the alkyl bromide. Gordon made a number of alkyl bromides in their plant in Holland. I visited Wierden and saw the production myself. He had a No. 1 man, Mr. Fixeboxe, whom I planned to "Shanghai." I also met Gordon's old boss, Dr. Jollies. He reminded me of my teacher, Dr. E. Emmet Reid. Both were aging but neither had lost interest in chemistry. They were eager to impart what they knew in the time they had left. When I met him Jollies was sitting alone in one of the small rooms in the Potash

House. No scientists had cast themselves at the feet of this genius. They were too busy with other things, and the old man was content to stay should anyone think up some problem for him to answer. Unashamed, I sat on the floor at his feet and said, "Now you know what it's like to be a Socrates," and he bade me sit down in the other chair, lit his pipe and talked for an hour, every word meaningful. He had forgotten more bromine chemistry than I would ever know. I spent the afternoon with this kind, gentle, knowledgeable man, happy in the land of his fathers.

Indulgently he spoke. "There is much knowledge, Max, and gradually they will learn it all!"

The third man in the London office was George Bebell. He was indulgently referred to as "the clerk." I am sure neither Leonard, nor Gordon ever knew the torture this inflicted, for George was a clerk in title only. Actually he was a Napoleon of the Pall Mall office, running an impressive empire. Having spent much of my life handling the details of a small chemical company, I could appreciate George. It is hard to find good chemists. Good businessmen who know chemistry are even rarer. George was an excellent manager who ran an orderly office with the help of the ubiquitous Miss Evans. This lady, having never married, showered her love on Potash and Chemicals and was prepared to die for it if necessary. Even the Israelis, who invented the wheel and do not need instruction for they already know it all, were impressed and she would survive the "Ragnarok" which would retire Leonard, pack Gordon off to the island of Gurnsey, also retired, and isolate George as the president and half of the staff of Anglia Chemicals.

As a consultant for Dead Sea Works, I was a member of the family and used this office as headquarters from which I sent and received cables and telephone calls, entertained guests, enjoyed tea, and admired the two young ladies. My friend Bebell explained to me how they handled the large shipments of bromine and distributed it and bromine derivatives. Behind his inscrutable face lurked an entrepreneur, and I suspected he had a second job.

The London office sold slag, a dross consisting mainly of cryolite, as a side line, which had nothing to do with BCL or Dead Sea Works. It made money. The slag by-product from Scandinavian smelting operations which had earlier been discarded, found a use in the reclaiming of aluminum. In a molten state it floated off the pure aluminum leaving the denser impurities. There was an excellent market in the United States, selling almost all that could be obtained. George was in charge of this venture and eager to find other

sidelines. I would listen to him and keep an eye on his secretary, Nargish, typing in the adjoining office.

Normally we ate at Raymond's Revue, which was a private club. It catered to the tired businessmen with steak and nude women. The meat was excellent, and the floor show consisted of bumping and grinding British girls in the buff.They twitched and turned and thoroughly enjoyed themselves, while keeping up a conversation with regular patrons in the front row. The three aging businessmen in front, Monk, Osborne and Gergel, always got special attention, since we arrived early. We got waves and extra "bumps." They knew our names and would come down from the stage and caress Leonard's hair. It is diverting to have an absolutely naked woman cut your steak and serve it piece by piece. Visitors from the states would sometimes come with us and would sit entranced, a morsel of meat unattended on their forks. My friends continued chatting and eating, even stealing tidbits from the plate of the distracted visitor. This was the early 60's and people were less jaded. Raymond's was delightfully naughty, and the food was good. We told visitors that the entertainers were oversexed University of London coeds dancing for kicks. Gordon, swearing me to secrecy, confided that Leonard once, in his cups, had danced with one of the girls on stage.

The main product sold by the London office was bromine. This was shipped from Israel in large lead containers called "gosslers," and it was used mainly in the manufacture of dyes and pharmaceuticals. They also sold ethylene dibromide, called EDB for short, which is used with lead tetraethyl in the so-called leaded gasolines. Lead normally deposits in elemental form in the exhaust manifold at the tail pipe of automobiles. The EDB converted it to lead bromide as an impalpably fine dust. The London office made money for DSW and General Makleff always liked for me to visit. Then Leonard retired, and Gordon had to manage both the operations in England and on the continent. Bebell quit to try his luck at running a buy-sell chemical agency, and the office moved from 62 Pall Mall. By then, I was no longer consulting for the company.

The most profitable item at Dead Sea Works was potash, used as a fertilizer and to a smaller extent in explosives. They also produced elemental bromine and such derivatives as EDB. The largest customer in the UK was Imperial Chemical Industries, which bought bromine and EDB. During the shortage period of 1974 when Israel was preoccupied with the Yom Kippur war, ICI needed ethylene dibromide and Israel could not supply. They were under contract and while ICI was sympathetic with its supplier, hurt by the war that had

taken most of its work force, they could not run their factories on friendship. Dow, the largest manufacturer of EDB, was prepared to fill their requirements if they would sign contracts. Monk, Osborne and Bebell seeing the complete loss of this big account decided to try to import from the U.S., and formed a company, Albion Chemicals, to import from its friends in America. I undertook to obtain their requirements, assemble purchases in containers for on deck shipment and handle the paper work and credits. The two U.S. producers aside from Dow were Michigan Chemical Company and Great Lakes Chemicals. We prevailed on these people to supply a brand new company with a commodity already in tight supply. We purchased a 40-foot, tandem-axle trailer, gave it a neutral logo, and placed orders where we could. The product was dispatched to Charleston, South Carolina, or Philadelphia. We made little money but ICI got thier EDB.

I always marveled at the calm of my friends in London, who handled bulk shipments of bromine, which is so dangerous, and co-existed with the Israelis, who are seldom calm. Monk, Osborne and Bebell were urbane, and always pleasant. Their reaction to such emergencies as leaking containers was remarkably low key. They lost their "cool" when they dealt with my friend, Frank West. To introduce Frank, and explain his relationship to the London office, I must retrace history and bring in my friend Seilles.

Chapter 14

In a suburb of Paris called Antony sur Seine, there was once a chemical company run by Dr. Jean Seilles called Syntheses et Catalyses. I do not know whether the company still exists and what has happened to Seilles. Quite possibly he has retired to the sun-kissed mountains of his beloved Greece, or perhaps he is in Paradise, discussing fluorine chemicals and his war years in the Maquis with Frank West.

Seilles, pronounced "Say I," was tall, slender and white-haired. He had hawk-like features, bright eyes and a soft voice. I was visiting Paris with Peggy, when she and I were much younger.

She was so pretty that my friend, Henri Najer, remarked, "Max, men simply don't bring girls to Paris, for our girls are so lovely, but Peggy is the exception. Does she have a sister?" Seilles was waiting for us in the lobby of the Henri VII, a small hotel on the Rue

de l'Opera. His English was better than my French, and he had brought his consultant, Dr. Dat Xuong, who spoke English quite well but was diverted by Peggy's leg, slim and lovely; charmingly exposed by the slit in her skirt. I told these men all about Columbia Organics and how we could work together but I had only superficial attention. Peggy had fallen asleep on the couch. The waiter had placed a little table beside us with wine, fruit and a single rose.

We were tired from a long trip, my first to Europe, and had visited Belgium, Amsterdam, Switzerland, and Germany. France was our next to last stop. We had visited the Louvre, the Arc de Triomph and made an evening boat trip on the Seine. Robert Français, a journalist, had taken Peggy shopping, and now we were visiting Seilles, who was the leading producer of aromatic fluorine compounds in Europe. Now Peggy yawned, and my guests nearly collided filling her glass. She told them she was French on her father's side and Irish on her mother's side, and they thought this charming — and we all went to the Lido for dinner.

I saw Jean many times during the following years. After my first visit, I traveled alone and would meet with him in Antony or with Dat Xuong at the French Atomic Energy Commission where he worked. Dat Xuong was a friend of the famous Buu Hoi, and he promised to introduce me but Buu Hoi died before we could get together. Normally we talked "shop," and I knew little of Jean's early days.

It was ten years after our first meeting. We were sitting over drinks at the end of an evening. Seilles talked about his war years. There had been an encampment of German troops outside Lisle. A bridge brought their supplies and Jean, his brother, sister, and two Maquis friends planned to blow it up. They needed plastic explosive and sent a message through the underground to the British. A drop was arranged and the parachutist who brought the explosives joined their mission. They destroyed the bridge but Jean's brother and sister were captured and killed. The parachutist was Frank West. I had heard of him years later when he was a chemist — and a legend.

When Algeria was released from French supervision, those colonials who had lived there for generations were threatened with the loss of their homes and farms. Under the fascinating General Salan, a veteran of wars in Indo-China and an opium addict, they fought the Arab and their own French army. The remnants came back to a France they hardly knew. Jean married an emigre Algerian girl. I visited them twice but then lost contact.

I decided to meet Frank West. He was a chemist, living in Yorkshire, but people seemed reluctant to discuss him. Yes, they

knew him but were vague as to his address or what he was doing. It was Phil Koch of Koch Light Laboratories who told me Frank was in prison! I secured his home address and wrote asking if he might be able to meet me. The short, burly man in soiled leather jacket had traveled by bus and was very tired.

"It's cheaper Maxie," was his only comment.

We were at the Regent Palace, which Frank told me was a hotel with plenty of action. This I already knew, for I had broken my record the day before, one which had endured for 40 years. Never before then had I been solicited. As a chemist, I must exude some odor that serves as a reverse pheromone.

Leaving the hotel for my rendezvous with Frank, a representative of the "world's oldest profession" stepped from the shadows, asking, "Can you spare a working girl a light, dearie?"

My inquirer was at least ten years older than I. I gave her a lighter and a ten shilling note — in appreciation.

I recognized Frank at once from the pictures, the broad Yorkshire face, the acid holes in this shirt — the badge of the working chemist — and above all, his odor. He had obviously been working with indoles whose odor persists. He had a gamey odor. People pulling up in shiny limousines cautiously sniffed. A bell hop checked the trash cans and looked fiercely at a little dog on leash, which, sniffing in turn, snarled his indignation.

A young man in black pullover said, "How about it, Uncle, short of soap?"

This was the famous Frank West.

He told me about his small chemical company in Otley, which is close to Glossop, where Mike Stevenson has Fluorochem.

"Yes," he told me, "I know Mike very well."

Frank knew all the chemical entrepreneurs in England and on the continent. He told me stories about them, and then freely discussed his experiences. He had served in the RAF as a paratrooper, in the desert against Rommel, and again in Burma, this time with Orde Wingate and his Chindit native troops. For all his brutal war experience, Frank was mild and soft spoken.

"It's good to see you, Maxie, after all these years."

We drank beer and he told me about his experience with phosgene.

Frank, no longer young, financially unsuccessful, a one-man business, himself the businessman and also the chemist, took an order to produce a phosgene derivative. Frank knew very little about phosgene. He purchased three cylinders of this deadly gas and set

up shop in Otley to react it. Phosgene is reported to have the odor of new mown hay, but I never smelled it, and in fact its toxicity is such that a few whiffs can do you in. We meaure toxicity as a function of animals slain per given time. This ratio is called the LD. The "lethal dose" or living/dead for phosgene is low. In short, the test animals are "kaput." It should be treated with the respect an explorer gives a krait. Frank is a disciple of the attack-and-then-get-the-hell-outa-there school, and he was more concerned with how much money he would make than the danger of phosgene on the fateful day.

Reactions involving this gas are carried out in a hood. A hood is a glass closet in which one confines chemical reactions which may misbehave. The hood is excellent for preserving eyes and avoiding facial scars.

"I have no hood, and no exhaust fan, and I never used them and never will," Frank told me as he pulled a rope, whereupon part of his roof collapsed that let in the North Country cold and rain. Then grinning he pulled another and the roof pulled together, albeit leaking badly and sending a small shower on his desk covered with bills and unanswered letters.

Certainly Frank did not use a hood on the day he ran his phosgenation. He, like most chemists, probably had an enlarged and over-functioning liver which routinely handled toxic substances, but the young man three houses away who died was not so fortunate. This was before Frank had installed his exhaust system which then piped all gases into the sink! Phosgene being heavy would theoretically go into the plumbing, and Rank did not bother to check on where the plumbing might vent. His gases found their way through the village mains and via the kitchen sinks into the houses on his block. Given enough time and enough phosgene, Frank would have decimated Otley. When the young man mysteriously collapsed and the inspectors smelled phosgene, about which they knew as little as Frank, they hurried to his premises where he denied everything, including any knowledge of how to handle phosgene poisoning. The young man died while Frank, thoroughly alarmed, trundled the phosgene cylinders into the forest and buried them. This went badly for him at the inevitable trial. He was detected, questioned, tried, found guilty, sentenced and imprisoned. Had it not been for his war record, he no doubt might have been hanged.

"Rum go of fate," he shrugged off the incident.

By coincidence my friend Howard Kastner was visiting London, and we invited Roden Bridgwater, making four of us. All knew Frank and were delighted to see him. We met in Howard's

room, which was larger than mine. Howard had set the table with sandwiches and beer.

Frank confided that he was temporarily low of funds. "A large check has been posted to me and will arrive in a few days."

I made a small loan. To assist further, Howard offered to share his room with Frank for there were two beds. The one window faced an open courtyard, and beyond this was another wing of the hotel. We were chatting about chemical experiences, when we noticed that Roden and Frank were at the window. Abandoning beer and sandwiches, they were staring at something across the court. In the twilight of late summer, the lighted window revealed a lovely young lady with long blond hair, who was applying lipstick unaware of the audience. She was naked. We maintained breathless silence. The assault of eight eyeballs must have penetrated her consciousness for she looked over, waved a hello, threw a little kiss, and pulled fast the drapes. There was a gasp from the four fathers and family men. We then returned to food and conversation.

I decided to introduce Frank to Gordon and Leonard at the Dead Sea Works for I felt sure that he could help with his knowledge and contacts. Because he was a fascinating conversationalist and had knowledge of so many unusual places they might even use him in sales. When I visited Pall Mall, next day, he came with me and while they had not heard of him, they mentioned odd jobs he might perform. The next day they made him a consultant at a small monthly stipend. I warned them privately, never to give Frank credit or have him collect bills and never send him merchandise on consignment. They were fascinated with his war stories and overlooked my parting words, "Frank has a weakness for ready money."

Eight months later I was back at Pall Mall. There was coolness in the greetings — a reluctance to chat.

I asked them what was wrong, and they said, "Max, why oh why, did you introduce us to Frank West?"

I grasped at once what had happened during the time I was away. Frank, a charmer, had persuaded them to let him sell chemicals, and had also received chemicals on consignment. He had sold the chemicals and consignments and pocketed the money. When they presented a bill, he did not pay. When they sent a statement, he ignored it. When they telephoned, he was out. When they had someone else make the call, Frank was in, but remembered engagements when he discovered that it was his creditor calling. Reproached, he assured them "that the check was in the mail." It wasn't.

With the audacity of the con-man, he told them of the illness of his wife, catastrophes in Otley, and a recurrence of pain from his war injuries. He suggested that they ship to his customer and bill the customer and simply credit Frank. The customer was Frank — at a different address and under a different name — and he was "into them" for more. He apologized, promised restitution and had them ship a large batch of material to a well known major company. They did, and billed. Frank's bill, sent simultaneously and offering a 1% discount for prompt payment, was paid — to Frank, and the amount they had been taken for was now truly large. They telephoned, and his telephone was disconnected. At some cost they arranged for a messenger to visit his house and laboratory. Both were boarded up with notes that the occupant was on an extended trip to the Greek islands.

I gave them the bad news as gently as possible. They would ultimately run Frank down. He would have good excuses. They would threaten. He would lament. They would sue. The court would find him destitute. They would lose their investment. Underline. They would lose their investment.

Once more they started the "why oh why did you introduce us?" routine. I told them that they had been warned and had not heeded. Frank meant well. He was, in fact, a Robin Hood of the British Chemical Industry. He took from those who had, as for example Dead Sea Works, and its saucy abbotts, Osborne and Monk (this did not go over very well) and gave the money to the poor, i.e. Frank West. I comforted them by telling them they were not alone. He owed me, Kastner, Bridgwater, Koch Light and everyone who sold chemicals. They had lost a little but at least they had lost it to a crook with elan! I then produced Frank who was loitering in the hall. He shook hands, and told them he was expecting funds from the estate of a rich uncle who had died in India, and he was planning full restitution. They had to laugh at this gall, and offered to sell him chemicals for cash. He declined politely, saying he only dealt with firms who sold him open account. Bebell told me that the new Israeli directors who replaced Monk and Osbome, and ultimately Bebell, went wild over the several pages of unpaid bills assigned to F. West, Yorkshire. By that time Frank had died.

Through his experience in India; where he had commanded a platoon of Gurkhas, and because of the gratitude of an Indian officer whose life Frank had saved, he was invited to visit the region of India called the "Ran of Kutch." They wanted someone who could help them build a plant for extracting bromine from their "bitterns" and use

this for making bromine compounds. Frank's expertise had been obtained as a visitor to the London library and to a limited extent from conversations with Bebell and Osborne. He had, as we have seen, an ample supply of gall, and, full of enthusiasm, he worked in his home with borrowed tomes, and accumulated an impressive folio of notes. On invitation, I visited Otley and he told me about the rescue, the gratitude and the offer. He gave me an ear collected by one of his Gurkhas — they were paid a bonus for kills and these were verified by collecting ears.

Frank showed the letter to the Indian government, in which he told them he knew everything about bromine production and the manufacture of derivatives; that he was a friend of the eminent (!) bromine chemist, Max G. Gergel, who was prepared to come with him to India. He said this would not cost any extra because I already consulted to Dead Sea Works, and getting pay would represent a conflict of interest. That I was willing to go along and help for love of my fellow man — but he, Frank West, had no connection with the Dead Sea Works so that they could pay Frank extra and pay me nothing! I was in the presence of a master. I stared at the old scoundrel, but he was watching something outside the window and avoided my eye. He came to life.

"Do it for your old friend, mate. Jesus, this is my chance!"

I told him that I would be glad to help him with information but I could not join him in this adventure. We spent the evening discussing "bitterns," the peculiar salt marshes of the Ran, and how they might be pumped hot into Kubierski's with chlorine running countercurrent. Frank made notes and ultimately went to India, spent two months in the Ran, and helped start the construction of a bromine plant. The next year they invited him back, and he again asked me to go, and even offered to pay my fare. I asked instead that he pay his bill to the London office. He told me the check had been posted that very day. But it never arrived.

Frank's life was always feast or famine. When he returned from India he had lots of money and bought a lovely new automobile shortly before I was to arrive in Glossop. He offered to drive me to Crewe where we have a friend, John Blundell. We backed into the highway in front of his home, and into an oncoming bread truck which was demolished; he told me with resignation that he had paid cash and had not gotten around to insuring. We drove to Crewe in his old car. Then after several explosions in his chemical laboratory, the town council of Otley evicted him. He moved to Ilkley and proceeded to pollute a new area. England was in a recession and Frank's financial

condition bordered on the desperate.

Ever resourceful, he decided to sell rodenticides, having noted that Ilkley had an abundent rat population. He was soon famous as a 20th Century Pied Piper. Now Frank's knowledge of rat killers, like his knowledge of bromine chemistry came from books. He "borrowed" the formula and label of a popular British product, Rentokil, and manufactured it himself — changing the name to Westokil. His *modus operandi* would be to visit a business establishment, bait and kill the population of rats, and leave several bottles of his product for mop up. Word of all this inevitably reached Rentokil and they must have been apoplectic when they beheld the crude labels on second hand bottles (Frank cut corners) at a price substantially lower than their own.

In a short, conservative letter to Mr. Frank West Esq., they asked that he cease and desist. A postscript threatened that failure on his part to abide would lead to judgment in a court of his peers. The unrepentant Frank West, Esq. showed me the letter and his reply. I will repeat as best I can from memory the letters.

Rentokil's said, "You are using our formula, copying our instructions, and duplicating the analysis we place on our bottles, producing a shoddy product and selling it at a reduced price."

They went on to threaten.

Frank's reply was typical. "My dear Mr. ——. Returning from a tour of the Balearics, I discovered that my co-worker, a man whom I knew for years and trusted, under financial pressure caused by the departure of his wife, used my laboratory and other facilities to do the mischief you have reported. He has disappeared, but the authorities are looking for him, and when he is found he will be severely punished."

"Come with me Maxie, and I will show you my breeding stock," Next to the office was a small room containing many sets of shelves and hundreds of cages. Small alert faces peeped out at us. Frank was breeding rats!

"I visit a community before I do any selling."

He abandoned this activity, for he discovered a larger and more lucrative quarry. Through me and through the London office of Dead Sea Works, he met Marlo Yadgaroff.

Marlo was a friend of Shaul Tchetchik, the treasurer of Dead Sea Works. He was about my age and like me, inclined to stoutness. He had eyes like marbles and was very cunning. he had a mania for gambling and every night lost most of the profits of his soap company. This was on the outskirts of London and had been

purchased for Marlo by his daddy who hoped this would make him settle down. It simply supported him, and all that was left over went to the private clubs.

The factory was on the outskirts of London. It was a grim old building terribly cluttered with open soap vats and no guard rails. He worked Lascars, and because the floors were slippery, it was intimated by people who knew him that the payroll was kept low by employees falling into the vats; this would have the effect of increasing the amount of soap. Learning about Frank, he hired him at once and business that had been bad got worse. Continuing to gamble, he was persuaded by Frank to take a vacation in Israel — to "shake the habit." When he returned he was bankrupt, and somehow Frank had been appointed to manage the business. Frank creamed the assets, sold the hardware, electrical wire, junction boxes, vats, forklifts — in short, everything. Now, once more in funds, he purchased a new automobile.

I got the story from Bebell on my next visit to the London office. By this time Leonard and Gordon were resigned to the loss of their investment and had grown rather fond of Frank. With the bulk of his loot from the dismemberment of Yadgaroff he purchased five tons of bromine, which he planned to ship to India. The purchase order and letter of credit required that it be shipped in small bottles. Few caps will withstand bromine, and I do not think Frank had given consideration to packing costs when he made his bid.

Bromine is vicious. I have a scar on my left hand from a chance contact. This element reacts avidly with paper, wood, metal, and especially with crates produced by the now desperate entrepreneur from Ilkley, who had to buy bottles, fill them with this vile stuff, and melt lead to make caps.

He had shown remarkable ingenuity in preparing proper containers for the bromine. Now with what amounted to genius he put the bottles into boxes and foamed in polystyrene! He then foamed the boxes into cases. It was a neat and safe pack, and should have made it to India. They did not. Frank told me his version of what happened, and Gordon another in a long distance call from London to Columbia in which he said that I certainly shared the ancillary responsibility for what had happened — since if it were not for me they would never have met Frank!

After packing the bromine into the little bottles and sealing on the lids and putting the bottles into the inner boxes; after extruding foam and putting the boxes into larger ones with the sides foamed in,

after doing all of this, Frank rented a lorry and started to drive to Liverpool, carrying enough bromine to suffocate the city. As it was late at night when he arrived, he left the boxes and the required bills of lading shipside, and drove back to Ilkley. He planned to get some rest, return to Liverpool the next day, pick up the signed bills of lading, go to the bank and get his money, and depart for the Isles of Greece. When he got home that night, there was a call. It was the keeper of the docks telling Frank to come back in a hurry.

It seems that a crane, specially designed for lifting wooden boxes dockside, had suffered mechanical failure, and while lifting one of the crates, had banged it against the side of the ship, breaking the box, and spilling the contents against the vessel. On the dock, everything got badly brominated, including the crane operator and four reporters who always come to alarm the public. The personnel of the ship left in a hurry. Poor Frank had been dealt an undercut by fate.

He was able to spirit away most of the boxes; he denied ownership of the damaged container and hurried home with growing fears for his fate and the fate of the letter of credit he was holding. As he left Liverpool, the chemical warfare people moved in with their equipment, and a loud speaker brayed a call for Mr. West to report to the harbormaster. Mr. West was heading out of the dock area as fast as the old truck would move.

When Frank told the story later, he claimed that the harbormaster was prepared to give him the ship and part of the Liverpool docks if he would take the crates away. The reason Gordon was apoplectic and called me long distance? Frank had told the harbormaster and the press that he was simply an agent for Dead Sea Works and that they should send the total bill to 62 Pall Mall. He had stamped the boxes, "Product of Dead Sea Works."

When I saw Gordon and Leonard next trip, their hair had turned snow white, probably from the cables reaching them from Israel. Frank assured me that he had a lawsuit pending against the crane operator, the owners of the dock, and the shipowners. He told me he planned to "make everything right" with Dead Sea Works when they settled. He asked me to inform Gordon and Leonard since they would not speak to him. When I told him I needed to visit Sheffield to see John Blundell, he offered to drive me, because, by coincidence, he was now working for John as a consultant. The owners of the truck he had destroyed had paid for his car.

There is a much traveled road to Sheffield and Crewe where

Crewe Chemical is located and Frank made a wrong turn and, realizing his error, backed into the main road destroying another van. There was an exchange of telephone numbers and insurance agencies, and we left the wrecked van, our car almost unhurt except for the loss of rear bumper. "Bloke is completely insured," said Frank. "Takes all the blame."

Frank knew everyone and delighted in introducing me to his friends. I have spent pleasant evenings with him and Yadgaroff who, though knowing Frank was consuming his assets, "somehow liked the man." Frank told us, "If I don't prevent him, Marlo will gamble it away!" Through Frank I met Mike Stevenson of Fluorochem, John Marriott of Organic Specialties, and Maurice Elton at Shell. These people liked him and accepted him with his faults and virtues. I recall an evening with Frank and his enormous friend, Benny. Benny made carcinogenic compounds, which Frank retailed. He told me that his body weight absorbed the toxins. He died a few weeks after our get-together.

Frank would drive down from his home in Ilkley (he had moved from Otley) any time I was in England. Once he came in a blizzard. It was important that we be in Glossop the next day, so Frank stayed up all night warming the motor with a blow torch. I did not know, thought he was asleep in the next room, tapped at his door at dawn, and went to look for him. The torch had run out of fuel and Frank was asleep in the snow. Nothing daunted, although it was pitch black and the snow was still falling, he set out on foot to get help. He and the repairman were able to crank the car. The repairman thanked me for the help I was going to give his brother in getting a visa. Frank had told him that I was the Vice Consul at the U.S. Embassy.

I was traveling through Scotland several years later with my wife and Howard and Meriom Kastner. We had visited a dozen towns on the tour bus, spending nights in quaint inns, which served good but plain food. We were in some remote portion of the North, when the bus driver came to our room to tell us we had a visitor. The visitor was Frank and his wife. They had driven half way across Scotland seeking us. They stayed for hot tea and a chat and then drove off into the night. I would see him one more time, in Manchester. He had a new car and drove us from Glossop. We ate at a Norwegian sandwich shop which served exotic cheese and fish, and when I went to the register to pay they told me I was the guest of Mr. West. "I'm in the chips, Maxie." This was the last time I would ever see Frank.

He spent his final two years with Blundell, a man as kind as

Frank. Blundell tried out all of Frank's ideas and this cost him plenty, for Frank was good at thinking them up but most did not work. He lived a story book life, regularly visiting Crete and the Greek islands. "Fought the huns there." He knew many languages. At Verostrami's one night he amazed the staff speaking to them in Hindi, Punjabi, Gujarati, and finally Urdu. He ate hot peppers saying they were too mild. Sturdy, full of life and plans, undaunted, he keeled over with a heart attack.

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I consulted to Dead Sea Works for four years and then another four years to its New York office, while still visiting Israel. Gershon Segelman, who had recruited me originally, headed the New York office, and when he went to work with Miles Laboratories, I worked for his successor, Chezi Rappoport. Chezi was a tireless salesman and an entrepreneur.

Our first achievement was tightening up distribution, for at least one of our representatives used Dead Sea Works products as a "come on" and then supplied that which gave him the most profit.

Then we challenged a restrictive tariff which had been applied to methyl bromide brought into this country for fumigation of tobacco beds. The tariff people, following the letter of the law, wished to classify it as a coal tar derivative on the basis of the addition of a small amount of chlorpicrin as a warning agent should a container leak on ship or while it was being transferred to a customer or to our warehouse. The amount was very small but enough to identify this highly toxic gas. We won.

Chezi was impressive. He was a large man and regal. He had vast dignity which impressed our customers and a surprising amount of chemical knowledge for a man not trained in chemistry, which impressed them more. He also had a sense of humor and connections. One of his friends, Mashulim Zonis, an Israeli who worked as booking officer for the Norwegian-Caribbean Steamship Company, whose Starward and Skyward cruise ships were popular floating hotels, permitted us unbelievably low rates on trips we made to Nassau, Puerto Rico and Haiti. When I had a chance to supply BASF acrylonitrile for some of its customers (when they had strikes in a producing plant), I called on Chezi's contacts and we were able to make my old friend, Herb Ende, happy, and make a profit for ourselves.

We made a trip to Canada together. Our host, at MacKenzie, had asked us to go to a conference room upstairs. As we climbed, I said, for no particular reason, "Om mane padme hum." He stopped and said, "Why did you use that phrase?" I could not give a logical answer, it had just "popped out." He told me that he had been stationed for several years on the Tibet border and was familiar with the inscription in the Tibetan prayer wheel, translating "The jewel in the heart of the lotus."

Chezi inherited a small office in New York, managed economically by Dave Schwartz, who had been with Dead Sea Works since it was started. There was one secretary, who was quite efficient, had a grand sense of humor and a large stomach. They didn't do much business for there was ample U.S. produced material and no staff to persuade the customers to import from Israel. There were few telephone calls and few visitors; the furniture was old and tired. Chezi went to work. He replaced the fine, affable low key secretary with a gum-chewing, good-looking, efficient New York girl who called me, "Buster," and the furniture and rugs, and put in a private office, exceeding by far the budget for running the New York wing of the Dead Sea Works empire. Then he began building a sales program, meeting the important people, making allies.

We made a trip to Israel together. While we were in the London office, the Persian secretary, Nargish, asked if I would carry a small package to Israel for her. It was addressed to the sister of the young man she was dating. We were met at the airport by Chezi's family and taken to their home in Rishon Le Zion. Because Chezi had to leave early the next morning for Beersheba, he asked his brother-in-law, Gaddi Zenger to drive me into Tel Aviv to deliver the package.

After supper we went to the Ichalov hospital but Nurse Nana had left for the day. Reluctantly, they gave me her home address and we drove to Bar Kochba Street. Nana came to the door when we rang. She was a tall girl with lovely black hair. She took the package and shook it, suspecting no doubt that I had brought a bomb. I told her who I was and the reason for bringing it, simply a favor for a friend. I was prepared to leave, when, as if in afterthought, she asked me if I would come in and join her and her mother for tea. Forgetting Gaddi, I had tea with two very interesting people. Her mother, Nana and her brother were from Transylvania, Dracula country. Nana was actually a doctor but because nurses were needed more than doctors in Israel, she worked as head nurse at Ichalov. She painted well and had a marvelous collection of shells. We looked at albums of photographs. I

forgot all about Gaddi, waiting in the car. When I finally left, he was asleep.

There were some interesting research problems waiting in the BCL labs. In the desert, we had a small reactor for brominating acetylene to make acetylene tetrabromide, or, more accurately, 1,1,2,2-tetrabromoethane. This is used as a high density liquid. The product had a tendency to turn yellow. Avram Ber and I tackled the problem and its solution was simple, just treat the distilled material with sodium carbonate to remove any traces of acid, and keep it way from light, for this would produce a photochemical breakdown. We had faced a similar problem with methyl bromide, which was picking up color, and in this case not only was there an acidity problem but the cylinders which were stored open had developed rust in the bromine containing air of the factory. The solution was equally simple, remove acidity and, in the second case, flush the cylinders and store them closed.

On an earlier visit, my second wife came with me, and because she was pretty, many an Israeli heart beat faster. When she announced on a sizzling summer morning that she would like to climb Masada, we were visiting S'Dom, which is hot but not as hot as this small mountain north of our potash plant. The man to accompany her was chosen by lot from many applicants. It should be noted that no one in his right mind climbs Masada during the midday when the heat is most intense. The "lucky" man chosen was Rosenzweig, one of our engineers. The two of them departed in the company Jeep, and I stayed with Avram Ber, drinking orange juice and discussing additions to the bromine plant. They returned in the late afternoon, Rosenzweig nearly dead, my wife seemingly untired. They made it up the circuitous path on the east side, the so-called "serpentine" (tourists use a cable car at the rear of the mountain so that no one will see them). Rosenzweig was a bit overweight and they had chosen the worst time. Pat offered to go back and climb it once more, but I declined.

Masada, some 25 kilometers north of S'Dom was the summer palace of Herod, and the fortress to which Ben Ezra took his zealots — those who had escaped the destruction of Jerusalem. Carved from the mountain itself, Masada is a ruined city and fortress with battlements, houses, storage areas, and cisterns — all perched a half-mile in the sky. It took the Romans almost two years to build an artificial mountain next to it. The defenders killed themselves rather than surrender.

From time to time as I grow older, I pose physical problems for myself and try to survive. Two years ago, I sailed from Montego Bay to Key West — the west leg by Caymen and east past Cuba. Few do this. Several years after the divorce, I went to the Dead Sea without telling anyone, past Ein Gedi, described in the Song of Songs, up the lifeless chasm to the mountain. It looked formidable and I suffered vertigo even before the climb. An Israeli soldier loaned me a canteen of water. The normal climbing time at dawn is about an hour or less. Two hours after starting, still a third of the way from the summit, dehydrated and terribly frightened, I was holding on to a shrub, trying not to look down, unable to proceed, unable to return. A young Israeli girl soldier passed and gave me her hand. I assured her I was pausing to enjoy the scenery, skipped like an elderly ram the final 600 feet, and spent an enchanting three hours exploring the ruins. On the descent, I was passed by the young, old, blind and halt but I had made it — and this is all that matters.

Chapter 16

One day in 1962, I was riding with Teresa down U.S. 17 from Charleston, South Carolina, to Beaufort. We were in no hurry. It was a lovely morning following a delightful evening in the "City by the Sea." The locals say that this is where the Ashley River joins the Cooper River to form the Atlantic Ocean. I was 41, overweight, and the chief executive of a small chemical company, which was doing neither better nor worse than usual. I was happy to be visiting Beaufort where my friends, Al and Dot Rosenberg, and my first wife, Clive, had gone many times years ago. Then as now we would visit Hunting Island, east of Beaufort, which is fighting a losing battle with the sea. Where U.S. 17 joins U.S. 21, there is a long, quiet stretch bordered with live oak and heavily draped in Spanish Moss, so lovely in the low country. There are few houses and little traffic. This is truck gardening country, inhabited by Gullahs, South Carolina's coastal Blacks, and the region is colorful and unique. After one passes over the bridge outside Beaufort and drives along the thinly settled back road, one reaches a causeway. In years past, Al and I threw our garbage off the bridge.

We drove past Hunting Island, observing the carnage of fallen palmettos, sagging roads, and houses torn asunder, and crossed the small bridge leading to Fripp Island. In 1962, Fripp was only

beginning its popularity, and I had been offered front row lots for $6,000 each. I wanted Teresa to see them.

She looked at the empty beach with its forest backdrop, the cloudless sky, and swooping birds, and said, "Buy as many lots as you can."

As I write this 18 years later, tears well up in my eyes for, alas, I did not take her advice, which would have made me a Croesus instead of a poor old broken down ex-chemist.

It was early spring and a Friday morning. People rarely visit the beaches of South Carolina in the off-season. Aside from the terns, we had it to ourselves. I collected sand dollars and keyhole limpet shells, and Teresa walked far up the beach. She was great at walking off by herself. Finding a knoll before which the Atlantic Ocean performed for me alone, I dreamed in the warm sun, free from the cares of making and selling chemicals.

A longboat with tattered black flag approached through the lazy surf, and several villains carried a small chest ashore. Spying me, they drew cutlasses, and I awoke.

My companion was at my side, swinging a cellophane bag containing shells.

We decided to have a brunch in Beaufort and return to Columbia by way of Hampton. We were once more on U.S. 21 in the region called "Burtons."

It was on the right hand side of the road, almost hidden by brush — a small homemade sign with the legend "Beaufort Chemical Company." I was surprised for I had not known there was a chemical company in this area, but after all, I had not visited this region in years. The road was narrow, potted from the recent rains. After a few blocks, it ended in a clearing. Before me was an impressive chemical plant with reaction vessels, distillation units, a boiler and filter presses. There were several small buildings. A few workers were crawling around on the reactors doing what plant workers usually do, but more slowly — because the equipment was in the open and the day was hot. The workers were Black. The place was silent — just a hissing from the steam jackets and the gentle complaint of the pines.

"Where is the boss?" I asked one of the men, a Neanderthal type, shaggy and sullen.

"He ain't around. Just who is you and what do you want from Mr. Asklese."

I explained that I was the boss's cousin from Columbia, and that he was expecting me. Old salesmen know how to work in

adverse conditions.

"You ain't from the guvment?"

I assured the faithful protector of Beaufort Chemical Company that I was a chemist as well as a cousin, had nothing to do with the government, and was in a bit of a hurry. I pressured several dollar bills into the hands that emerged from this Cerberus. It was obvious that the unseen owner had trained his minions well, but not perfectly. Satisfied with my appearance, story and accent, he shuffled off.

I felt the eyes several minutes before I saw the owner. He was "looking me over." Dogs and chemists size each other up. Bob Ascolese, clad in a sweater, wearing a yarmulka (he is not Jewish but is getting bald), and grinning with pleasure appeared from a small door, shook hands and welcomed me to Beaufort Chemical Company.

He whispered, "It's all right" to the circle of employees clad in tattered overalls, holding pipes and stillson wrenches, who had gathered.

I slipped another dollar into the once more outstretched hand of the leader and we were alone.

"The boys thought you were government," he said, needlessly.

It was obvious that Bob had a passion for anonymity. We went into his small office and quickly he produced black coffee, cheese, and rye bread. We were alone, for Teresa preferred the air of the automobile to the air of the plant. I could have told her it was the same air.

In our business there are small companies and large companies, and each is a fiefdom with a solitary king. "Only one tiger to a hill," is the saying. Bob was a famous producer of special chemicals. I knew the Beaufort area and knew of him; I certainly did not expect to find him in South Carolina, back of Parris Island, next to the sea. Bob explained that he and his partners had retained their dyestuffs plant in Newark, New Jersey, but had moved the laboratories and pilot plant to South Carolina. It was exciting to know that he was here in Beaufort, less than 120 miles from our own plant in Columbia. In his little office, drinking coffee and munching rye bread and cheese, we discussed business and the personalities of our fellow entrepreneurs.

"Don't you ever have visitors?' I asked.

"No," he replied, "They miss the sign and drive by. We are far enough from Charleston and Savannah to keep them from coming

too often. They usually call on the phone."

He told me the story of his life. The chemistry part is so familiar.

The boy is bright. He reads a lot. His family or a family friend gives him a chemistry set. He converts the basement of his home into a laboratory. He exhausts the small manual that comes with the set and reads everything in the library. He cannily, inevitably discovers reactions not described in the mandamus, nor anticipated by the manufacturer — dramatic chemical projects that culminate in a visit by the local fire department or the sheriff investigating the "BOOM." He graduates into larger quarters, devastates the home, conceals the evidence of fires, and removes the odors through a window — to the annoyance of neighbors. He attends the local university, studies Chemistry, becomes a chemist or a teacher. Bob did, and so did I.

When he graduated, he set out on the exciting trail of using his knowledge to make a living, producing new chemicals for other chemists who lacked the time and skill to make them in their own laboratories. His customers were the same people who bought from my own company — just different items. Business was good. He moved into larger quarters in New Jersey and shed his first wife as part of the expansion program. Chemical entrepreneurs, like insects, molt. Unusual is the woman who can compete with the charms of the laboratory.

One day some chaps came in who wished to buy small quantities of quinine. Bob didn't offer quinine, but they mentioned the high price they were willing to pay and knowing that he could buy from a local supply house, he purchased what they needed, sold it to them at a handsome price, and took another order when they came back the following day. They were friendly and paid cash.

Bob was making more money reselling quinine than he made from his research chemicals. The customer ordered even larger quantities. Every day they came by, picked up the previous day's purchase, and placed a new order. They never questioned the price or the purity. They were tacitum.

Bob visited the local university library and studied the literature relating to quinine. Aside from its medical use in treating malaria, it had a second use derived from the first, as an adulterant for heroin. Many addicts use a community syringe and transmit their diseases to their friends. A virulent malaria killed off large numbers, which reduced the customers for heroin. The friendly heroin supplier, zealous for the well-being of his patrons, learned that a bit of quinine mixed with the heroin effectively prevents malaria. They required

quinine as raw material and were shy professionally. (They did not go to the established laboratory supply houses, which were watched by the law, but to the Bob Ascoleses, who are not informed). Any day the narcotics people checking Bob's supplier would note his large purchases and make a visit. The fascinated and badly frightened Ascolese had solved through his literature search the reason for his popularity and felt the dew of apprehension. All of us know the character of these professionals, enough to make us wish minimal contact. Visits and questions from narcotics officers can be as dreadful. Bob was an accessory before, during, and after the fact. Summoning up all his courage the next day, he informed the visitors that his supply had dried up. He would no longer be able to supply them with quinine. They listened quietly and then remarked that his health would be affected if he did not locate additional material. Without raising their voices, without any emotion, they enumerated perfectly horrendous things which could befall Bob: automobile accidents, not just to him but to his wife; burned laboratories; broken fingers and knees; cigarette butts applied to the posterior; pliers used to grasp twin portions of maculine anatomy customarily shielded by one's legs. In short, the total inch-by-inch destruction of his business and his anatomy. He got more quinine. They paid promptly and announced that, because of his improved attitude, they were going to involve him in a scheme which would double his business.

The new assignment would be a chemical conversion. They would supply the raw material as football-shaped masses of gummy material, which he would refine to a white powder. He would then mix in the quinine himself. The pay would be excellent. They would supply workers to help with production and guards to minimize visits and to make sure there was never any delay in production, which would continue around the clock. A guard would travel with Bob so that he would never be "captured" by competitors. When he mumbled that he would like to think it over, the speaker whispered to his companion and this man removed a small rope which he held in both hands and made into a coil which he playfully put around the neck of my friend. Tersely, Bob was informed that he had no choice. He was now a business associate whether he liked it or not.

Bob was terrified. In a panic, he must be quite a sight, the little yarmulka bobbing up and down in pace with the up and down motion of his Adam's apple. Bob and I are very much alike, same size, same jowls, same tummy, and same low pain threshhold. Just listening to him tell the story made me apprehensive.

Bob decided to make one try to extricate himself and, if this

failed, to flee the country. He had saved up some money and liked Mexico. He told the visitors the next day that with regrets he must turn down their offer. He had decided to return to college and get another degree. The college was in the far west, thousands of miles away. His wife's health was not good, and the doctors had recommended an arid climate. They listened quietly and said he would have to stay.

"What if I don't?" he squeaked.

They made a dramatic pantomime, in which the friend of the day before used the same rope to remove the head from a body, preserving both sections in concrete. Two fingers indicating that his fate would be shared with his wife. A whisper warned that any idea of leaving the country should be abandoned. Their people watched the airports. The vacationer would be returned for the head removal/concrete treatment. Once more two fingers were raised. I was so scared listening to this story that I nearly wet my pants. Bob was so scared in retrospect that his forehead gleamed with perspiration.

The men did not return the next day, nor the day after. Bob was packing, like mad, boxes and equipment and chemicals, which he carried away in his automobile. He worked through both nights, facing each morning with the awful thought that they would be waiting, but they never returned. Perhaps in one of the disagreements not uncommon in such organizations, they had themselves been slain. Longevity is not common in sociopathic society.

Bob did not dally, and by the third day, his chemicals and equipment were shipped to a warehouse in North Carolina, where they could be picked up at leisure. He planned to transport everything to Beaufort, South Carolina, the place that he had chosen late in the quinine operation for remoteness, plus its proximity to Parris Island, the Marine base. The land that would be the site for Beaufort Chemicals was back of the runways.

While we talked there was a periodic interruption — the overwhelming roar of a jet making a takeoff or landing. Together we walked down to the bay that lapped at the back of his property. Trenches dug from the plant consigned the condenser runoff into a lagoon, from which the tides would transfer it to the Atlantic Ocean. I returned to my car after saying goodbye. My companion was reading and greeted my enthusiastic account of the conversation without much interest.

I promised to return, and did again and again. Bob calls me Mexele, or Sam, which is the name of one of his business associates, when he gets confused. Sam, whom I have never seen, has been described as small, plump and Jewish. Bob is, as I have mentioned, not Jewish. He is Italian. He has lived with and worked with the "chosen" so much that he speaks excellent Yiddish, certainly better than my own. Visits to his home, or wherever he is working, are a homecoming for me.

Several years ago, Bob Ascolese and his partners sold Beaufort Chemical Company to the Lowensteins, who have textile plants all over the Southeast. Bob became rich and bought land in Mexico. Part of his contract with the Lowensteins required terminal employment in Beaufort for two years.

At that time I was consulting for Polaroid and they needed a particular item which I knew Bob could make. Polaroid required a plant inspection, and I coached Bob, told him to hire extra people, and at least one other man who looked like he could run things.

On the appointed day, I drove the visitors from Charleston, South Carolina, where we had spent the night. When we entered the plant, we found only Bob and his "Indians." Bob is absent-minded and probably got the dates mixed up. The inspection team was aghast at the quality of personnel, none of whom had ever worn safety glasses, and Bob, who was wearing his yarmulka with an unbuttoned shirt, through which peered part of his belly. They viewed with apprehension the lagoon for wastes and the various places in the plant area where the casual visitor or the preoccupied employee could break a leg. Their report was not favorable, but Beaufort Chemicals did make some items for them, and ultimately Bob left and was replaced by a proper observer of protocol.

After a visit from the DHEC people, their waste system was reorganized. The place is no longer nearly as colorful as when it was the empire of Bob Ascolese. *Sic Freat Crustulum.*

On one of my periodic visits to Beaufort Chemicals, I was told that Bob was "at the new company up the road a piece." I went "up the road a piece," and, sure enough, fields were being cleared and Bob's car was parked in front of the little farmhouse serving as a temporary office. This was the infant Vega Chemical Company, now a division of Kalama. Large buildings were being erected. Fork lifts were hurrying to and fro. Welders were performing their magic. In the office was my friend, clad in sweater and yarmulka — his uniform. With him was a medium-sized, muscular, deeply-tanned Irishman, whose

fist, closing on mine, damaged some bones. This was Ray Carmody. He was full of enthusiasm, sure of himself and the prospects for Vega Chemical Company. When he confided that his company planned to do hydrogenations and nitrations, I did not share his enthusiasm.

Hydrogenations are carried out in reaction vessels designed to stand great internal force. When the vessel fails, and statistically some do, one deposits equipment and the contents over a large area, and sometimes there is a chemist or chemical engineer blown out as well. One gets a lot of free, albeit unwanted publicity in local and sometimes national press. If chemists or chemical engineers, or bystanders (those who live next to chemical companies) are eliminated, you get visits from OSHA and EPA.

One has to have plenty of courage plus cash and a credit line to start a chemical company. Courage and money are not enough to sustain one in day-after-day hydrogenating and nitrating. One needs what the Germans call "Lebensraum," plenty of space where a large chemical reactor can land after it has been sent into the stratosphere by an explosion. Nitrations and hydrogenations are tricky and often misbehave. Sooner or later, all plants carrying out these reactions have a major explosion — usually with deaths.

Like the entrepreneurs whose earliest South Carolina chemical plants were the time-honored whiskey stills, one has to make one's money in a hurry and run before the statistics catch up with you. Companies that carry out Carmody's type of chemistry carry very high insurance rates. Chemists used to making their bread in a poisonous and often dangerous atmosphere shun nitration and hydrogenation companies. Ray was brave, a confirmed addict of the delusion, "It will never happen to me."

We were taken for a tour of the premises. Out of sight of the road, there was chemical equipment already functioning. The boiler was producing steam. A large reaction vessel, bigger than any I had ever seen, was nitrating (you can always tell by the small whisp of red-brown gas which inevitably escapes). Metal-hatted engineers were observing gauges and making adjustments. I had the feeling that when this unit blew up, one would be able to hear the explosion all the way to Columbia, that it would level the plant, and do in a number of chemists and chemical engineers. Parenthetically I note that when it did blow up two years later, we could not hear the explosion here in Columbia, but it was heard in Orangeburg and mistakently thought to be the Ethyl plant. Ray's plant was destroyed but no one was killed. They started over.

We sat in Ray's office, winded from the tour. Bob and I were

getting older. He and I were out of breath. Ray was quite fresh. The chemicals had not yet attacked his lungs and liver. Here we were: Gergel, grown gray and more plump, now 55 years old; Ascolese, the friendly visitor come over for a chat, about the same age; and Carmody, the proud papa of the new installation, ten or more years younger.

"No, I am not afraid of explosions," Ray said, answering my question.

There was a tremendous "BOOM," and Ascolese and I almost achieved levitation, rising from our chairs and rushing to the windows.

"Just a jet, boys. You know Parris Island has lots of them."

Shaken, we returned to our seats. Nitrations keep you on your toes.

Ray is a member of the school of production chemists who will make any chemical for a price. Both chemist and chemical engineer, he is an alumnus of Mobay and Celanese, and even did a few years with Dr. Quattlebaum's Cardinal in Columbia. A smile is never far from Ray's mouth. His fingers do a little dance on the table, for he is always in a hurry. Most operators of chemical companies, especially co-owners like Ray, approached to make some devilish compound, recite the dangers, the rising cost of labor and raw materials, and, in these days, the problem of waste removal. This is a game designed to produce the best price with its success in proportion to the urgency of the customer and the number of companies which have already turned him down. There were no games played by Ray. He was ready to make anything one wanted to buy, provided the quantity was enough and the price was right.

Several years ago, we had an arrangement with GAF, an acronym for what was formerly General Aniline and Film, for the production and marketing of some of the compounds no longer in its production program.

One was propargyl bromide, which we made in Columbia for a while. Having reviewed the vital statistics concerning the number of explosions encountered and the number of chemists passed away (blown away would be a better way of putting it) making this interesting and rare compound, we abandoned the production as GAF had done before us. The decision came after an explosion that nearly cost us Sonny (Henry Jackson), our distillation man. He refused to work with it any more after the explosion lifted him a foot into the air.

Another product that they gave us to make and market was 1,2,4-butanetriol. This interesting relative of glycerine is the starting

material in the production of an analgesic for stomach ulcer. It is also the raw material for butanetriol trinitrate, a special smokeless explosive (it leaves no vapor trail) used for the destruction of the other fellow's navy. Thus the compound has two groups of customers — those who wish to sink stomachs (enclosed in sailors), and those who wish to make stomachs feel good! Having customers is one thing, making the compound, another. We had the GAF procedure for making it but we needed equipment that would handle the vast amounts of water needed as reaction medium.

In practice, one purchased 1,4-butynediol (from GAF), and treated this with water and mercury oxide to make an unsaturated ketone, and then reduced the ketone with hydrogen. Because we did not have the necessary reactors, we "farmed out" the three-step synthesis, almost bankrupting our first partner, Bill Crowell, whom I had known when he was a salesman for Colgate, and who was now president of Patrick in Greenville. They made textile chemicals profitably. We were about to make their company unprofitable.

I told Bill that he could make the compound using the GAF process and Patrick's own equipment on "down time" (time when someone's equipment is not being used, such as Sundays and Robert E. Lee's birthday). They agreed to make the 1,2,4-butanetriol, a decision made in haste which would be repented at leisure.

Patrick ordered raw materials and carried out the first and second stages of the reaction without any problem. True, very large amounts of liquid had to be used producing only a small amount of product. Then the water had to be removed, which tied up his distillation equipment. Then there was the problem of disposing of mercuric chloride, which was the by-product, a removal problem even in pre-EPA days.

They ran into trouble. Because Patrick did not have hydrogenation facilities, it farmed out this part of the synthesis to Union Carbide in South Charleston, West Virginia. Someone at Carbide must have goofed, for they ended up with a product that was essentially butanediol rather than butanetriol.

When you get diol rather than triol, you lose your shirt. All the raw materials, and the time and labor which went into the first two steps are wasted. There was spirited discussion between Carbide and Patrick, but no amount of letters will convert butanediol into butanetriol. Meanwhile, there were equally spirited discussions between my company and its customers, who were growing restive with the delay.

Patrick repeated its work, using fresh raw material. This time Carbide hydrogenated correctly, but the oily product would not distil without decomposition in any unit which Patrick had available. This problem had not been anticipated. Patrick sent many drums of the oily liquid to Riceboro, Georgia, where they could use what we call a Luwa or wiped-film evaporator, normally used for sludges and oils and expensive to operate. The distillation proved a nightmare, for butanetriol has a tendency to dehydrate. After nearly ruining the wiped film evaporator and the morale of the Riceboro people, after spending money on consultants to tell them what was wrong, they produced about 15 drums of heavy green oil, with a small top layer, not mentioned in the patent.

Bill Crowell, was making discreet inquiries to determine if any other company had an opening for a top executive. A confidential discussion with his auditors had revealed that the company had spent far more than the total value of the order, and this was already pretty much known throughout the company. This loss was too great for the explanation that he was doing a favor for a friend.

To everyone's surprise, our desperate customers accepted the drums (despite the top layer); to our astonishment they ordered more! Patrick told us politely, but firmly, that they had had enough. Coincidentally Bill Crowell left their employ.

Several years later, I ran into him, now president of another chemical company, and tested him by saying, "Butanetriol." While he flinched, the old smile came to his face and he said, "What is your latest easy, profitable project?" Bill is a good sport.

This sort of project is called in chemical vernacular a "dog." It will impoverish any chemical company attempting to carry it out. The lousy prep may have worked for GAF, but it certainly would not work for Patrick, and getting rid of the by-product mercury sludge was a problem.

With our customers pushing us for more material, and with Patrick adamant in its refusal to lose more money on this prep, I made trips to other companies to try to get another supplier. Then I bought a number of drums from my friend, Walter Griesmeir in Germany, but the cost was so great that after paying air freight and duty there was no profit. Then I remembered my friend Zeke Clarke He was the president of a company called Pressure Chemicals in Pittsburgh. It made dangerous compounds such as metal carbonyls.

Zeke, a sportsman, a man who liked to live dangerously, was willing to try a new prep. In an earlier cooperative effort, he had produced ferrocene and from it, n-butyl ferrocene used to promote

smooth burning of jet fuel. I told him of Patrick's experience, and he agreed to study the GAF patents. The following week he informed us he would make a small batch. Two weeks later with my customers telephoning daily to complain about slow delivery, Zeke called to tell me he was sending us a sample. We checked this and told him to run a bulk prep as soon as possible.

Daily I called to ask about progress. The reports were always encouraging. Finally, he reached the hydrogenation stage. As I have said, high pressure hydrogenations are dangerous, but his company specialized in such reactions as indicated by its name.

It was at the tricky third stage that Pressure Chemical Company had problems. An explosion eliminated the batch for which my customers were waiting. By then Zeke had taken a job with another company — showing some prescience. His successor assured us over the telephone that part of the intermediate had been saved, and more was being produced. Some time later he delivered a batch which appeased my customers. Unfortunately, it would be months before he could rebuild and produce more material.

Now we get back to Ray Carmody, in his lovely new chemical company, close to Parris Island in Beaufort, South Carolina. This was in the pre-Kalama days before his explosion. I had a telephone call from Ray. From his questions it was apparent that he had been approached by Pressure Chemicals. We gave him what advice we could and cautioned him to maintain a high pH (degree of alkalinity) during distillation. Either he did not hear or did not remember, for part of his product cyclized and much of it was therefore lost. He was the third victim of this star-crossed synthesis.

When something like this happens, friendships are jeopardized. One looks around for someone to blame. Because he had lost time and money on the first try, Ray informed Pressure that his next shipment must be CIF. This commercial term usually means that the shipper pays the freight charge and insurance, but in Ray's case it meant "cash in fist." Pressure Chemicals sent more raw materials and one of their technical people. Ray called me to say they needed as one of the raw materials a special kind of clay. Because they were in a hurry, I promised to visit the pits myself, although they were located in a remote area of the state, and pick up their requirements myself.

I drove South on I-26, the superhighway connecting Greenville, South Carolina, and Charleston, turned left when I reached I-95, which runs North and South, and when the sun peeped over the horizon, I was at the mine. The site resembled a

lunar landscape. Pygmies in little shovel cars threaded intricate roadways into the excavations. I found the superintendent, who looked pained when I told him I needed a barrel of clay. He told me their smallest unit was a railroad car.

After a conversation concerning the activities of the University of South Carolina football team, and my uncle, South Carolina's once great baseball pitcher, Kirby Higbe, he consented to sell me my requirements, provided I would do my own digging. Unfortunately the hill he indicated was a half-mile away. There was no road to it. I was given a shovel and bucket, and for two dreadful hours, I was a hod carrier. This was my penance for ever getting involved with 1,2,4-butanetriol and I am sure that the lumbago that I developed that day will be with me the rest of my life.

I arrived at Vega's plant several hours later. The raw material was already in the reactor and the workers quickly added the clay I had brought with me. I started for home and the next day got the dismal news that the yield was neither better nor worse than the preceding batch; my clay shoveling had been in vain. I don't know what happened after this. I told our customers we would not supply and told them they could buy in Europe if they were prepared to pay the very high price.

Ray transferred to the Kalama home office, returning to Beaufort with his partner, Art Heinel, when the American Color and Chemical Co. was put up for sale. I don't get to Beaufort any more and have lost touch with him, and with Bob Ascolese, who is probably in Texas, and I imagine that Vega, like Beaufort Chemicals, is a few buildings and rusting equipment.

Chapter 17

Small chemical companies tend to locate beside or behind larger chemical companies, protected by the buildings, fences and guards of the neighbor. There are other advantages: a peculiar odor originating from the small offender brings the wrath of the populace — and the attention of the newspapers — to the larger company. Better is a secluded neighborhood where one can make chemicals in peace, with no neighbors to offend. This grows more and more difficult, because the population is expanding and has taken over woods and valleys where deer, raccoons, and chemical companies lived relatively alone and without publicity.

When we built our plant at Cedar Terrace, we were seven miles from the center of the city, protected by intervening forest, a large creek crossed by a bridge, and the road leading up the hill to the Veteran's Hospital, that was then two lane. The forest is almost destroyed making room for houses, the stream is almost dry and the two lanes are now eight. Jules Lindau's plant on Old Granby Lane is still remote. It has a cemetery across the street, which is an asset, because no one can build houses across the street and then complain.

Old Granby Lane is close to the Pacific Mill district. When I was a little boy, the area consisted of a school, two churches, and a number of small, inexpensive houses, supplied virtually rent-free by the mill owners. The mill sold the "mill village" its groceries. Young men from this area were tough and mean, walked every morning two-and-a-half miles to Logan School, and returned the same way that afternoon. This made them tougher and meaner.

There were no school buses in those days, and there was no integration. No "colored" children lived in this area; those on the periphera went to their own school.

Every morning a stream of mill kids wound its way to Elmwood Avenue, where Logan School was located, like a caravan of ants making its way through the primeval forest. They were armed with stones, baseball bats, and slingshots. They were respected and feared.

My uncle, Tom Revelise, who was a freshman at the University of South Carolina, driven by carnal desire and having little money, cohabited with some of the older girls from the "mill village," and confided in me that the price was "two bits," which was slang for a quarter in those days. This was the amount of my weekly allowance. He said

"You have to do it fast."

Knowing the ferocity of these people, I am surprised, in retrospect, that Tommy was able to "do it" at all.

Protected by my allies, Hamp Kaminer, his brother Buckeye, and our friend Colie Longs, who was a giant at 17, but retarded, I could walk to school in peace. Every year at fair time the same group traversed the mill village and Old Granby on our way to the county fair. I knew the area long before Jules Lindau built his chemical company.

Jules, like Ray Carmody and Will Frings, was an alumnus of Cardinal, a large chemical company on South Beltline, about two miles from Old Granby, but still in the "Ruhr Valley" of Columbia. he was for many years a professor at the University of South Carolina. I

believe his work with Cardinal was essentially consulting, but contacts made there interested him in chemistry although he himself was not a chemist. Many Columbia chemists got their training at Cardinal, perhaps with Dr. Lipscomb, my old professor as well, for in the early days Cardinal was a part of his Continental Chemicals. When I was a student at Carolina I worked in Continental's drafty old barn in the area now called Cayce, where they made pastes for school libraries, embalming fluid to preserve our citizens, and a sort of solidified glue which could be attached to tombstones and then sandblasted to etch out appropriate messages.

Jules Lindau had sprung from Cardinal like Athena from the mind of Zeus, already full formed. He had established an excellent reputation as an inventor, a professor at the University of South Carolina, and as co-founder of Southern Plastics. With another graduate of Cardinal, he formed Lindau Chemicals.

I knew him from the Southern Plastics days. Their plant was back of the old Glenco Cotton Mill on Huger Street. Mine was in small building in front, which had formerly housed the paymaster. Huger Street at that time contained Columbia's finest "sporting houses" as well as the city dog shelter. When I began making mercaptans, which have a "raunchy" odor, prostitutes, dog lovers and businessmen urged me to move, so my stay as a neighbor of Southern Plastics was brief.

When business was slow (and in the early days it was usually slow), I would walk around the deserted mill and visit with their tool-and-die man, Elmer Sizemore, who occupied the front part of the little building where I first made my chemicals. This is where I met Jules, and I often saw him in the company of his partner, Erwin Kahn, who was a relative by marriage.

Jules always wore a suit and looked neat. He was a legend at the University of South Carolina for his inventions and brilliance. When he left Cardinal, he and Bob Robinson opened the plant in Old Granby. There were no complaints from the neighbors. Aside from the inhabitants of the graveyard across the street, there were no neighbors. They put in bulk equipment to make organic chemicals and when it was not all in use were willing to let us rent some for bulk preparations.

In the early 70's, we had a contract to make 150 kilos of dimethyl acetylene dicarboxylate. When we got an order for this material it meant that someone had tried to make it himself and failed, then had tried to find someone else to make it for him. It is a member of the ester family of organic chemicals and has a sweet odor.

Unfortunately by the time you have smelled it your eyeballs are ready to drop out for it is a vicious lachrymator. The customer, a dyestuff manufacturer, contacted us by mail and asked if we would make it. They were in a hurry and offered a good price. My fears of blindness were offset by the prospect of making an excellent profit.

We had two experienced chemists, John Bocking and Ed Hunter, and I put them to work using the **Organic Syntheses** procedure. After they had completed their experimental runs they recommended that rather than go to Germany for the raw material which is the potassium salt of acetylene dicarboxylic acid, we make it ourselves and save additional money. They assured me the reaction went smoothly, and the raw materials were cheap. In retrospect, I am able to confirm an old Southern saying: "Hogs get et."

On paper one produces the potassium salt of acetylene dicarboxylic acid by brominating fumaric acid and then "cautiously" treating with potassium hydroxide. This is then reacted with alkali, methanol and water, and one is supposed to maintain low temperature. The details in the literature are vague. My chemists were enthusiastic so we ordered the raw materials and contracted with Jules Lindau to use his reaction vessels. I then drove to Rhode Island to visit the customer and discuss his future requirements. As they say, I started eating the bird before it was caught.

The customer was friendly; grateful that we were making the ester rather than their own people. They hinted that they had made a small batch and their union people threatened to shut them down. The stuff is a terrible vesicant as well as lachrymator and one of their men had spilled some on a chair and sat in it. The chemical went through his pants and had a terrible effect on his posterior. They brought in the unfortunate and when the doors were closed he showed me his fanny, which looked like a waffle.

Leaving the plant, I hurried to a telephone. Early results were promising but there was a small problem. The reaction vessel was too large and the agitator could not readily stir the contents. They proposed to add more water. This did not seem unreasonable, after all water was already present, more should not hurt. I was wrong, and the addition of the water spelled disaster.

A navigator not watching the sky, only the compass, I decided to take a vacation. We were only 60 miles from Cape Cod. Confident that all was well at the plant, I telephoned for a reservation. As I drove, I mentally totted up the profits, and how we would spend the money. We would buy a large reactor, new distillation equipment, a comfortable chair for my typewriter. The man at the desk said,

"Mr. Gergel, we have a message for you. Call your office." He handed me a telegram which had preceded the call by an hour.

It had only two words: "Come home."

They must have been waiting by the phone, the two of them, a bad omen. They were cryptic. The reaction at Lindau Chemicals was not going right. There had been no temperature rise when the reactants were mixed. A test sample, treated with acid "did not burn one's eyes." This was the "rule of thumb" test for dimethyl acetylene dicarboxylate. This compound should have torn the eyeballs from one's skull.

"How much water did you add to the pot?" Their hesitancy was 12 strokes on the clock of doom. I knew the awful truth. Too much water had been added, and the resulting mixture was too dilute to react.

The telephone I was clutching swayed, the room reeled, I lowered myself into the chair. Mentally, I canceled the expansion plans for the plant, composed the letter I would write to the customer.

I told the fellows to cook the mixture the rest of the day. It would probably not help, and would certainly increase our rental bill for the equipment but perhaps by some miracle we might get a product. They told me this was impossible for they had already cut off the heat and agitation. So much bromine had been released that they were ill. Because it was Friday, they had decided to wait until I got back. Sadly, I calculated mentally the extra money we would have to pay for rental.

It was a sunny day on the Cape, but I went to my room and, hands behind my head, rocked away my wretchedness in the solitary agony of the entrepreneur who has lost. Bad icing on bad cake. My wife, unaware of the major catastrophe, appeared in a bikini, attractive and sexy. I told her I would be along in a minute.

"Pity me, oh Wahwahkonda; my heart is very lonely; there's no one here to satisfy me; pity me, oh Wahwahkonda." Thus lamented Ernest Thomson Seton's Cherokee. Thus lamented Max Gergel, far from home, in a hotel he could not afford, shattered by fate's fickle finger.

I will spare the reader most details of the return trip. The water pump misbehaved; repairs on most cars on Sunday are hard to arrange, on a six year old Cadillac, a miracle is required. This was not my time for miracles. We would drive ten miles, stop and I would put in water. I had two five gallon cans of it, sold to me by a service station operator who could give good advice but not repairs. After 150 miles of this, I was almost insane. At midnight, we steamed through the

Baltimore Harbor Tunnel. One cannot get out, lift the hood, and service the poor parched radiator in the Baltimore Harbor Tunnel. It was not enough to have to fill the car, I had to find places where I could get water!

The next day in early afternoon we reached Columbia. Somehow the last few hundred miles were trouble-free. Perhaps the radiator or water pump had healed itself! Perhaps the fellows had solved the problem of making dimethyl acetylene dicarboxylate! Perhaps a distant relative had died leaving me as his only heir! I hurried to the plant and summoned the scientists.

They had gone to Lindau's plant after my telephone call, put in more sulfuric acid, and let the contents of the reaction vessel agitate over the weekend. That very morning several drums of ethyl ether had been added to the reactor to extract the ester, which is more soluble in ether than in water. A fact to be noted is that ether was now diluting the atmosphere of Old Granby. Had Jules Lindau known this he would have had a stroke. Ether forms explosive mixtures with air, and the fumes have a tendency to "creep." A match struck half a block away can ignite the intervening atmosphere. No one struck a match, which was fortunate, because in their zeal they had used far more than was required, and had several additional drums stored nearby, enough to destroy not only Jules' plant but the entire Granby community. Since ether is expensive, this was another nail in my financial coffin. When one is lying dead in the road, struck by a car, any number of automobiles can run over you without being felt. I had spent so much on raw materials and rental of Jules' reactor that another $500 for ether hardly mattered.

My fellows had separated the contents of the reactor into ether solution and bottom layer waste, and were preparing to strip the former to remove the solvent, leaving behind what we hoped would be dimethyl acetylenedicarboxylate. To test for its presence, you pull off a half pint from the drum and run a mini-distillation. This is the scientific way to do it. You can as an alternative do as I did, open the bung of the drum, take a long sniff, and nearly keel over from the fumes.

The odor was authentic.

I danced happily around the yard to the astonishment of my co-workers, who did not have to pay plant bills and could afford to be calm. I sent thanks heavenward.

We were saved.

The fact that my eyeballs were excoriated simply made me one more of a large group at our plant, and the workers of Jules Lindau

wearing dark glasses, a tribute to the potency of the product. My enthusiasm returned. We would make a profit after all.

We started the distillation next morning with Ed Hunter in charge. Ed is a nice chap to have around. He has a good sense of humor, a quiet respect for the chemicals he works with, and indulgence when they misbehave. Because he was usually assigned to the ones which misbehave, he had become something of a stoic and did not jump when cars backfired on Cedar Terrace or the remains of a butyl iodide distillation would detonate.

He filled two 50 liter flasks with ten gallons each of the dark, evil material we had taken from Lindau's reactor. His eyeballs protruded attesting to the strength and virulence of the mixture. The flasks were suspended in heating mantles and connected with distillation columns and condensors and traps to recover the stripped ether. Our product would be left in the flask and would need careful distillation at high temperature under a partial vacuum.

I went up to Lake Murray to take a sail. Anything to get my mind off the problem. It was a fine afternoon with clear sky and a light breeze. Bad news was far away, 22 miles away to be exact.

I telephoned from time to time learning that all was well. Two hours later the contents of the flasks had diminished to eight gallons, approximately what we expected. Unfortunately, the ether continued to strip. Every quart was $100 loss. When the contents of the two flasks were down to about three and a a half gallons each, I told Ed to let them cool, combine the contents, and apply a small vacuum.

Good bench chemists eat when they are hungry. Safe and happy at Lake Murray, I dined on pork chops, rice and gravy, black-eyed peas, and corn on the cob. I ate heavily, the condemned man unaware that judgment has been decreed by the gods.

The telephone rang.

Uneasy, I was tempted not to answer. It stopped.

Then it rang again.

"Hello," I said, bravely.

After all, it could be my mother, or one of my children. There was no answer on the other end of the line.

"Ed," I said, "Give me the good news."

The answer came back, hollow, almost an echo, a doomed whisper.

"Good news? There is no good news. We are down to two gallons of liquid in the flask."

Pork chops, rice and gravy, black-eyed peas, and corn on the cob were almost regurgitated. I rushed back to Columbia and 37

minutes later faced an apparition with blackened sweat and tear-smudged face.

"We're down to a half gallon," it croaked. "All we have left is the smell." He handed me a hammer, which we normally use to tighten bungs, and pointed to his cranium. I was sorely tempted to use it on my own. While we shook in woe, the flask contents distilled merrily, down to half a gallon. My profits from this project had departed, my costs for raw materials were astronomic. There would be a huge bill from Lindau.

"*Oy Vay is mir*," one says in Yiddish.

"Pity me oh Wahwahkonda," chorus the departed Indians.

The decision to cable Germany and buy authentic raw material removed the problem of the customer suing us. It almost meant that we would be bankrupt. I seriously considered early retirement. I could probably teach Chemistry at some high school.

The shipment of raw material arrived from Germany and was immediately converted to authentic dimethyl acetylenedicarboxylate. Once more we broke out in dark glasses, nearly blinded. Mr. Reichlyn got some on his arm and still has the scars. I sat on the drum before we shipped, discussing the adventure with my veterans, and when I got up, felt an itching, then a burning, and finally screeching with pain, went running to the john where soap and water removed part of the damage. Time has left a faint aureola as souvenir. The scars on my confidence went deeper. I would give it three more years and then, old enough for food stamps and young enough for teaching, I would hang it up and await the glorious day when I reached 62 and could draw social security.

What the hell.

During the nightmare of attempting to make this horror, I renewed my friendship with Jules Lindau's associate Bob Robinson. He "graduated" from National Distillers in Cincinnati, then did a stretch with Cardinal Manufacturing in Columbia, and ultimately came to Lindau. Bob's wife is a chemist, too, which means that he can talk Chemistry day and night if such be his desire.

I met Bob years ago when I was visiting Cincinnati on a sales trip. I was salesman as well as chemist in those days and getting in to see the right people was not always easy. I knew that National Distillers was pioneering production of isosebacic acid which was of interest to Thiokol. I was doing work for Thiokol. I insinuated that my visit *might* be motivated by Thiokol and was quickly ushered into the holy of holies, the Research Director himself. He was a world authority on metalorganics and told me he and his company were

delighted that Thiokol had sent a representative. I tried to tell him that I was not really a representative but he brushed aside my mumbles with a request to join a group of their people for a heart to heart talk on just what National Distillers could and could not do. I was tempted to jump through a window but we were three stories off the ground, and I was not sure where I had parked my car.

Thiokol had just purchased Reaction Motors and was heavily involved in the production of polydisulfide polymers for the rocket program and such missiles as the Bomarc, the Honest John and the Nike Hercules. We were reacting various dibromides into mercaptans for them to use as experimental intermediates for disulfides. It is true that Thiokol had considered making a disulfide derivative of their isosebacic acid, but it was still in the discussion stage and my friend, Ed Fettes, Thiokol's DOR, would have been astonished that the program was being openly discussed, especially by a salesman for another company, a peon in rank and knowledge. My problem began with a visit from a National Distillers salesman to us! He told me they were producing isosebacic acid and 1,10-decanediol and I had told him we were using these on a "hush-hush" project for Thiokol, that if I were ever in Cincinnati I would like to drop in and see their purchasing people. I had never intended to talk with their chemists.

There were nine men in the room, and they had pads for taking notes. After we were all introduced, the DOR left, telling me he hoped I would come and see them again. A tall gentleman in a black suit asked me a number of technical questions about long chain compounds and particularly those we had made for Thiokol. I should have left, I was "over my head." These people were not going to buy anything and the questions were embarrassing for they involved plans of Thiokol and I knew little and had no right to discuss what I knew. Fortunately, my interrogator turned the discussion to theory of bromine compound production and generation of mercaptans, and here he knew very little. The group treated him with great respect and accepted his statements even when they were wrong. We did not like each other. I was not surprised when I learned he was from I. G. Farbenindustry in Germany whose activities on behalf of Hitler have been well documented. Disconcerting, when it developed in the conversation, was the knowledge that he consulted for Thiokol. I got out as quickly as possible, and telephoned Dr. Fettes and apologized and he told me there was no great problem, just not to get carried away in conversation in the future. Within a year, having failed to develop a bulk customer, National Distillers dropped the project. The consultant with whom I had the stormy session has died. Years later I

am more tolerant.

Thiokol sponsored the work that brought Jim Hardwicke to Cardinal in this city. Cardinal had been formed as a joint operation by Professor Lipscomb, his son, Guy Jr., and a former student, Dr. William M. Quattlebaum III.

Thiokol needed CBE, Chlorobutyl ether, which we made for them experimentally at Columbia Organics, and when they needed large amounts we farmed the project out to Cardinal. Dr. Quattlebaum hired Will Frings and Jim Hardwicke to help with the project. They made enormous amounts of CBE and Columbia received a commission. The income from CBE helped us rebuild from our fire in 1958.

Will, his wife and their children lived on Trenholme Rd., not too far from Ravenel St., where my wife and I lived.

While the ladies talked, Will and I discussed 4,4'-Dichlorodibutyl ether, which we were all making for Thiokol. We stayed friends long after the work was completed and later, he and Dr. Hardwicke split away from Cardinal and formed Hardwicke Chemicals which was later bought by Ethyl Corporation. They periodically turned over to us projects which were too small for them.

I had been visiting Will at the plant in Elgin, South Carolina, and noticed that he smelled goaty. For that matter, the other workers seemed to have a goaty odor, too. I inquired the reason, and he took me to the source, an isolated section of the plant, which smelled horrendous. A large glass still, one that would have delighted a moonshiner in the old whiskey-making days was stinking up Hardwicke Chemical Co. and the surrounding farms.

Now fatty acids have a rank odor smelling like rancid butter. The absolute worst member of the series is isovaleric acid. This smells like rancid butter with a soupçon of goat and old sneakers thrown in for good measure. As bad as it smells, the acid chloride derived from it is worse. It is so volatile that it will chase a visitor and leave its far from subtle mark. The odor is soap, water and Lysol resistant. This acid chloride reacts with mucous membrane so that while you are rendered ill by the obnoxious odor, the acid chloride is hydrolyzing with your perspiration as a reactant and eats away your lips, eyeballs and tongue. Hardwicke, committed to make this monster, was only too happy to find Columbia Organic Chemicals Co., Inc., as a "farmout" and once more we were making something no one else wanted to make.

We had never had such a dreadful assignment. Anyone working with this "superstink" is branded and given a wide berth. No

matter how amorous his spouse may be, passion crumples despite baths, Chlorox and Dentine. For a while we made isovaleroyl chloride at Cedar Terrace. It created pandemonium among residents who first sniffed each other, came to the plant to sniff us, and then sniffled to their lawyers.

We transferred production to Kings Laboratory in Blythewood, a small community about seven miles from Columbia in the general direction of Charlotte, North Carolina. The owner and president, Al Montgomery, is an old friend of mine, and his plant, like that of Jules Lindau, is next to a graveyard — a coincidence. A chemical company usually smells, and if there are no dissenting neighbors, no one complains. In Al's case, his neighbors were beyond caring but not church-goers on Sundays exposed to the far from subtle odor of isovaleroyl chloride.

The president of Kings was a bright student while at Clemson University and is a loyal alumnus. Be his plant inundated with orders, yet there is a Clemson football game within driving distance, he closes shop. With this happy philosophy, he will live for years. After Al took his Bachelor's degree, he came to Carolina to take his Master's and absorb additional lab technique. He will remain in the memory of the older professors as the man who left a water vacuum running overnight. When the sink clogged, tons of water loosened the ceiling in the newly-constructed chemistry building, inundating laboratories and offices. There were conferences between Al and the professors. Fortunately, he was close to graduation.

Kings has large reactors and distillation units. Al bravely makes "touchy" chemicals. When he made the isovaleroyl chloride for us, he and his co-workers developed a pronounced odor. It is rumored that ghostly figures rose from the graves, holding their noses. The Bythewood community, three miles away but able to smell even at this distance, protested. Fortunately, by then Al had finished the order.

He makes cyanogen bromide, for which he is the only supplier. Others have discontinued making it, for they lost staff horizontally or vertically depending on whether they left on their backs or through the air. The compound has a tendency to decompose violently. Al assures me that it is perfectly safe provided it is stored cold, kept dry, and packaged in small containers. Something went wrong with one of the shipments, which may have been stored in a warm or damp area, or packed in too large a container. The trucking company called in deep distress, looking for my friend. Somewhere en route to Milwaukee, a catastrophe occurred, and they

feared for their truck and driver. Al was watching Clemson destroy its latest victim a hundred miles away. We located a friend who had a small chemical company close to the accident, and who was familiar with the chemistry and how to control rampaging cyanogen bromide. He located the truck and helped the driver spread out and neutralize the stuff. All ended well. Chemists lead exciting lives.

Kings Laboratories is located close to I-26, the interstate to Charlotte; at Rickety Ranch, the former summer home of Al's daddy and mama. His father, John Montgomery, was the editor of the ***Record*** newspaper. He is a scholar and historian. The Montgomerys have a large fish pond next to their house and within running distance of the chemical plant, if one cannot stand the odor or catches on fire. Rickety Ranch is a beautiful, secluded cottage, and the lake is something out of Thoreau. There are lots of fish. These are caught and eaten by the Montgomerys and their friends. All seem to survive.

Chapter 18

George Holland, now resident in Valhalla where he chats, I am sure, with Ira Remsen, Victor Grignard and other illustrious forebears, was in charge of the laboratories at the Baptist hospital when I first met him. He was a small, thin man, made owl-like by the large glasses on his short, thin nose. There was always something mischievous about George, something puckish and fay. He was a splendid lab man and knew not only how to test blood and urine, but how to make cultures, prepare drugs from the brains of rabbits and sera from the blood of all sorts of creatures.

He was often on the action end of a hypodermic separating me from my blood after I would visit Dr. Emmet Madden's red-haired nurse and, giddy from love, would be sent by her boss to donate blood for his anemic patients. Despite my activities in the laboratory and my intimate association with chemicals, I had a high hemoglobin count.

Now my stepfather, Mr. Seideman, at that time worked in the Federal Land Bank which was housed in the same building as Dr. Madden. In the afternoon when I came by to get a ride home, there was often time to slip into the doctor's office and gaze at his lovely nurse-receptionist. The thrifty doctor would give me a few minutes looking time and then send me across the street to see George.

"Gergel," he would say to the small adoring one. "It's time for you to do your bit for humanity."

"Max," she would say in her small voice, "Do it for me."

Inevitably, I ended up in George's sanctum, sleeve rolled up, rubber tube around biceps, vein bulging in shocked anticipation, obliging the doctor, the nurse, and the anonymous patient who would soon share my blood. I had the theory that if I gave enough blood, the nurse would ultimately marry me. It was my deposit in the bank. Men have followed the will-o-the-wisp since the beginning of time. I received no thanks from the hospital, no pay from the patient. The closest I ever got to the red-haired nurse was the fragrance of perfume when she passed close to me the afternoon she eloped with an intern.

George gave me the bad news as he deftly separated me from another half pint of blood. Used to my vein, aware of my lovesick state, and full of sympathy, he clucked his tongue and advised me to set my sights lower and date student nurses. They were younger, less sophisticated, and their affections could be purchased for hamburgers. I could keep my blood.

I spent the next six months pursuing this strategy and bought hundreds of hamburgers, coffee and Coca-Cola as well. The pickings were thin, but my hemoglobin count returned to normal. By then, George was my good friend and confidante. We chatted about the doctors and their private lives, some of the more interesting cases (he had a panhypopituitary), and I listened to a rich store of anecdotes gathered in 25 years at the hospital.

By then I had formed Columbia Organic Chemicals and was struggling to make a living. During one of our "low" periods when we were as anemic as Madden's patients, George drove out in his old automobile. He looked as if he had been scared by something large and ominous.

"They fired me," he said, shaking his head, still in shocked disbelief. "I'd worked for those people for years."

I was equally incredulous. George was as much a part of the Baptist Hospital as the walls and ceilings. He told me that there was a new administration, and all lab work was assigned to pathologists and student assistants. This would make the pathologists richer, and George, old faithful George, poor. It happens in business, but you do not always hear the stories. They hurt too much to tell.

"Can you give me a job?" The pale blue eyes winked back the tears.

We were a tiny company and survived by living on what we had

saved and what few orders came our way. It is axiomatic that one begs from the poor, the "have nots." The "haves" will give you a lecture on thrift and tell you to put your faith in Jesus. Naturally, we made a place for George.

He became the superintendent of our packing room. This was the area normally assigned to those who have become sensitized to chemicals (i.e. those who break out in sores, and foam at the mouth from exposure to the laboratory's normal atmosphere); those too old and tired to do regular work. It became the home of our new employee, dejected as he was with the callous dismissal from his life's work. He made our fusty, crowded, mildly dangerous packing room into a neat, functional showpiece. It was the meeting area for those who came to talk to George. He was not simply an employee, he was a member of the family. His grin made visits to the packing room a pleasure. He was kind to the workers, who adored him, because he "doctored them for free."

He examined their tongues, poked their stomachs, and inspected their "privates," reporting his clinical conclusions to the patient on a confidential basis. He listened to their problems (most of them caused by the paltry wages they received for risking their lives for Science and Columbia Organics). He lectured on contraception (my men were fertile, and because this was a pre-TV era, had leisure time in evenings); abortion (it was not legal then); nymphomania (all of my fellows had stories of friends who had met a nymphomaniac and hoped to have the opportunity themselves); hermaphroditism ("I seen a morphydite at the fair, Doc, and his pecker was smaller than Sonny's." Sonny had to be restrained from immediate revenge by fists); satyriasis (without exception my workers were, or claimed to be satyrs). He described to an engrossed audience the symptoms and treatment for gonorrhea (clap), syphilis (syph), blue balls, chancre, and other diseases of the adventurer. He dispensed aspirin (the men always had headaches), vitamins (for pep and hangover), and Band-aids for the frequent encounters of workers with broken glass and fire.

He was overall a devotee of TLC and stroked one and all. They loved him. He was always ready to put aside whatever job he was doing to listen to a problem and treat the afflicted. He filled large gelatin capsules with dextrose and gave them free to all who asked. All asked, swallowing the capsules in amazing amounts, swearing they put hair on a man's chest and stiffened his "peter."

He would walk across the road to the warehouse, where my mother and my Aunt Ida had the "Industrials" office, and discuss the

ailments of the cats, of which we had about 40 at the time. The cats would come out to greet "Doc" and followed him in an adoring company on his way back to the stockroom.

A year later, he and his friend and former co-worker, Weese (she had also been terminated at the hospital when they released George), opened a clinical laboratory and ran tests for doctor clients, the same tests they had run when they worked at the hospital. His bottle labels reflected the gentle humor of the man. For example, I suffered from a problem common to executives (and their bookkeepers) called "spastic duodenitis." It is brought on by tension; the imminent possibility of disaster in the form of a telephone call, a visit from a process server, or the crash and black smoke that indicate serious trouble in the labs. George concocted a quart of internal analgesic labeled, "Toddy to Tidy Tummies." Once when I came back from a trip to Bulls Island, itching like fire from an onslaught of minute wood ticks, he mixed up a balm, "Tick-Tox," that brought relief and sanity.

In the six months before his death, he made a good deal of money in his analytical lab, and we knew he planned to work there full time. He assured us he would visit and help any time we got rushed. Then, prepared for a new life, he detected, diagnosed, and treated his own cancer, fighting hard and with grace. There is a yawning absence in the packing room of my memory.

People were always coming up to visit, look, sell something or pick up soap or insecticides. Mothers would bring bright-eyed kids for help with "science projects" and old friends would come to see if I were still alive. One of the frequent visitors during George's time was Harold LaShuma, or "Tiny," as his friends called him. I first saw Tiny, a very large, sloppily dressed man, ambling down Cedar Terrace, his hands in his pockets, whistling without care. Tiny was a therapist at the Veteran's Hospital a few miles from the plant. He had remarkable hands and was skilled at massage. He was an avid reader and would come by the plant to discuss "Bug Eyed Monsters" or "Gestalt," usually when I was busy. He was a student of the occult and believed in signs. He knew the regions in Columbia's outskirts where voodoo was practiced, where remote waterfalls offered therapeutic powers (and dragged me off to them, usually when I should have been sitting at my desk worrying about something or other). Tiny had a large round face with small blue eyes. He always grinned, unless you were out of sorts. Then catching your mood, he would grow sorrowful. His hands, approximately the same size as those of King Kong, had been used as weapons. "Say, I just came by but don't want to waste

your time." When I told him that now he was here we might as well talk, he would discourse on his battle experiences, in which these hands had been actively employed.

Tiny had been a ranger, and his specialty was capturing, or destroying sentries. He made special preparations for his forays, first painting his body to disguise the whiteness, oiling it to make contact difficult, and attaching a "kneespike" to dispatch the victim. The sight of Tiny, stripped to the waist and thus armed, was enough to subdue the opponent without violence, I feel sure. He was a large man, quick on his feet.

We played a game. I tried to hit him with a broom, and he tried to avoid getting hit. I also used a chair, but before the broom or chair established contact, his flat hand had gently grazed the back of my neck and he joked,

"If I had wanted to I could have popped out your eyeballs."

When sentries were getting scarce or more alert, Tiny transferred to the nursing corps with an assignment to bring in the dead and wounded following battles. He brought in "ours" and "theirs," but not too many of the latter. His luck ran out, and on one of the missions he was captured and "worked over." Unconscious for a month, he woke up in a German hospital, his head permanently furrowed from repeated contact with the stock of a rifle. I examined the furrows. He owed his life to his thick skull.

At the time I met Tiny, my best friend was Dr. Henry Potosky, who was the radiologist at the Veteran's Hospital, where Tiny worked, and a member of the "I Like Tiny" club. He confided in me that Tiny, enraged, like an elephant, could be dangerous. In the 20 years I would know Tiny, I never saw him in any mood other than friendly — and indulgent.

He was concerned about my lack of size and muscle.

"Small men get hoited," he confided. He trained me to "Hoit the other fellow."

First we wrestled, and he showed me the holds, and groaned in simulated agony when I applied the "Hindu Death Lock," which I had learned years ago at the Y camp. You needed cooperation from your opponent to apply this hold, and Tiny obliged, but commented,

"By the time you get it working you would be "moidered."

Then we boxed, and the Gergel left jab and crossover brought screams of agony from the grinning LaShuma.

"You really hoited me that time."

Then karate, and I belabored my friend with lethal back hand slaps, which bounced off LaShuma blubber, but brought anguish to

my wrists. Exhausted from the lesson, I lay down on the portable cot he always brought with him and got a massage, which he claimed would stimulate my circulation and nervous system and make me irresistible to women. Peacefully, comfortably, I relaxed, a small, plump, lethal scientist, ready to woo, win and then protect.

He would show up at the plant whenever he got off work. If I was busy he did not mind, and would go visit my mother or the cats and then amble off. If things were slow or I was tense from too much or too little business, he would divert me with a trip.

"Come on, I have something special to show you."

Then we would drive up U.S. 76 toward Sumter to meet one of his cronies, to some scenic spot Tiny had discovered, or simply to have coffee at one of the local restaurants. Driving toward Eastover, he would point out sections of terrain, all looking alike to me, but each having distinct character to my guide. All were scrub oak and pine. Under no circumstances should I ever follow this side road. It was populated by devils. We followed this one which after winding forever ended in a clearing. There was a little scarecrow-like mannikin made of stones and pine cones, all alone in the middle. Tiny swore it was alive, a local in the form of a scarecrow, under a spell. It resembled one of our new plant men whose absence had been explained by Tommy,

"He's done gone North."

We were back on the main road after forks and dead ends which left me confused but did not bother Tiny. He once more told me never to drive it alone. We passed solitary Blacks, all waved at Tiny. One of them turned the back of his hand toward us in the anti-devil position, the first and fourth fingers extended, the others curled in the palm. He stuck out his tongue.

"You can't win them all," Tiny commented.

He had pet waterfalls. We would leave the plant in the late afternoon, Tiny enthusiastic, I dizzy from fumes and problems. We followed winding roads into the outback, then we had to get out and walk the final few blocks for the road had disappeared. This brought us to a stream, which we followed to its cascade. We stripped and let the water run over our heads. The cold, gushing waterfall did indeed vanquish my inners devils and brought peace. Unfortunately, this is now a suburb of Columbia and they have no doubt diverted the water.

Tiny was a firm believer in dreams and an expert in their interpretation. He knew all about "familiars" and kept up contact with several of his war buddies who had not made it home. He suggested

that I contact my old friend, Pete Todd, who had "taken it" in a TBF (torpedo bomber) close to the end of World War II, and although I had been a scoffer several things happened which convinced me that everything does not have an obvious scientific explanation.

He was hired by the family when my grandfather developed phlebitis and had to have his leg amputated. Tiny became grandfather's source of locomotion, as well as companion. The two of them went everywhere, Tiny pushing the wheelchair and grandfather complaining. Grandfather was not easy to get along with because he missed grandmother and his leg, and his old job as packing room assistant. He had a magnificent temper when he was young, usually directed at grandmother, who never answered back but simply pursed her lips and left him to rage himself out. Confined to the wheelchair with nothing to occupy his time, he quarreled with the characters on the television screen and sometimes threw things at them. He was especially angry with LaShuma who, somehow he decided, had been involved in the loss of his leg. As he aged his temper ripened. He would fuss at Tiny and threaten him with his cane.

"Now Mr. Revelise, why are you so mad with poor Tiny?" brought greater rage.

He stood up in the wheel chair, the cane in battle position, like a crab holding up its claw. Tiny, holding up his hand in mock defense, intoned, "Don't hoit me, Mr. Revelise. Don't hoit poor Tiny."

The gladiator made sweeping attacks with the cane but Tiny stayed just beyond reach. They sparred, playing the game. With cunning, grandfather beckoned Tiny to come close ("I'm only joking, Tiny!"), then Tiny barely sprang to safety as the cane made another sweep. Then the mood passed like skies clearing after a shower and Grandfather in great good humor joked with his friend,

"LaShuma, you don't think I would hit you?"

"Mr. Revelise, I was frightened to death. Everyone knows what good muscles you have."

Then Tiny would roll him to the car, and they would wave their goodbyes.

On the day we buried Grandfather, on one of those gray, rain-drenched days God provides for funerals, there were just a few old-timers in the cemetery, cronies of another era, just enough for the *minion* that Grandfather, the unbeliever, would have scorned, Tiny, enormous under his yarmulka grieved alone.

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There is a wonderful poem by Lewis Carroll entitled, "The Hunting of the Snark." It is a poetic quest in which the quarry is ill defined and elusive. One never sees the Snark. To do so would be fatal. One never sees the plant, Treadsad. You just hear some of the old-timers talk about it. LaShuma, for example.

Treadsad is a small, private plant. You have to step on it to know that it is there. Once you establish contact, you almost achieve levitation, for you can't find it wearing shoes, and it is cruelly barbed and the stickers inject poison. You have to be a real devotee to walk barefoot in the meadows. But after all, the French gather lethal sea urchins and brave the barbs to get to the stomach of the creature.

Tiny was a confirmed Treadsad addict and invested the quest with magic. We hunted on moonfilled nights, walking barefoot in the grasses, feeling for the Treadsad with the big toe, never actually stepping on it. Because there are cockleburrs and nettles that produce a similar sensation, one has to have educated toes. LaShuma walked in front, carefully testing the flora. He would capture the quarry using his big toe and the one next to it. The spikes drop off when it is boiled, and after several hours steeping, one obtains a thin green broth, which is a specific for impotence. We were not always successful on our hunts, for the species has grown rare, probably from overharvesting, because it is so beneficial to the ego. Tiny was not the only afficianado. Other shadow figures walked the moors. Now that I am retired and have plenty of time, I plan to explore the wild land back of Lake Elizabeth Road and the headwaters of the lake itself. Time is short.

I would often see him during my last few years at Columbia Organic Chemicals, Inc. He retired from the Veteran's Hospital and became a night watchman for a trucking company, uniformed and heavily armed, hoping to catch an intruder. My helter-skelter life left many stranded friendships and lamentably I neglect many that were forged in the furnace of shared experiences. He became quite ill and called me regularly, and toward the end there was desperation in his recorded voice, but I was away on a trip and only got the messages when I returned from overseas. They grew resigned. Finally, he told me he was mailing a gift which he had wanted to give me in person. It was a Greek sailors hat. I had always wanted one and never told Tiny nor anyone else, but somehow he knew.

Chapter 19

When I was a boy, before I became a chemist, the popular conception of scientist was a thin, earnest, dedicated, silent man who neither drank nor smoked. He was brilliant, had one wife (to whom he was faithful), and a family whom he supported, but neglected intellectually. He was devoted to his work and had time for nothing else. I have known hundreds of chemists and many of them are, indeed, thin, earnest, dedicated and silent. Many neither drink nor smoke. Most of them are faithful to their wives. Some are distracted and pay little attention to their families. Fortunately, there are plenty who are interesting, colorful fellows. Some drink, some smoke, and a few pursue an amorous second career. I have known the brilliant, the eccentric, the slightly mad and the outright insane. I have worked side-by-side at the bench with some of them and maintain correspondence with many more.

I revisit Columbia Organic Chemicals, which was once virtually my home, and see old friends. We eye each other, cautiously wondering what damage the chemicals may have done to our respective internal organs. We have all been exposed repeatedly to benzene, carbon tetrachloride, and fused ring hydrocarbons. Statistically, we should all be in the final throes of cancer. According to the ominous reports I read in the journals, we should be dead, or about to go. Actually, the fellows look pretty aged, but I think they will die from automobiles or saddle emboli rather than from our friends, the chemicals. Their lives were rarely conventional. Each person is colorful. Working with these men has been fascinating.

I have friends who are chemists and friends who are sailors. No one with a single exception is both. Jim Hudson is a legend among bench chemists (those who do their work in the laboratory rather than in the library). I don't know where he is now. He may be making chemicals out in Colorado, where I last heard from him, or he may be sailing in the Caribbean. Whichever he is doing, he is having fun, and his wife, Gwyn, is close by. I don't imagine he drinks much now. He was quitting when I last saw him. Jim has steel will power. So if he decided to be sober, he would quit drinking and be sober. He would do it quietly without taking ads in newspapers to inform the world, or like many reformed drinkers, turning to religion and lecturing his unreformed friends.

During his days at the University of Michigan, he was well known, admired, respected, and feared — all at the same time. I met

him by chance. I had come to visit the purchasing people and professors who might be induced to buy from us rather than their large, sophisticated neighbor in Milwaukee, Aldrich Chemicals. I had visited Parke Davis and my friend, Dr. Elslager, and friends at Michigan State in East Lansing, and everyone was glad to see me but no one was short of chemical raw materials. I decided to visit Dr. Overberger, who had just moved to University of Michigan to be the head of the chemistry department. With my luck on the wane, he was out of town and the only other man I knew in the department, Dr. Elderfield, had just died. I have trips like this.

I didn't know anyone else and felt too old and tired to make calls "cold," (those made to a person you don't know and with whom you don't have an appointment). You have about five minutes to make a fast, hopefully favorable impression, and then he goes to class, departs for tennis, or throws you out on general principles. The girl in purchasing was tall, shy and very helpful. She felt almost as bad as I did about my lack of luck.

"Maybe you'd like to meet Jim Hudson. He makes things in the basement."

Jim was surrounded by flasks, all boiling gently, and pressure vessels, whose gauges indicated that something was being hydrogenated or otherwise being run confined. There is always a certain amount of danger to the operator and visiting salesman should the reactor explode. He was running a three-ring circus production. Jim was of medium height, blue-eyed, tousle-haired and overweight. Like a lion tamer, he was icey calm. His helper was thin, blue-eyed, and agitated.

"Jim, come over here!"

My host withdrew his outstretched hand and hurried over to the reaction indicated by his helper. It was, as we "old timers" say, "getting away." He adjusted the stirrer, cut down the voltage on the thermostat controlling the heating mantle, and added more water to the jacket of the reflux condenser. The ebullition subsided as well as frothing that had threatened to crawl up the neck of the flask and into the reflux condenser. Such incidents happen to the research chemist and he develops fast reflexes. Jim moved fast. The excitement over, he once more stretched out his hand.

"Sorry for the interruption."

This was Jim Hudson, who had the reputation of being one of the best "prep men" in the business. He introduced the helper.

"That's Gwyn. She drinks likker just like a man."

The liquor-drinker stretched out her hand.

"Paw drinks moren me."

This is language right out of the South, and I felt at home with these transplanted Oklahomans. Jim was proud of the equipment.

"Come straight out of Parr."

Parr is the Cadillac of pressure vessels.

"I make all the bad chemicals that the geniuses around here dream up and are too damned lazy or scared or both to make themselves." He discussed his prices.

"I charge them high, but, hell, they don't complain cause they ain't got no other place to go!"

He then gave me a brief description of meeting, wooing and marrying Gwyn, the helper.

"I was visitin Oklahoma and somebody shot a rifle, and she cum a-runnin out of the bushes."

The subject of this anecdote listened, smiling. She obviously loved the raconteur, and it was obvious that she was not hearing the story for the first time.

"How about stayin with us for the night?" he proposed. I told him this suited me fine.

He methodically turned off stirrers and heaters, shut the flow of hydrogen to the shaking cylinders, another flick and they shook no more. He lit a cigarette and, framed in front of the "No Smoking" sign, stared at me.

"I reckon you drink beer?" (He was looking at my stomach).

I nodded, although I prefer Coca-Cola. In a few minutes we were out of the laboratory on a campus grown dark and cold. Students muffled in coats and sweaters hurried home from classes. We followed Gwyn into a dimly lit, crowded basement beer parlor and the greetings from those within indicated that my friends were "regulars."

Jim blew the foam from a tankard. Gwyn looked at me across another. I was staring in disbelief at a gallon of beer, yellow and frothing, which I was supposed to consume.

"Maw, I can tell Max ain't a true beer-drinker," said my friend after transferring a quart to his internal plumbing.

He hiccoughed a few times, kidded me once more on my timidity, and drank another quart. Then he departed for a "pit stop," and Gwyn patted my arm and said, "Dad drinks a lot of beer. Take what you want and leave the rest." They were wonderful people whose fingers were stained yellow from Chemistry and whose hearts were full of affection. They smelled the same fumes I smelled, spilled the same dangerous chemicals on their skins, rotted out their

clothes, and overworked their lungs, livers and kidneys, just like me. They bought raw materials, processed them and sold them wherever they could find a customer, the same as we did at Columbia Organics. I felt at home. Driving to High Rock Lake in the suburbs of Ann Arbor, Jim told me the story of his life.

This burly man was self-taught. He had become a chemist the way other men become hunters, car racers, or devotees of bridge. Able to do almost anything with his hands, he got a job with one of the oil companies laying pipes in the Arabian desert. He accumulated a chemical laboratory and small library and made chemicals for fun.

"It's hot as hell in the desert, which makes reactions go fast, but ets up ice when you're distillin' and need to condense vapors."

By day he was a rigger, assembling the huge pipes that carry oil to the refinery. At night he studied his books and carried out syntheses, repeating the experiments of others, and refining them to simplify the prep or increase the yield.

When he had to leave (he did not tell me just why), he decided to return to the states and get a chemistry degree. He wrote letters to many universities. Dr. Elderfield, the noted Hetrocyclic Chemicals professor at University of Michigan, invited him to visit. Would be starlets come to Hollywood and do not make it. Hudson never got around to attending classes. As Elderfield's helper, he learned a great deal of practical chemistry.

Elderfield, like Jim, liked to drink. He was a genius and the author of a number of books. He had taught at Columbia University, and his move to Michigan was welcomed like the arrival of a seven-foot center to a basketball team. He found a kindred spirit in the no-longer-young Hudson, the alumnus of the Arabian sands, on oasis in Michigan. Theirs was a love-hate relationship, but they had mutual respect. Master and student spent afternoons discussing chemistry and the synthesis of heterocyclic compounds. Then the devoted Hudson donned lab apron and repaired to the bench to perform symphonies of production.

He never took a degree; never, in fact, enrolled. He was too busy, the work too important. On a visit home he added Gywn to the team. She took a degree in chemistry! He and Elderfield were inseparable; the suit clad mentor, and the apprentice in soiled shirt, hands yellowed from cigarettes and xanthoproteic acid, which forms when nitric acid touches bare flesh. They yelled at each other whenever there was a disagreement, especially after a few drinks.

It is argued by those who recall the incident that Hudson pushed Elderfield, or Elderfield pushed Hudson the night of the

chemistry department party. Locked in mortal combat, they broke through the guard wire of Hudson's sailboat and fell into the frigid lake. The young men who pulled them out are now well-known professors and industrial scientists.

Several years earlier I had visited Elderfield to pay my respects and thank him for a favor. Several years previously I had been requested to write the section on nitriles for the Encyclopedia of Chemical Technology. This was interesting, for I knew so little about nitriles. With the help of my uncle, Max Revelise, and the University of South Carolina library, we put together a 50 page article, which was corrected and refined by reviewers and ultimately published. I inquired of Janet Scott why she had come to us and she said it was on the recommendation of Elderfield. When I came in, after a knock had been acknowledged, he listened and then made a short speech:

"You know, Gergel, I am a bit absent-minded. I had intended ordering 10 kilos of methyl iodide from you at Columbia Organics and writing my friend in Canada to handle that article and now I know why he wrote me a crazy letter and I never got that methyl iodide."

I went with Jim to Elderfield's office, which had been preserved just the way he left it, to pay respects to my benefactor. The bookshelves were neat, the desk, arid, on the wall a picture of the former inhabitant as a young man. He had made me an author, and Hudson into a chemist. The silence was broken by Hudson.

"You ain't never seen a man drink like old Bob Elderfield."

The stern young man in the picture glared a reproach.

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When Elderfield entered the Elysian Fields, Hudson remained as flotsam. He was hired by the chemistry department to run the hydrogenation units. Hudson prepared those chemicals which no one else wanted to make and charged heavily. He and Gwyn worked hard in their little room at the university and when it became too small set up Hi Laboratories in a building next to their home. They banked their earnings, and in the summer, Hudson the chemist became Hudson the sailor with Gwen as first mate. They sailed at the Detroit Yacht Club and their 42-foot sloop rigged sailboat took lengthy excursions into Canadian waters.

It was another visit months later over another tankard in Luther's Tavern. The whine of the jukebox had subsided and the crowd, mainly university students, had thinned leaving the habitues and those who had no better place to go. I asked the bleary-eyed

"Quasimodo" why he had left the desert and returned to America. Like Hoffman, he stared at me, sipped his beer silently, setting up the story.

"The workers who put in the pipe lines drew high salaries but had no place to spend their money. There was no "suk" (trading bazaar) at the oasis. The miserable bedouin women were heavily veiled and their husbands and brothers were armed. There was a game room supplied by the company, but liquor was forbidden. The men read magazines, wrote letters home, and in the case of Hudson ran chemical experiments. One man had his wife with him. She was excruciatingly bored.

One evening as he lit the alcohol lamp, which heated his reaction flask, the tent flap opened. His visitor was the woman, heavily made up, wearing a "see through" dress. She asked Hudson to tell her all about chemistry. Complaining of the heat, she removed her bra and stepped out of her skirt. The dedicated scientist was horrified, ordering her out when the flap of the tent once more opened, this time revealing the woman's husband. The scene was right out of Mack Sennett or Charlie Chaplin, the husband brandishing his pistol and saying what husbands usually do, the wife giggling hysterically, Hudson inviting him to watch the experiment. There was an argument — just like in the movies.

"I've suspected the two of you for some time."

"Pete, you've got this all wrong. I was working here and Bebe just came in to watch."

"She watches with her clothes off?"

Pete shot Hudson twice in the abdomen, a large target even in those days. Two more reached his arm and leg while the rest went into tent wall or were aimed unsuccessfully at the fleeing Bebe. One final shot destroyed a glass condenser which had taken three months to get from Corning, New York, to Arabia. I believe this is what angered Jim the most. He got out his knife, a large murderous weapon and, terribly wounded and outraged, fell on Pete and almost bisected him with a cut starting at the neck, channeling down the chest, stomach and pubic region. Poor Pete had been in the wrong place at the wrong time with the wrong people. A helicopter carried the two combatants to the hospital and adjoining beds. Bebe, still running, was half way to Tunis.

As Jim said, "I ain't never heard from neither of em again."

Jim was a quiet man. We would discuss chemistry for hours, usually compounds he had made, things that he could offer me for resale, and people he had met in his travels. I introduced him to

Alfred Bader of Aldrich and they became good friends. Aldrich kept him busy and he fretted because he considered chemistry a hobby and its reward the sailing trip at the end of the season.

He grew reluctant to take on new projects and when I brought an important one to him involving lithium aluminum hydride, he did it only as a favor. I had a telephone call from my friend a few days later. His voice was muffled by a crackling interference.

"Jim," I said, "What's the noise?"

"We're having a helluva fire," was the reply. "It's that lithium aluminum hydride you sent us. Place is burning up. Send us some more. We'll get another place and finish up yore stuff cause Gwen and me need to hit the Exumas before the hurricane season."

Jim was a marvelous sailor. His vessel was moored at the Detroit Yacht Club, about 35 miles from Ann Arbor.

She was long, trim and clean. She carried plenty of sail and a cargo of Jack Daniels, stored in the cabin for the captain and guests.

It was early morning, and the fog had not lifted from the water, but already there was a bit of chop.

Our crew was Jim, Gwen, myself and Franz Duell from the University of Chicago. We went out under jib with a following breeze. We drifted up the channel, lined by docks and warehouses. Soon we were in open water with other sailboats that had started early. Jim was at the helm.

The wind freshened. Black squall clouds appeared. The chop became three foot waves. The captain called for foul weather gear and bourbon. We donned the familiar yellow oilskins which keep out water and cold and busied outselves shifting from the Genoas, which are large full sails, to storm jib. The bottle was passed from hand to hand, the contents drunk straight. Jim, busy keeping us "pointed," removed the cap of a second bottle with his teeth. Paranthetically, I observe 20 years later, I did the same thing on CAROLINA in Jamaica for an audience of Black seamen when we won the Montego Bay Open using two "Gennies" in place of a spinnaker.

We lined up for an impromptu race. Our ketch was easily the fastest boat, and we waved as we passed the others. They waved back enthusiastically. Jim's reputation as a sailor equalled his fame as a chemist. He took another long swallow of bourbon and passed the bottle to the crew. It reached Gergel, whose numb fingers would not hold it. Bottle and contents fell into the sea.

"Waste of good whiskey by Mr. Gergel," said our chief, without resentment. "Give him a new bottle, Maw."

By now we were in heavy blinding rain in a churning sea.

The other vessels turned back, sails furled and running on engines. Jim announced we would run out of the bad weather, indeed, within a half hour we were in sunlight, the clouds heading toward America as we headed into Canada. Three wonderful hours we cruised the small islands, the wind warm and gentle. I lolled in the cockpit with my friend discussing our future lives. He told me he and Maw would get a 50-foot yawl built in Taiwan, fly over and sail her back. We were almost home. Jim single-handed the boat while we talked and the others slept. As the skies lit up with the last of the sun, we glided into anchorage.

I heard from him only once during the past 15 years. He was in the Caribbean, spending an evening with Gwen in Port a Pietre, Guadeloupe. He has a fast ketch. I don't think he makes chemicals any more. I don't blame him!

Chapter 20

In 1971, I was no longer young. I was looking back on 30 years of running a small chemical company and facing with apprehension the prospect of having to run it the rest of my life.

It was a company no one wanted to buy, run by workers who were over-age and a president who faced the future with apprehension. There were early signs of government supervision of the raw materials we used, the products we made, the conditions under which we worked, and what we did with the leftovers, the chemical by-products, the cruds, the vapors. In the old days, we could all die quietly of liver trouble and cancer since scientists prove that these chemicals kill mice and must surely kill people as well.

When I was not driven frantic by orders for chemicals we could not make, delivery schedules we could not keep, and the inexorably increasing scrutiny of alphabet agencies, I had nightmares of Gergel, aged 70, making methyl iodide, running Friedel-Craft reactions, and continuing to apologize for tardy delivery and occasional deviation of our product from the physical characteristics spelled out by the literature and verified by our competition. In nightmares, my co-workers were absent and presumably had succumbed.

The sound of a fire truck, whether close to the plant or uptown when I was steaming away my tensions at the YMCA, indicated that the plant was on fire. The appearance of a policeman meant that I, or worse, a key employee, was about to go to jail. I suffered from anxiety neurosis, which at one time or another bedevils anyone who works hard for a living. It gets worse as you grow older and you feel your strength going and your mind shriveling.

In day dreams, my three daughters graduated from college, I saw them marry men who could support them, learned that my ex-wives had remarried. I retired (in the dreams), devoted my life to writing, consulting, and teaching at Allen University, the local Black college which chronically needed chemistry teachers. Alas, in 1971 I was too old to go back to college and too young to draw Social Security. I dreamed I was back in Israel working with Makleff and Dead Sea Works. Dreams are inexpensive and one can indulge in them provided one forgets not the payment on the note at the bank, the payments on the various mortgages, the payments to various wives and money presents to one's children, payments to the Animal Welfare Society (they, or the Salvation Army, will provide a home if all else fails), payments for the car, gasoline and repairs. Insurance, utilities, food and taxes. With the aid of prayer ("Pity me oh

wahwahkonda." I appeal to him regularly since he is neglected by the departed Cherokee) and strong coffee, I continued maintaining the daily schedule from whence cameth my daily bread, relying on the Greeks who say, "Even this too shall pass."

A welcome relief from the day-to-day problems of the chemical plant were trips to thank old customers and try to get new ones. ACS, the American Chemical Society, has two annual meetings and I attended one each year, even when we lacked money for me to eat, travel and sleep in a hotel each night. This was solved by minimizing eating and sponging on friends.

My first ACS meeting was a magic week in Atlantic City. I stayed with Dr. Reid, who was a consultant to DuPont. They paid for his room and food, and unknowingly for the youthful president of Columbia Organic Chemicals.

In those halcyon days, with research money freely available and industry pampering its chemists, national meetings were tremendous affairs with 15,000 or more scientists attending. I arrived early to see people and distribute our little catalog. Often I had to pick up food checks because chemists are forgetful or thrifty. Columbia Organics could not afford the dinners but the friendships lasted the rest of my life and have been repaid tenfold. I strolled through the exhibition area, chatted with the vendors who leased booths (an extravagance my company could not afford), and even occasionally went to the talks.

The meetings were held in major cities. Chicago was my favorite. After I tired of listening to lectures and talking shop I would visit the art museum, the symphony and the opera. Sometimes I would visit my friend Fred Jeffries in Waukegan or travel as far as Milwaukee and, at that time, a much smaller Aldrich Chemical Co.

I had dramatic adventures. Coming in late at night on the old Rock Island Railway, I asked the conductor to let me know when we reached Chicago Avenue. I was staying at the Knickerbocker Hotel, across from the Drake, just on the edge of the "Loop." The conductor advised that the area was unsafe and that I should take the train to its last stop and come back by cab. However, I knew that the hotel was only six blocks away and I insisted on getting off at Chicago Avenue. I regretted leaving the train when I descended into the horrible darkness of the steps leading to the street.

No sooner had I reached the middle of the road when I heard footsteps back of me. I ran well, despite the briefcase. My adrenaline flows steadily, especially during a chase. They were gaining when a taxi picked me up several strides ahead of the pack. He had been

cruising and happened to be on hand in time to forestall my possible dismemberment.

At one of the meetings, Alfred Bader invited me to see a supposed Rembrandt painting. It was one of the many portraits of the artist's wife, Saskia. Al had invited an old German, an expert on Rembrandt, to join us. After a conference, they confided that the painting was at least 50% Rembrandt and the rest had been done by students. I could buy it for $1,200. Because this was my salary for two months at the time, I decided not to invest. It was sold for $36,000 before the end of the year. I recall the visit for another reason. The dealer, impressed with Alfred's reputation as a collector, said, "Dr. Bader, I have a Corot." Alfred replied:

"Sir, Corot painted 135 paintings, of which 137 are in Chicago." The figure 137 may be incorrect, the inference is clear.

Chicago is also the headquarters of Standard Oil of Indiana and its chairman of the board, John Swearingen, our University of South Carolina's most distinguished alumnus.

Swearingen had studied Chemistry with Pete Czarnitski at Columbia High School and studied Chemistry and Chemical Engineering at the University of South Carolina with Copenhaver, Lipscomb, Whitesell and Moore. I had known him for years. His mother had taught me in the city schools, and he was a contemporary of Atherton Whaley and H. Willard Davis, both of whom helped me when I was at Carolina.

Shortly before attending an ACS meeting in Chicago, with some bravado, I wrote THE MAN, asking if he would like to join a select group composed of Dr. Davis, Jimmy Goggans, one of his own research chemists who likewise graduated from Carolina, and myself, for a dinner as my guest. The meeting place would be Le Petit Chateau in the Palmer House. I did not expect to get an answer but he wrote saying he would be there! I told everyone I knew including chemists from his own Whiting research labs, and at the appointed time there was a considerable gathering at the cafe. Christ walking on the water could scarcely have attracted more attention. There was a ripple of nervousness. No one in the group had ever seen this living legend. At the appointed hour, a Fleetwood Cadillac drove up and was guided by the chauffeur into two parking places reserved by the Palmer House and a proportionally large man emerged.

John Swearington at 40, and Alexander the Great a few centuries earlier, had similar problems. Both had reached Parnassus. There were no new worlds to conquer. Those who had known him at the University of South Carolina, and those who met him during the

brief time at Standard Oil when he was merely an employee knew he would go to the top — and he did! Briskly, Swearingen walked through the door and there was a murmur from the enraptured audience. One chemist pretended to faint and was supported by his fellows from Whiting. A number of them called a greeting and a faint smile rippled the corner of Swearington's mouth. He was impressive, all six foot five inches and 275 pounds of him.

He saw us, walked over, and shook hands. While there were only three of us, somehow four pairs of hands reached out to shake with John. Because the stranger hands were indelibly colored by our profession, it was obviously one of the Whiting people.

Swearingon's "HELLO!" so startled a waiter that he dropped a tray of cocktails on a pair of salesmen and their dates, creating a mini-scene. John announced that we would not dine at the Palmer House, that we were all guests of Standard Oil, and that we would spend the evening at the Drake Hotel, where Standard had a suite. As we embarked, there was a scattered cheer from the on-lookers, an improvised banner announced that Whiting Research Laboratories loved its leader. John turned as the Fleetwood picked up speed and made a "V" with two fingers. We were on our way.

We persuaded the driver to take us up Michigan Avenue so we could show off to our friends. The car weaved in and out of traffic and in a few minutes we were at the Drake, opposite the old Knickerbocker and Chicago Avenue, where earlier I had run for my life.

Brisk activity on the part of hotel personnel had the car berthed and two cases of whiskey consigned to the Standard Oil suite; the Maitre D whispered a respectful

"Dinner will be served for you and your friends at 11:00, Mr. Swearingen."

Trailed by his awestruck friends, THE GREAT MAN entered the elevator. In the distance, by coincidence, there sounded the trumpets of the Triumphal March from *Aida*.

The Standard Oil suite occupied an entire floor. We sat in the luxurious "Party Room." A picture window revealed not only Chicago's business district but also a window across the street in the Knickerbocker and a group of Whiting chemists including my friend, Paul O'Brien, waving like mad. Our host took off his shoes, loosened his tie and belt, and indicated that we, too, should get comfortable. The first round of drinks was poured. I did not tell them I was a non-drinker. Jimmy Goggans, a fellow abstainer, had the same problem. Straight bourbon in an oversized glass is a challenge for men

inexperienced in the fine art of drinking. John and Dr. Davis discussed their youth in Carolina.

He asked me how I made a living and I told him about our genesis and he nodded vaguely and told me most of his work was acquiring oil fields and handling stocks and debentures; that he guessed my customers were the "kids at Whiting." If I ever got a hot item to take it with his blessing to the director of research.

The four of us then tried some harmonizing, and the product, whiskey lubricated, was quite good. We sang some more and started a second bottle. By 11:30, we had disposed of this and discussed all the professors and graduate students from Carolina for the past 20 years and the fate of the basketball and football teams.

Sobered, John rose to announce, "Gentlemen! I forgot all about feeding you.!"

Part of me tried to get up but I was heavy in my chair. Goggans arose shakily, and we followed Dr. Davis and Swearingen to the elevator. The combination of drink and elevator motion led to social disgrace. I slipped and sprawled at the entrance to the dining room. The others helped me to my feet. The waiters stared fixedly several inches above my head.

The table was set for four. Each place had an engraved card. My name was spelled correctly but I had received a PhD. There was turkey, prime ribs and ham. The latter was part of an animal staring at us, its jaws clutching an apple. There were about 17 vegetables, ten forks, spoons and knives and two wine glasses per setting. Three waiters, several assistants of lesser height, a frosty lady who checked the table, chairs and floor beneath (presumably for bombs), and the chef himself, a tall, robust, grinning man who smiled happily as our plates filled.

We toasted the governor of South Carolina, the late President of the University, J. Rion McKissick, and his successors, Steve Wadiak of football fame, and my former professor of general chemistry, Guy Fleming Lipscomb. We toasted the present head of the chemistry department, our own H. Willard Davis, who rose a bit wobbily and bowed to each of us in turn, our distinguished native son, John Swearingen, and two young men who would no doubt make their place in the world of chemistry, Max G. Gergel and James Goggans. I proposed a toast to Colonel Spotsky, a ritual left over from my pre-flight days.

Dr. Davis proclaimed so that all might hear, "From now on, Gergel, you can call me 'Wullard!'"

It was a wonderful, never to be forgotten evening. We

demolished the pig, turkey and prime ribs and most of the 17 vegetables. There was cake, sherbet and plates of nuts. Everything was eaten. We smoked cigars, drank black coffee and returned to the party room full of food and cheer. If Cinderella had appeared, I would not have been surprised, such was the magic of the evening.

Once more we loosened our belts, took off our shoes, unbuttoned shirts and sang the old songs. We were distended with food and drink, and somnolent. Willard excused himself, entered one of the two bathrooms, and could be heard fumbling with the flushing mechanism.

He poked him head out of the door. "John, how do you flush this damned thing?"

John ambled into the bathroom and explained to my former engineering instructor the technique for flushing a Drake Hotel commode, remarking, "Next time, Willard, we'll get an old two holer like you're used to."

He advised us he would not be going home, that there were plenty of bedrooms in the suite in case we wanted to spend the night, but if we wanted to leave we could have the rest of the booze and the Fleetwood. Goggans opted to stay. Willard and I cruised Chicago for a few hours.

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A good friend of mine in Chicago, Jerry Swimmer, made methylene iodide, which is the densest organic compound, and offered other high density liquids for mineral flotation. This is a fascinating method of separating desirable ores by suspending the lighter materials. One does it without thinking when one "pans gold." Jerry was also an authority on gems, and supplied off quality diamonds to the abrasive industry. From time to time he would give me some lovely opal or topaz as a gift. Whenever I was in Chicago, I would try to visit with Jerry for not only was he a good chemist and businessman but knew a great deal about the effect of chemicals on health, a subject which fascinates chemists, especially those who work with obnoxious compounds. With the aid of vitamins, and I suspect good genes as well, Jerry, who is several years older than I, looks like my nephew.

Another friend who frequently attended the meetings in Chicago was the eminent fluorine chemist, Dr. Cyril Woolf. A typical get-together would start like this: the telephone would ring, the voice on the end gentle and very British.

"Max, my friend, how are you?" He had telephoned the plant and found out where I was staying. "I'm so glad you are here. It is a lovely autumn day and the wind is blowing hard off the lake. Will you walk with me?"

Cyril worked for Allied Chemicals. I first met him when I visited their research facilities in Morristown, New Jersey. He was already famous. Dr. Harold Barrett of DuPont's Development Department, always a friend to me, in part because of our mutual affection for Dr. E. Emmet Reid, told me that both DuPont and Pennsalt (later called Pennwalt), had tried to get him when he came over from England. He was an honor student under Professor Emeleus. He helped Allied develop a line of fluorinated propellants and solvents. Through his friendship Hynes Chemical Company with whom I worked closely (John Hynes has always been one of my very close friends) was able to produce and sell chlorodifluoroacetic acid made from fluorochloroacetones which Cyril's company supplied.

Cyril worked for the research director of Allied's Fluorine Division, Herb Pierson. Herb was a ferocious-looking man, who spoke out of the corner of his mouth, but the bulldog scowl softened when I asked if I might meet Cyril; that I either had to sell chemicals or make friends on trips, or I would not eat whether I was on a trip or not. Cyril joined us in a few minutes, a tiny man, quiet and shy. The three of us sat in Pierson's office and discussed fluorine chemistry and they gave me some unusual fluorine compounds which I could list in my catalog. Cyril Woolf was about five foot tall. His head was dolicocephalic and proportionately quite large for his body. This was probably caused by the vast knowledge it contained. Not only was he a brilliant chemist, but an excellent chess player, a student of Zen, and a devotee of Transcendental Meditation. He was a kind man, a lover of animals, a lover of human beings.

When he visited us in Columbia the first time, we sent our new secretary, Mary Ann, to the airport to pick him up. He was supposed to give a seminar at the University. The talk was scheduled for 4:30 p.m. and a capacity crowd was expected.

Now Mary Ann had just been releasd from the South Carolina State Hospital, which houses some of our more confused citizens. She had been "graduated" because of overcrowding, and we got her because she formerly worked as a lab technician. Unfortunately, sometimes she would be late showing up for work, and sometimes she did not show up at all. We would get a call from Albuquerque, New Mexico, or Galveston, Texas, or wherever she took a fancy to visit, telling us her "nerves were acting up" and she would be "taking

a short vacation." She had a second problem. She adored telling her life story in vivid detail to any appreciative audience, preferably male. I remark parenthetically that I heard this autobiography several times, and always found it more interesting than making methyl iodide. On this fateful day, I felt it safe to send her to the airport for Cyril for she had just returned from one of her trips, and I had coached her and Cyril on the importance of not keeping the chemistry group waiting. Further she had fallen in love with a purchasing agent for a pharmaceutical company in Scotland who had visited us recently, had told him the story of her life, and the two of them were now corresponding. When she volunteered to pick up Cyril, I did not hesitate, gave her the key to my car, and when they did not appear within the hour, I assumed they were sightseeing or she was telling him the story of her life.

Dr. Cargille from the University called several times, first to invite Cyril to come early for coffee and donuts, then worriedly to announce he was late, then to tell me he could not hold the group any longer. The call, an hour too late for the talk, was from Lexington, South Carolina. It was Cyril, telling me that this was a deeply disturbed woman; that perhaps I might like to join them for a drink.

She was telling her history when I drove up in the plant truck. They had each had several drinks. Mary Ann told me that she felt bad about leaving Columbia Organic Chemicals but Cyril had invited her to visit Morristown and seek employment with Allied. Later, he told me that this was for my sake since she told him that I, and all the male employees of Columbia, were harrassing her sexually. He feared for my stability as chief officer. He also said she was not insane, just confused, but he felt his organization which was larger would be better prepared to handle her problems. Not waiting for a formal invitation from their personnel people, she left the following day for New York City, checked in at an expensive hotel, telling the desk people to charge everything to Allied and Dr. Woolf.

He was not calm when he called me next week to ask for help. She had barricaded herself in her room after giving a party for various people she picked up on the street and in the lobby, and at payup time the next day when they insisted on money and refused to bill Allied had called him to say it was his fault and his problem. She was still at the hotel and he did not know what to do. I telephoned her brother in Atlanta, and my friend Charlie Grogan in Washington, both of whom had experience with Mary Ann's moods and they talked her out of the hotel and New York, and Charlie drove her to Atlanta.

Then Cyril had a heart attack, brought on he explained to me

later by heredity rather than cholesterol or cigarettes (he ate lightly and smoked not at all), and delved more deeply in Zen. he told me that he would never have another heart attack and that he could, in fact, control his heart beat. He demonstrated this to my astonishment when holding his pulse I felt it grow slower and slower until there was hardly a pulse at all. He was in a trance, hardly breathing and turning green. I propped him up on a corner of the couch in my office and saw three salesmen, one right after the other. All became unnerved at the sight of Cyril transing on the couch.

"Is it alive?"

I assured them, "it is alive."

A year later, Joe Marcolla of Mercantile Development Corp. in Westport, Connecticut, had me consulting in fluorine chemistry for RIMAR, in Trissino, Italy. Joe represented them in the U.S. and hired Flavio Settin and me to do the leg work. He and I took several trips to Italy together. Their program included production of fluorinated acids such as pentadecafluorooctanoic acid by Simons Cell technology.

They wanted to develop a process for making trifluoroacetic acid in their electolytic cells. I felt that this route was too expensive and they should use the time honored treatment of trifluorotrichloroethane with fuming sulfuric acid. Allied had such a process, which they were not using, and there were other routes available. I approached Cyril and he supplied them with ideas and information. Rimar was grateful and invited Cyril and his family to be their guests for a month in Italy. He visited Venice, Milan and Urbino, and many other exciting cities, having a wonderful time. It was good that he had this vacation for his thread was almost spun. Joe told me later that Cyril knew and had known when he had last spoken with me. He died of cancer, refusing treatment and requesting that his illness be kept confidential. He was convinced that there is life after death.

When General Makleff left the Dead Sea Works in Israel as director his successor was General Meir Elan, and I consulted for him during my entire stay in office. Chezi Rappoport, who was in charge of the New York office, and I suggested that we bring in Cyril's old boss, Pierson, as a consultant. He had retired from Allied and could help with problems that we had developing a use for fluorine which is present in phosphate rock. Pierson was packed and ready to leave, excited by his assignment, when the Angel of Death contravened his trip to the airport.

Marcolla and I, two old friends, left the Excelsior Gallia in Milan, chatting about Cyril and Pierson and others we knew and had known,

and entered the park close to the railroad station. A truly lovely young lady came out of the shadows and whispered in his ear. He laughed, and we walked on. I pressed him for an explanation, and he smiled and said,

"She told me, 'Because of your advanced age, gentlemen, two for the price of one.'"

Chapter 21

One of life's pleasures is talking shop with one's peer group and gossiping about one's contemporaries. Being our salesman, I met chemists and purchasing agents, students and professors.

In 1961, Ray Dessy, whom I had known at the University of Cincinnati, invited me to Virginia Poly in Blacksburg, Virginia, to give a seminar. My talk was entitled, "How to Lose One's Shirt Running a Small Chemical Company," a subject in which I had developed expertise. This recounted my travails at Columbia Organics and the interesting people I had met. With variations, this is essentially the same talk I give over 20 years later to a new generation of listeners. The audience included the Chairman of the Department, Dr. Al Clifford, and the famous Czech chemist, Dr. Milos Hudlicki, who had just joined his staff. No one fell asleep and some stayed to chat after the talk was over.

One of the young men became director of research at Nalco. Another went to Motorola, where he worked on dyes. Each became steady customers and I realized that giving talks was an inexpensive way to advertise Columbia Organic Chemicals. During the next 20 years I traveled at someone else's expense, saw old friends and discussed my favorite subject to a captive audience. The University provided housing and I ate with the professors and graduate students. At first, I provided my own transportation but then the American Chemical Society presented me as a speaker at meetings throughout the country; I was a sort of "forced dessert." I gave "one night stands" in such places as Fargo, North Dakota, and Lincoln, Nebraska.

Talking was not difficult. A good salesman talks, even when he faces an audience which is not particularly appreciative. In a typical talk, I would discuss the lean and hungry days at Columbia, and how we had prospered, thanks to friendship; my waistline testified that we were no longer lean and hungry. The average audience was 35 people, but dinner meetings produced a greater turnout. Snacks and

drinks provided by local chemical companies swelled audiences and made them mellow. They swelled the speaker and made him mellow, too. Chemists, I observe, are thrifty and try to get as much yield as they can from a reaction, and they readily absorb food.

The smallest group to which I ever spoke was in Lincoln, Nebraska. I arrived early in the afternoon by bus, took a cab to the barracks-like motel where I was to be quartered, and was directed to a room that had only one window, this occupied by an air conditioner. It made a dismal clanking sound when I cut it on. The season was late fall and the walls were paper-thin permitting me to share the confidences of a couple in the adjoining cell who had retired early. The air conditioner blotted out the sounds but set up a rumble which shook my teeth and detached a picture from the wall. I had planned to rest before joining the group for early dinner, after a warm shower but there was a plumbing problem and at first no water would come at all, then it came cold, and suddenly I was half scalded to death. Unnerved, I dressed hurriedly and took a cab to the laboratories of an Indian chemist with whom I was corresponding; he manufactured biochemicals. We compared notes and agreed that making chemicals is challenging and not always safe. There was a loud crash in the back room, and a wretch flew out covered with chemicals and broken glass. We tidied him up and he apologized for interrupting our conversation. Indians are very polite. I felt very comfortable. My host served tea and cookies. He excused himself from attending the dinner for he would have to clean up his laboratory and visit his insurance company. When I returned to the hotel room, my neighbors had resolved their argument and were sound asleep.

There was a knock at the door. A small, neat lady stood there with a notebook. My astonishment lasted only seconds. This was my hostess for ACS. She would drive me to dinner. She warned me:

"We do not normally have good attendance at meetings, but it is better at the dinners."

A count of heads at the dinner table indicated that the prospects were doleful indeed. She whispered at my left,

"We have competition from the World Series.. Are you a baseball fan?"

After I had whispered that I am, she asked if I would especially mind if she skipped the talk. After all, she would miss several innings because of dinner. As an afterthought,

"I was supposed to introduce you. Are you sure you don't mind?"

I introduced myself. There were 42 people in the lecture hall,

but 22 filed out when they found that the lecture on "Exploration of Ruins of Gnossos" was upstairs.

The largest group I ever addressed was an ACS group in Chicago. Counting Paul Smith's contingent from Pierce Chemical Company in neighboring Rockford there were over 700 at this meeting. The smallest was in Minnesota in a blizzard. Five attended this meeting including the keeper of the keys who patiently waited for the end and then locked us out of the building. Fortunately the car started and we got back to the hotel.

In my talks I discussed those who had made it in chemistry. It was appalling how quickly the great are forgotten. Men who were famous in my time, Whitmore, Prins and Henne fared worse. I asked them how many knew Eastman Kodak and everyone raised his hand; Aldrich, ditto; Columbia Organic Chemicals, only half the hands were raised...

My talks were extemporaneous, without slides, blackboards, notes. The failure to put out lights and show slides was bad for the sleepy ones in the audience, somnolent from too much food.

The shortest talk I ever gave was five minutes. A group of friends and ex-students of Dr. H. Willard Davis on the occasion of his retirement from the University of South Carolina spoke at length, elevating "Wullard" to the pantheon of the gods. A down-to-earth man, he became first restless and then almost pained. When my turn came, I had only three minutes. I told the audience about his problem with the commode at the Drake Hotel in Chicago.

My longest talk was in Athens, Georgia, in 1973 at an ACS dinner. The introduction was made by Winn Baldwin, himself an exceptionally good speaker. It took a half hour and was a hard act to follow. I spoke for two hours with two intermissions and established, I am sure, a Guinness record.

Sometimes I would see people whom I had known at the University, such as Spencer Meeks, teaching far from home, or characters from the early days of Columbia Organic Chemicals. Chemists travel and relocate. Sometimes I saw the same person at two different locations a thousand miles apart. Some of the old timers played a game in which I do poorly, "Remember me?" There would stand some old geezer with soiled shirt or tie, one button missing, waiting with growing impatience while I tried to figure who in the hell he could be. Then memory took over and I was aghast at the ravages of time. Usually he would say in a confidential whisper, "Your tie has a little gravy in the corner, Max," or "Max, you are missing a button." Sadly, some observed, "You look a bit haggard, Max. Business bad?"

They were friends from a past era, the flowers who are "born to blush unseen."

Then there were ancients, the old time greats whom I knew as professors or bench chemists, first-class scientists, hanging in after burying their peers and often their students. They would arrive supported by the new men, or in wheel chairs. I was giving a talk in Painesville, Ohio, and a truly old man was at the back of the room. "Remember me?" I certainly did. This was Anton Schormuller, in his 90s and going strong! He had done monumental work on the addition of dry HBr to allyl chloride forming trimethylene chlorobromide, a specific until 1981 for nematodes. Then it was found to produce sterility. Anton, who worked with it about a dozen years, was far from sterile. One of his kids, in fact, wheeled him in. During World War II, he ran a plant in Painesville, producing Beryllium, a light metal whose salts are extremely toxic. It did not affect Anton. When we shook hands, he croaked,

"Gergel, you are getting old."

I never had anyone faint, nor have an epileptic seizure. I have had the coughers and the sleepy, and the sudden departure of a lady who had left something on the stove. I had a drunk wander in, mistaking ours for an Alcoholics Anonymous meeting in the next hall, and apologizing profusely before bowing his way out.

"You fellows look just like ordinary people."

Of the group who fell asleep, some snored.

I have had people walk out at the beginning of a speech, at the middle, and just before the end. About 10% waved goodbye. About 20% returned.

There is sometimes a question-and-answer period. My talks were not erudite but sometimes there were questions from would-be entrepreneurs, and sometimes a request from someone who had heard the talks before, for some favorite anecdote, particularly "DuPont and Preacher," which I told so many times that I am weary of it myself. Sometimes after a talk people would come up to tell me they liked it, or to tell me "hello" for we had met before. Too many times I have had an entire audience file out without a word, leaving me with the person who was to take me back to the hotel. The assignments were sometimes exasperating. Once I gave four talks in as many cities in five days for ACS. I received a small plaque, and three weeks' hoarseness. Sometimes they were hard to schedule. In Tucson in June 1978, I had left a crew on CAROLINA after a five day run from Callabogue Sound (close to Hilton Head, South Carolina) to Miami. The dinner was a black tie affair given by the publishers, John Wiley &

Son, honoring Mel Newman of Ohio State University for 35 years' teaching. After two days in Tucson, I flew back to Miami and we sailed to Bimini, Chubb Key, Nassau, ran the Exumas, Long Island, made Greater Inagua and, finally, Montego Bay, Jamaica, where I live part of the time.

I was once in a city close to the Ohio-Pennsylvania border, having driven over with Jim Svoboda of Cationics. We found the meeting place in a country club 20 miles from the city. The people were all middle age and above, all couples, no one smiling. Svoboda wished me luck and took off. An old-timer dressed in black asked me if I was Max Gergel? At least I was at the right place. I sat at the head table next to a little lady, also dressed in black. She was, as they say in Victorian novels, "of a certain age." She was weeping. When I offered sympathy and inquired the cause, she told me she was in deep mourning for her husband, whom I assumed had recently passed away.

"You knew my husband? He was the professor of chemical engineering."

I assured her that he was known even in South Carolina. That his death had been reported in the obituary section of the ACS magazine. She was surprised and momentarily tearless.

"You know he died five years ago."

The tears resumed, and I was spared comment by the emcee, who indicated that we should start eating.

It was an excellent dinner, and I ate too much. By the time dessert was served, I was battling dyspepsia and in agony. The emcee made a short speech in which he thanked me for coming, welcomed the lady, my neighbor, back to ACS, and congratulated her for joining us, throwing off her grief, influenced in her decision no doubt by Mr. Gergel's reputation as a humorist.

The humorist was panicky, his stomach in a state of revolt. I spoke for an hour. The audience was relaxed and appreciative and laughed at everything. The little lady next to me was the loudest laugher of all. She applauded so loud it was embarrassing, and I feared calls for an encore. My greatest wish was to get to a bathroom. I took curtain calls like a diva. Then the little lady came over and whispered in my ear that she planned to take me to her house for a nightcap of elderberry wine and cakes "I baked myself." Fortunately or unfortunately, Dr. Rand was waiting to drive me to the airport.

I gave a talk at Ohio State University in a blizzard. Dr. Newman introduced me, and, despite the weather, there were about 75 professors and students attending, all of whom wanted to know how

to run a small chemical company profitably.

In another experience with bad weather, I gave an afternoon talk in Wausau, Wisconsin, with another talk scheduled for the following evening in Duluth, Minnesota. The airlines had cancelled flights and it was too far to drive. One of the professors told me he could pilot a plane and would try to fly me to Duluth. After a very bumpy ride, we landed at Duluth airport, fighting a heavy crosswind. Safely on the ground, he told me this was his first experience flying cross-country with a passenger.

Once I left one city in Indiana, planning to fly to my next stop, another city in Indiana a hundred miles away. The airlines had grounded planes because of weather and I rented a car and, driving 20 miles an hour, arrived exhausted. The hotel had cancelled my reservation, for the group I was supposed to address had cancelled the talk.

I gave a talk for Upjohn, a large pharmaceutical company in Michigan. They arranged to pay me $500 honorarium, and told me there would be 196 people in the audience.

"How do you know there will be 196 people?" I asked.

They told me that attendance at the banquet was compulsory.

During the day, I toured their research laboratories, and then visited purchasing, and, on inspiration, asked what they did with surplus chemicals. A new business was born. From then on, I asked every company and university I visited what chemicals they might have that were surplus, and offered these redundant items to friends in other companies. In the afternoon, we drove out to a country estate maintained by the company for VIP visitors. They showed me a lovely guest house kept for such people. As I had been booked in a local hotel I was apparently a visitor and not a VIP.

The talk was scheduled for an auditorium on the premises. A sound engineer adjusted several mikes, which were placed away from the podium so that one could talk naturally and be amplified without having the problem of adjusting equipment. There were exactly 196 seats in the auditorium and all were occupied.

They were an attentive group, quick to laugh. The question- and- answer period had most of them remaining in their seats, and brought a number of interesting, thought-provoking questions. A group remained when the others had left for dinner. They told me to get my plate and come back, for they had a few more questions. I decided they were going to offer me a job, make me a permanent member of the staff. From the stern looks when I fetched my plate, I could only assume that they had caught me with one of the ash trays

bearing the company name I had in my back pocket as a souvenir. Happy day, the subject was chemistry. The spokesman asked me to repeat what I had said about the explosions we encountered when we used potassium permanganate to oxidize trifluorotrichlorpene, and my theory that permanganic acid was forming *in situ* , causing the trouble. They told me they had been using potassium permanganate to improve the color of a sulfonic acid they were making, and had destroyed the reactor. It was obvious they were generating permanganic acid and should switch to milder reagents. We all shook hands and I returned to my dessert.

I was invited by Phillips Petroleum Company to come to their offices in Bartlesville, Oklahoma, to discuss trifluoroacetic acid. They were prepared to pay a fee and expenses. I told the man calling, Hank Jamison, I was more than willing to talk anywhere for a price.

He explained that one gets to Bartlesville by way of Tulsa. There one meets the limousine from Phillips which makes a regular run. I joined an assortment of Phillips employees, a salesman for Phillips, and for companies who did business with Phillips, including a sheik and his attendants. I tried my Arabic,

"Salaam Aleikum"

He touched the top of his burnoose and thanked me — in English.

A pleasant, red-faced man asked me whether I was "company." Learning that I was not, and that this was my first trip to Phillips, he recommended that I join him and his friends at an eating place close to the Phillips Hotel. After I had checked in at the old Colonial-style home that served as in-town guest home for Phillips, I joined my new friend and a wonderful group of prospectors, wild catters, bush pilots and sales types, all cramming in steak and washing it down with black coffee.

The next morning I had breakfast with Hank and he explained that Phillips had developed a process for making fluorine-containing chemicals, and this could be modified to produce trifluoroacetic acid. They were concerned as to whether they might expect problems from ecology, who might be competing, and if there was sufficient market to warrant the capital investment. I had been sent a list of questions for which they expected answers, and an audience of 20 chemists and salespeople had assembled in the conference hall to discuss the pros and cons of the venture for seven hours! Hank drove me back to Tulsa and months later the project was cancelled and the people put on it, reassigned. I had advised them against going into the business. Ten years later, I was invited to Albany

Chemicals, who had flirted with the idea of making trifluoroacetic acid. I gave them the same advice, and a bill. The results were the same. I have made money just telling people not to make trifluoroacetic acid.

I have spoken in New Orleans three times, twice at Louisiana State University and once for the local ACS. At a dinner meeting we stayed at the Marie Antoinette, the newest addition to the French Quarter. I telephoned Bill Koch of Koch Engineering Company and asked him to come to New Orleans with Joani and join us. Then I drove to the Southern Regional Research Laboratories and saw my old friend, Dr. Bruno Wojik, who had been director of Research at Hooker, active in the Manhattan District Engineers, and a pioneer in the commercial production of trifluoroacetic acid. Returning to the hotel, I got the message that Bill and Joani would join us for dinner that evening, and were on their way to New Orleans.

After the talk, we strolled through the French Quarter. Bill shocked my wife by telling her he would like to eat ice cream. New Orleans is famous for more exotic fare. Then Joani dismissed a mendicant saltily, a further jolt to my wife. We all ate ice cream. Bill and Joani could have purchased the French Quarter if they so desired. I remember when he visited Columbia to consider buying my chemical company and told me that he and his family "have a passion for anonymity."

On another occasion I was in Boston to consult for Polaroid, and Bill told me there was a new restaurant in town with a super chef. We drove for a half hour into the Wellesley area and in what seemed the beginning of the countryside, pulled up to a gate which opened with his flashlight. After another mile, we were in front of a castle. There was Joani, the famous chef. The dinner was steak, salad, peanuts and grapes.

Five years before being honored in Tucson, Dr. Newman was given a 30-year award luncheon by the ACS in Cincinnati. I was the guest speaker. Before the talk, I went for a walk with the eminent George Olah, who was then at Case-Western and he told me of his plan to commercialize "Magic Acid," a mixture of fluorosulfonic acid with antimony pentafluoride. His new company would be called Cationics. He hired Jim Svoboda and ultimately the organization was moved to Columbia, South Carolina, where it is now a part of Columbia Organic Chemicals. He and his wife were present at a talk later that year in Painesville.

I told him, "George, I know you have heard this talk before."

He answered, "Max, I am a glutton for punishment."

Before giving a talk at the University of Georgia, aranged by Dr.

Bruce King, the noted organometallic chemist, I met Paul R. Story, whose friends call him "Dick." This brilliant chemist had pioneered a method for ring enlargement by the reaction of a ketone with hydrogen peroxide. He wrote the equations on the blackboard during the hour before my lecture. I asked him if the work was patented. He told me that, although his research was subsidized, he thought he could get clearance. I felt that this family of macrocycles, which are musk-like in odor and known fixatives for perfumes, could have industrial importance. Moreover, synthetic production would relieve the plight of the musk deer and civet cat, hunted to the point of extinction. I told Dick that if he wanted to form a company, I would put up $500 for stock. Several months later, Story Chemicals was formed, and I purchased more stock. They built a plant and received large orders from one of the perfume companies. Then they "expanded upwards" by buying Ott Chemical Co., which made phosgene derivatives. I sold my stock (at a good profit), for no one making phosgene chemicals can avoid a serious problem of waste chemical disposal, and I felt (correctly!) that this would be their undoing.

In 1978, I gave a talk at the Schlitz Brewery in Winston-Salem, North Carolina. Dean Plemmons from Marshallton Labs and my old friend, Dr. S. Thomas Amore, then with Worth Chemicals, drove over from Durham. A slim, handsome man in his 60s came up and said,

"Max, I remember visiting you in 1947. I was working for Dow and you and your mother and father were working at your plant."

I remembered him well, as well as the consternation we had at a visit from a Dow person, for they made the same things we did, but on a vast scale. We were so little and our business was so small that we had no orders to work on and set up flasks with colored water stirring, throughout the lab, pretending we were working on projects and had orders in hand. He confided that he had not been fooled, that the visit so many years ago was social, and the pretty young lady who accompanied him to Schlitz was now a great grandmother!

I gave a talk at Syracuse University. I remember the occasion for I drove with Joel Freeman of Freeman Industries, who is a stockholder in Columbia Organics. Joel's car had trouble on the way, and he could not make up his mind whether to abort the trip leaving me stranded between New York and Syracuse, and the Syracuse section of ACS without a speaker — or harrass the wretched, clanking car into completing the trip. I suggested we drive on to Syracuse and junk it there, but this brought protests from Joel, who had sentimental attachment to the automobile. I told him my car had

made sounds like this while impoverishing Columbia Organics, as attempts were made to keep it running. While we talked, the poor car clanked on to the city limits of Syracuse where it expired next to a garage. The pressure of time made it imperative that I catch a cab. I left Joel at the garage, in shock; the owner of the garage had just offered him $25 for his automobile "no questions asked."

At the chemistry department there were about 40 people waiting. Midway through the talk, there was a fire alarm, and we were asked to change buildings. When I resumed the talk, there were 60 people by head count, including six firemen and Joel Freeman, who had repaired his automobile.

In September 1977, I was asked to give the first talk of the season at Purdue. Dr. Herbert Brown, the distinguished boron chemist and Nobel prize winner, sat in the front row. Herb and his wife had visited South Carolina, ten years earlier and been my guest at Holden Beach. He sat on the front porch for hours, starring at the Atlantic Ocean. Finally, it divided.

The 17 years giving talks inspired my first book, ***Excuse Me Sir, Would You Like To Buy a Kilo of Isopropyl Bromide.*** I have given a lot of talks, in a lot of places, to a lot of people. At North Texas State University, where I have given four talks (!) I was inducted into Beta Eta chapter of Alpha Chi Sigma, which subsequently published in **HEXAGON** some of the stories in my first book, and three chapters of this present book. Gerry Dobson of North Texas and his wife, Kay, had always been my good friends. Now he was my brother! At one of the talks in Denton, I shared the platform with Henry Gilman, who spoke on Victor Grignard. I recall that in St. Louis at an ACS meeting, I invited him to join me with his wife for dinner, and as we walked to the restaurant, the group grew until 20 people sat down at table and I had wild fears that I would be paying for all of them, but quietly some of his students and friends had taken up a "kitty" and, later, I found I had made $20 on the dinner.

It has been a privilege to give these talks, to travel, to quietly sell chemicals — and to yarn with the old timers one meets.

Chapter 22

At a time when my chemical plant was beset with new and old woes, when all my physical and mental facilities were devoted to solving problems or worrying about them, my wife decided that in the

interest of my health (and hers) we should take a vacation. In my opinion, the vacation is a reward for a diligent, successful practitioner of his trade. A vacation taken when one's efforts are needed by an ailing business borders between madness and crime. This philosophy when extrapolated produces a vacation-free life, for never does a business run without problems. In a small business, they are major problems. My wife was a "vacation-nut." There are drinkers who indulge, when business is good, to celebrate, and conversely, when it is bad, to fight depression. She survived the cares of running a household and living with a not-always-successful entrepreneur by dragging him off on trips to Mexico, Haiti or Jamaica. Now she planned a super trip, just at a time when my problems at Columbia Organics were overwhelming. It would include Scotland and Yugoslavia, and the rest of the world if I did not protest. I protested. This trip she contemplated would seriously intrude on my worry time — the hours spent mulling over problems I could not solve, and the ledgers which recorded bills I could not pay. The solution, according to my wife, was to get away from it all, take a rest ("you will return invigorated"), and, a fait accompli; tickets had been purchased in my name (overdrawing my American Express), reservations at hotels made (I would be away when they called to tell me I was overdrawn) and correspondence sent to our friends, the Howard Kastners, who said they would be glad to join us exploring Scotland and Yugoslavia. I would justify it all with God and the IRS by trying to do business in both areas.

Trips to Europe traditionally begin with England and are preceded by a rush to catch the plane, which is supposed to depart at 9:30 ("Be there an hour early," the agent always tells you) but it does not leave on time, and then gets you into Heathrow shortly after dawn the following morning. Due to the hours picked up flying East, one arrives five hours after leaving New York. He has eaten too much and slept too little, in my case I ate too much and slept not at all. My wife ate delicately and , as always, slept soundly. I spent the sleepless hours worrying about my chemical company, ever more costly to reach by telephone, and also about how I would ever pay for the madness of this vacation.

We were met outside Customs by the Richs. They were happy people, even at 6:00 a.m. Sunday morning, having driven 25 miles from their home to greet us. There was excited discussion of the vacation plans by distaff Rich and distaff Gergel, and good news! They would join us in Yugoslavia, if we survived the tour of Scotland. I looked forward to this tour, by bus, with the enthusiasm of the

condemned.

The buses are cheap and popular. The travel package includes not only bus fare but the driver who serves as guide, councilor and physician. One also gets lodging, breakfast and dinner. The average age of the silent group waiting to board was the other side of 60. They seemed depressed. We arrived at the station after a desperate drive since the lady at the helm, Pamela, who never gets lost, got lost.

Arriving right after us was an astounding couple, hardly to be recognized as our friends, the Kastners. He had done something to his eye, which was covered with a large patch. She had broken out in giant hives, and was hardly recognizable as human. If I had not known them as a well-adjusted couple whose marriages had survived 25 years and the usual crises, I would have assumed they had come to blows, perhaps over this very trip and its cost. I ventured, after mutual embraces, the suggestion that Howard might have popped his eye out gazing at some cutie; that Meriom might have poison ivy from bedding down in the wrong place. This produced no laughs; they just nodded dolefully.

I surveyed our fellow travelers. They were expressionless, with the exception of a very stout lady who had a mustache. She smiled, which caused a hairy wave, and dragged aboard a small, aged man. Recognizing a fellow victim, he gave me a weak leer. I suggested to Howard, who has been my pal for years, that we desert the group in Raeford, before we reached Scotland, and rendezvous with our old friend, Frank West. His one eye gleamed briefly, but then he shook his head in defeat.

"I do not think I shall survive this trip."

The bus driver emerged from a pub, glanced at the sky, and said, "We have a bit of mist." It began to rain. We rolled through narrow streets heading North, and were soon on the M-1 which is a British superhighway leading to Sir Walter's kingdom.

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The *raison d'etre* for a tour by bus is an inexpensive holiday. It is patronized by a section of the populace who either likes to travel by bus, or likes to save money. The traveler gets a bargain. The bus is roomy and the driver a wit that could charm any audience.

"I fear that it is again misty," when the rain comes down for the third straight day.

The caravanserai to which we repair at day's end is always

clean, the food abundant and tasty. My fellow travelers are middle-class and have typical British reserve. They have spotted us as Americans. We have heard the whispered, "The rich Americans," with a glance in our direction, which my wife finds pleasant. We are also the "loud Americans," for we do not possess British reserve. We are the "mysterious Americans," because of Howard's bandaged eye. Meriom Kastner was the "sick American;" the writer, horror of horrors, "the little fat American." One of the Americans is not loud, nor mysterious, nor ill, and is only slightly overweight. He is definitely not rich. He has completed totting up the costs of "week in Scotland," plus long distance calls home, and feels very low. He talks with his friend and fellow chemist, Howard Kastner, about the possibility of abandoning wives, bus, and the rest of the "tour of Scotland" and departing for the continent. The driver, intuitive, and possessed of extraordinary hearing, assures us the trip will grow more exciting as we get farther and farther into Scotland, and that the skies will be less full of tears.

Much of the day is spent driving through mountains in a blinding rain. I observe my fellow travelers.

A romance is developing between two of the relatively young members of the group. She is about 45, buxom, and ample-bosomed. SHe has high complexion and lovely auburn hair gathered in a bun and concealed by a large flowered hat. Moving closer and closer as his attention receives encouragement, is the male of the species, a middle-sized, pipe-smoking, young (in this society of senior citizens) dandy, perhaps two years older than his sweetie.

He holds a large umbrella for her as they get off the bus, receiving a cultured, warm, "Thank you, sir."

I, who am attending closely, for they are far more interesting than the wet Scottish countryside, receives a pint of rain water when the umbrella is sheathed at the entrance of the inn where we will dine.

He whispers to her, "I believe I doused the head and shoulders of the American with both eyes."

She answers, "Serves him right for trying to listen."

They take a booth and sit side by side. He holds her hand in his own; his other holds a mirror. She performs surgery on an eyebrow. Titian, who immortalilzed a similar scene in his "Allegory," which has Alfonso D'Este holding a mirror for a naked Laura Diante, would have seized palate and paints and put this touching scene on canvas.

Howard and I have made a bet as to whether they would sleep

together before we reach Edinburgh. I maintain they will, offering as evidence his obvious lust, and her unconscious bouncing one leg off its fellow's knee, a good sign to an observing seasoned lecher. Howard offers rebuttal. He followed them shopping, and the man definitely proposed something, to which she shook her head in a vigorous, "NO!" However, he admitted that she seemed neither shocked nor angry. We then heard the male member whisper, "The Americans are listening," so we turn our attention to a large, fat, South American woman, who has told my wife that her rich family has sent her to England to find a husband. I am sure they had tried without success at home. She is unable to speak English and is speaking with my wife in Spanish. She has a mustache and an enormous backside. I discuss with Howard how much the family will pay to the bold, desperate man who will take her away.

The bus stops and first off is the formidable lady with the poodle husband. She strides along, half dragging her consort who hops over pools in an effort to keep up. Howard, Meriom and I get off next. My wife lingers on the bus. She has made friends and they probably think her Spanish and exciting. Her new pals tell her, no doubt, that she is kind to put up with her "standoffish" husband who is so typically American. My wife adores being considered non-American when she is in Europe, and particularly when she is in France (she speaks accent-free Parisian French). She is blonde and tall and I married her because she reminded me of Michelle Morgan, a lovely French actress of the 50s whom I had long worshipped.

I calculated there were only 53-1/2 hours left in "tour of Scotland." We arrived in the city where Robert Louis Stevenson was born and, after a considerable search, visited his home. It was like every small cottage on the street with only a tiny sign to indicate that the creator of "Fifteen men on a dead man's chest," Jim Hawkins, Pew, Long John Silver and the Admiral Benbow Inn had lived here. We learned that one of the things people do in the town is climb a small mountain back of the residential district. Four hardy members of the bus family started off; the wives prudently waited at the hotel. We walked through wet jungle, the trail stretched uphill until the trees stopped, we faced a road to the summit slanting almost 45 degrees. My friends methodically climbed to the top, waving for me to come on. I am afraid of heights, was, in the vernacular, "chicken."

When we got back to the hotel, I returned and slogged once more through the jungle and, removing sweater and shoes, crawled halfway up the road to the summit. I stopped, rooted in fear, unable to advance or retreat. It grew late but I was too frightened to move.

Finally, with galloping heart, I slid down on my belly, found my way through the dark forest and back to the hotel. After dinner, I made friends with a native Scot, tall, lean and white haired. He told me that when he was young he used to run up the mountain every day for exercise. He was about 75 and concerned about my stomach.

"Stay with me two weeks. We'll go up the mountain every day, and do something about that." I believe that the reason for low population density in Scotland is that people run up mountains, fall off, and neglect their home work.

Scotland has mountains, lakes, villages and sheep. It has some deer but they are scarce, and hide. The mountains, when you could see them through the "mist" were purple. This is the famous heather. At least half of the young ladies have red hair. The same ratio no doubt exists with older ladies. No one wore kilts. The kids wore blue jeans.

I purchased a Sherlock Holmes hat. Immediately a whisper went through the back of the bus, "The American just bought a hat."

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I have won my bet, Howard has conceded. The two of them made it last night. They were playing Hearts, attended by the two of us playing solitaire, watching their every move.

She yawned and said, "I guess I will turn in."

And he said, "I think I'll walk with you to your room."

When they left there was a murmur as to whether he would return, and some side wagers made by other card players. Hot in pursuit, the drama approaching its climax, I followed them and was able to observe from a vantage point back of the stairs the unlocking of the door and two figures in muted conversation one of whom said, "Do you think the little American knows about us?" The other replied, "If I catch him, I'll give him something to tell that jailbird friend of his." I passed the door several times but there was complete silence in the room.

The next day they sat at opposite ends of the bus, indicating either they were discreet, or perhaps that their chemistry was defective.

Howard maintained that he should not have to pay up, because they may not have "consummated," but agrees that the chances are they tried! There are only 17 hours left.

We are planning to escape. We can skip the final night if we leave the bus in the afternoon just as it re-enters England, and take a

train. The bus takes us to the station. A lovely, sun-filled afternoon is backdrop to the long mobile dormitory in which we have spent almost the past week. Everyone is happy, especially the driver, probably at the prospect of losing us. The two conspirators are at opposite ends of the vehicle. Sex ruins some really good relationships. We call our goodbyes. Some wave back at us, the others stare ahead, probably wondering what will be on the menu that evening.

Howard removes the patch and asks me how he looks. I tell him frankly that he looks terrible. Meriom is still badly swollen; she will enter a hospital. My wife tells me I am a killjoy. We could all be having a wonderful time if I were not so impatient. I tell her that if she had followed me up the mountain in Scotland only one of us would be catching the train.

Skipping over this dark reference, she says, "What will we do for eight days in Opatje and Bled?"

I wonder, too.

Back in London. Howard and Meriom depart for the hospital. They will rejoin us in Yugoslavia. I visit the London office of Dead Sea Works and they congratulate me on surviving "Tour of Scotland."

"Good practice for retirement, old boy!"

The Richs ask,

"How was Scotland?"

I tip my Sherlock Holmes hat and assure them it was "different."

And it was. Scotland is beautiful and lonely. The people are friendly. It has lovely pastel lakes and forests. The girls have wonderful red hair. There is a small mountain in Robert Louis Stevenson's home town which I will never climb. I can now really appreciate Scott's *Lady of the Lake* and the exquisite lines,

"The stag at eve had drunk his fill
Where danced the moon on Monan's rill."

I may never go back to Scotland — but I'm sure glad I went.

Chapter 23

Now that we had returned from Scotland, there was only a day in which to regroup for the voyage to Yugoslavia. These trips were booked well in advance for they are popular: Yugoslavia is lovely, and the plane fare and accomodations are priced very low. We told the Kastners to recover as quickly as possible and join us. My wife noted

my care free attitude and told me the trip was doing me good. I did not tell her that I considered myself and my little chemical company doomed.

The airport was crowded with British and two Americans. A large contingent were Yugoslavia-bound. The planes were full. Ours looked strange, unlike any plane I had ever seen. Its marking was "Jugoslavia" and the pilot, co-pilot, navigator — all had beards.

Opatija, our first stop, is a famous "watering place." In the days of the Austro-Hungarian Empire, this was the city where the opulent "took the waters." It would be my first trip behind the "Iron Curtain." Anyone can tell his friends, "I have been to London," or "I have been to Paris," or even, "I have been to Moscow." How many can say, "I have been to Opatija?" You don't fly to Opatija — you fly to Ljubljana; and go by bus the rest of the way. Having left one bus, I did not yearn for another.

The young airline hostess looked as if she lifted weights. She announced in seven languages that we would be flying over water, and what to do in case of trouble. She showed us how to use the oxygen masks. Interminably, the instructions were translated into various languages.

We flew for hours. The plane was very slow. Finally we reached Ljubljana, a milling crowd and much confusion. Seven planes had disgorged passengers at the same time. We looked for Howard and Meriom but they were nowhere to be seen. I ask the heavy-set lady escorting passengers to buses where I would find the bus for Opatija. She says, "Stand still. There is an identifying strip on your baggage. You will be picked up." Chaulk one up for Yugoslavia.

Sure enough, another female attendant similarly plain, equally husky, came over, checked our luggage and directed us to a minibus, where we joined three other couples, all British. They welcomed us as fellow countrymen in hostile territory.

We drove through austere countryside, bleak, although it was summer. Drab houses, drab stores, drab people in drab costumes, and a drab rest place when the bus pulled to a stop. There was little merchandise on the shelves. The wrappers were Yugoslavian and the bathroom contained specimens of Yugoslavian calligraphy. Graffiti confirmed that man is the same no matter where he resides. The pencilled and chaulked nudes were overweight. In the "restaurant" there were cakes and donuts. There was weak coffee and a type of local, uncarbonated soda.

The day was well advanced when we resumed our trip. Fall comes early to Yugoslavia and the clouds looked as if they contained

snow. We began to snake down a mountain with hairpin turns. The driver, with much hornblowing, managed to get us to the bottom intact. The bus was now obviously almost home. We saw a lovely town with lots of hotels and hand-in-hand vacationers. Neon lights twinkled like stars. The motionless Adriatic reflects the brilliance of the city. It is warm, and the air smells good.

Opatija is a poor man's paradise. The food is wonderful and well prepared. The hotels are clean and comfortable. Everyone is eager to please. The cost for all of this is even lower than one pays in Scotland.

After a full breakfast with seconds (one half of our partnership ordered seconds while the other looked on with disapproval), you could go swimming, shop, or sit around looking at attractive young women. Because most of the vacationers were eager to swim, and because there was a limited amount of beach, people hurried down to the water to secure prime real estate and rocks. Vacationers, like seals, maneuvered for the best places. Howard and Meriom arrived. He had removed his patch but her allergy was still horrendous. The four of us, along with one of the British couples, fought for beach space, hiked and played bridge. After swimming in the ice-cold water and visiting the shopping center, I was ready to leave Opatija and explore Zagreb and even Dubrovnik, but by contract you must stay, swim, walk, and eat in Opatija for three days. There is no escape unless one dies of too much vacation. Then I acclimatized and the water got warmer and I really liked Opatija.

All vacation resorts, whether they be Hilton Head, South Carolina, or Opatija, Yugoslavia, have tours. Visitors to Opaija can visit celebrated caves (one looks about the same as the next to me). Or one can travel half a day and see the Lipizaner-trained dancing horses (I am not a horse lover, and I would not spend a day on a bus getting to them and returning, even if they talked). The adventurous could sign up for a nature walk in the forests surrounding the city, with a guided tour of Partisan hiding places. The Yugoslavians under their leader Tito managed to tie up a large part of the German army and they used these woods as headquarters.

I clambered like a goat along paths cut into the rock leading to gorges where during the war, the hunters became the hunted and were shot from little nests in the sheer rock. I passed and tarried by a number of the plum trees for which Yugoslavia is famous. These large purple plums are eaten raw or immersed in sugar solution and taken internally as a violent aid to peristalsis, or in fermented form (the famous slivovitz) can be drunk or used as insecticides. I ate about 70

of the miniature purple footballs, and they promptly fermented in my stomach, affecting my gait and alertness and several mosquitos and stinging flies which lit for a meal keeled over. I plan when time permits to research this singular quality of the Yugoslavian plum.

We had been advised that the most wonderful thing to do in Opatija was to take the cruise along the Dalmatian Coast. We bought tickets and learned that the voyage included a visit to one of the small islands where there would be a complimentary barbeque. We sailed past one of the largest petro-chemical complexes in this part of the world and anchored in a lovely harbor off the island that was our destination.

Most of the group opted for swimming, but once in the water, it was hard to find a place not already pre-empted by sea urchins. The local variety is bigger than one's hand, so large in fact that they are gathered and eaten by the French. In the clear water, you could see them waving their spines and daring swimmers to put down a foot. Anyone doing so and making contact with this heavily armed creature could be heard yelling. There is no antidote except fresh urine. I demonstrated this to a lovely young swimmer who had stepped on one of the monsters. Feminine urine is equally effective but harder to aim. I ran out of antidote quickly, but there were other volunteers prepared to apply first aid to the more comely victims. Stung males and the aged went unattended.

I explored the island. It is lovely and remote, with trees coming down almost to the edge of the sea, and a small heavily wooded hill from whose crest one could see a large part of Yugoslavia. A shepherd was attending his goats and waved his friendship. I decided never to go back home.

My fellow passengers had gathered in a large circle. Members of the crew dug small holes and burned brush and dead wood. Soon each hole was filled with cheery red coals. They suspended strips of meat from wires. Soon the savory odor of barbeque competed with the incense of this island. While we waited for our dinner a tour director initiated an old and obnoxious game often played on shipboard and seaside nightclubs called, "Where are you from?"

The program director shouts, "Who all are from Montenegro" (in Montenegran, I assume).

There is a faint cheer from presumably the Montenegrans in our group.

Then, "Who all are from the United States?"

Howard, Meriom and my wife scream like crazy, while I pretend not to know them. And on and on.

The barbeque was served along with fresh roasted corn, dripping in butter. I ate too much and developed a tremendous bellyache, which sent me skittering through the woods until I found a remote thicket. Several other diners sought the woods and it was with genuine apprehension that I left the safety of my bathroom to obey the summons of the ship's whistle. Three islands later, we had to make an unscheduled stop for the same reason, but other than this it was a lovely day.

Just when we were getting accustomed to Opatija, the schedule called for our trip to Bled; 3-1/2 days in Opatija, 3-1/2 days in Bled. Our final afternoon was sunny, like all the afternoons in this wonderful city with which I was now in love. I thought of various maidens I might bring here on subsequent trips, lissome honies who would adore the industrialist contributing to their classical education.

The thought was so wonderful that I walked daydreaming, unaware of the hand that explored my pockets in quest of my billfold. Unaware of this intrusion, I proceeded to the shopping center intent on last-minute purchases.

I buy for wives, children, my mother and my divorce lawyer (one must always remember this important person). The gifts were purchased stealthily for the present wife disapproved.

I wander into a small establishment specializing in hardware for the arms collector: old pistols, knives, swords, suits of armor (how does one get a suit of armor on a plane?) I pick out a dirk. The proprietor whispers that it is so sharp one can separate a money belt, or tuft of belly hair without disturbing the victim. At the mention of money belt, unconsiously seeking reassurance, my hand sought the pocket where I normally keep my billfold.

For the next five minutes the shopkeeper was treated to the spectacle of a frantic Gergel, turning his pockets inside out, checking his shoes, his socks, his underpants — and then in despair, but with desperate hope, grinning weakly at the proprietor and saying with forced humor, "You are playing a joke. You wanted to show me what you could do with the knife."

The heavily bearded Turk who runs the place assured me that his knives cut money-belts, they do not remove billfolds. The awful realization that my billford, my cash, my credit cards were hopelessly lost produced consternation. The vendor was showing me a curved knife with a tassel on its end, murmuring that he could vouch for its history. It had destroyed a half dozen enemies of his country. I was too preoccupied to ask whether they were enemies of Turkey or Yugoslavia, although my mind normally seizes on trivia when more

important matters have priority. He showed me the red stains. I abandoned politeness and bolted from the store, promising to return.

I ran the mile along the beach to our hotel, up the stairs, (the elevator rarely functioned), and into my room. There was a couple on our bed making love. They were horrified, and so was I when I realized I was on the wrong floor. My key obviously opened more than one door.

Upstairs, I hurried to my own room and a search of the trousers worn yesterday. Thank God, my billfold is in the correct pocket. My second billfold, the one in which I keep "mad money" is the victim. Fortunately, it didn't have much money, nor any of my credit cards. I breathed more easily and wafted thanks heavenward.

I hurried back to the shop where the Turk, now my friend, embraced me and produced two cups of the thick black syrup only a Turk can like. I told him of the wrong room and the busy couple, and we laughed. He confessed that the tassled knife never killed anyone, he made them in a shop outside the city (loud laughter from both of us). I bought the knife, and he took a small bottle from a drawer and sprinkled on red paint. I told him if he would give me a special price I would buy a half-dozen. He sprinkled them and gave me a "family" price.

He asked me if I were Jewish, told me he had guessed I was, and claimed to be "part-Jew" himself. He gave me small knives as presents for my kids, Eleanor, Tanya and Shawn, whose pictures he admired, then showed me pictures of his own seven children and a very hairy lady, their mother. I gave him an extra $10 to buy gifts for them. He gave me a small vial containing a powder of sworn efficiency "for a rainy day."

We drank more coffee, and I promised to return some day. He wanted me to join his family for dinner and was sad when I told him our appointment with the bus did not give me time. He walked me part way back to the hotel.

The suitcases were packed with my wife sitting on them.

She and Meriom and my friend, Howard, now possessing two eyes, complained about the dearth of things to do in Opatija, which for me had become a Shangri-La, a city to which, some day, I would return. We boarded the bus and soon were zooming through the countryside, bound for Bled, where General Tito, who at the time was president of Yugoslavia, had his summer palace.

We left the lovely sunshine. The weather became dreary, there was a light rain. The countryside was grim and hostile and

moods were affected. I tortured myself with visions of my chemical plant inundated by floods, consumed by fire, or worst of all, free of orders.

Howard told me all that had happened to him since he retired from Eastern Chemical Company, which he had founded. He moved to Munich (he speaks German fluently) belongs to hiking and vacation clubs, listens to concerts and plays bridge. He kept in chemistry as consultant to his former company.

We discussed Loba in Vienna, actually in the suburb city of Fishamen. I had visited Loba two years earlier with Mead Wyman acting on assignment from Bill Koch, and we discussed buying it.

The women read. It grows dark quickly and the driver tells us that this region is so cold that no one lives here. The winds are cruel.

Now the rain beats heavily on the bus and the wipers are almost useless. The driver cursed quietly and peered through the windshield like a helmsman in a storm. I asked him if there were many accidents on these roads and he told me that several cars have fallen off the mountain each year in weather like this.

There was a sound like gurgling in a pipe as numerous ears absorbed this information.

As if to emphasize the point, he momentarily lost control, and the large van careened over to the other side of the road and angled to the edge of the cliff. There was a mad scrambling for the high side of the bus and a frenzied screeching which, I confess with embarrassment, was not confined to the women.

Fortunately, we were spared the view, because the rain was coming down in sheets.

I reminded my wife that I had never wanted to come to Scotland and Yugoslavia. Such comments in moments of stress do not endear human beings to each other, and I writhe as I write. She was patient, or catatonic.

The driver assured us there was no danger and deftly inched the bus backward into the main road.

We continued in blinding rain and were almost afloat when we reached the city limits of Bled.

We drove to the hotel and poured into the reception room, followed by bellhops in foul-weather gear, who brought in a mountain of wet, dripping suitcases. We always carry too many on trips. The room was comfortable, and we were told dinner would be served early.

The hotel tour director told me that because we did not check in with him in time (How could we in the storm?), he had discussed

the activities program with the other guests and did not plan to repeat his talk. He said if I wanted to know about Bled and its attractions to ask the other guests. I asked him if this is a directive from Moscow and we had "words." He told me I am a rude American and I told him to go to hell. I visited the concierge and he told me he could do nothing since the tour director was a member of the Party. This is the first time we are aware we are in a totalitarian state.

I saw an old geezer smoking a curved pipe and asked him how long it had been raining. He looked at me, removed the pipe, yawned, and in excellent English said, "Forty days."

I checked the schedule for return trips to Opatija and how much they cost. It was probable that I would return alone. The cost was high, one cannot "double up" on Opatija, and anyhow the hotel there was full. I was joined by the British couple who were also homesick for Opatija.

I produced my billfold and rustled several ten-dollar bills, and he repeated the story in an uncertain voice, his eyes rooted on my money. My English friend produced his billfold and rustled his paper money. The young man at the desk was almost in tears. He was, no doubt, a good Communist and what we were doing was contemptable and illegal, but he was tempted and told us he would see what he could do. Questioned, he telephoned and advised that the day was sunny in Opatja.

Prepared for the worst, I telephoned my chemical plant in the United States. In a surprisingly short time, the call went through. The plant was surviving, and business was moderately good. There had been no fires, no serious accidents, no other emergencies. Relieved, I hung up and was strolling back to the dinner table when the telephone operator called me to the desk and apologetically presented a bill that equaled half the cost of the trip to Yugoslavia. I developed apoplexy. I now know the awful truth. The reason for the cheap fares to Yugoslavia is to lure businessmen away from their plants, and the telephone system supports the country. My distaff side told me without sympathy that this would teach me not to call home.

The clerk beckoned me to the desk with one curled finger, and hoping for a rebate, I rushed over. He whispered that it is absolutely impossible to get hotel accomodations in Opatja.

The rain thundered down.

There was an after-dinner celebration in the park. The park, like everything else in Bled, is close to the hotel. We should be able to swim there. The clouds relented, and we joined a large crowd

gathered to hear a collection of lovely young people singing to the accompaniment of their papas and uncles blowing lustily on bugles, saxaphones and tubas. They were celebrating the birthday of Tito, the National Father, whose home we could see further up the lake. It was late afternoon. The sun poked through the clouds and, magically, a large patch of blue appeared.

Our group, which now included the English couple, rented rowboats. The big thing in Bled is renting rowboats and rowing or poling up the lake. There is a tiny island in the center, a magic island with a fairy book castle sitting trim and white in the blue water. It is an old church. We rowed up, explored the church and the rest of the little island, and I elected to swim back. Before common sense or my companions could prevail, I leapt into the water.

In the old silent movies, for fun, the projectionist sometimes would reverse the film, and a man would emerge from the water and travel up the shore from which he was preparing to dive. Would that I could have emulated the man in the film. The water was icy despite the season. My friends had disappeared in the church and the other rowboats were well on their way back to the hotel. I gave up trying to swim to the hotel and instead made for the shore. I was freezing. I shivered all the way back to the hotel, changed clothes, and still was freezing.

I knew the specific antidote, peanuts. I asked directions to the canteen; there is no cognate in Yugoslavia. I made drinking motions and they showed me to the bar. Realizing my error, I ground my teeth, and they took me to a snack bar with little to snack on and no peanuts. The young man who worked there spoke a little English and, remembering a German word, I asked him for *erd nusse*, and how to find the market, where they are a regular commodity. The little shopping area had *erd nusse* and soon I was warm and bloated.

One of the big things in Bled is personal health. There are nature hikes and obstacle courses installed by the army to prepare its soldiers. Tourists are welcome to use it. The man who sold me my *erd nusse* told me all about the obstacle course and I assured him that I would visit it, but not for a while. I returned to the hotel loaded with plums, hot bread, carrots and a whistle, which I will use to entertain the very young.

At dinner, the tour director walked from table to table taking orders for the various safari. He ignored us. I complained to the manager. He fetched the tour director, who was highly irate. He was a good Communist and did not have to cater to American "pigs." Fortunately, he said this in English. I made another trip to the

manager and confided that I was a representative of the American International Touring Association, and showed him my card. It comes in handy on occasion. I told him we were checking out Bled but unless matters improved, I should have Bled blacklisted. The manager apologized, and once more sent over the tour director, who asssured us that America is doomed and he, for one, is delighted. A dog barked outside and Howard reminded the TD that his wife was calling; tempers were really frayed. Howard, Bill, the Britisher, and I formed a US/British phalanx. The TD disappeared forever (perhaps to the Yugoslavian equivalent of a Gulag). The manager sent us a bottle of slivovitz and thanked us for our patience, but the next day we received the silent treatment from the waiters and were isolated in a corner of the room. Bill suggested we flee Bled by taxi. The proposal included himself, me and Howard. We will fight to the death. My wife reminds me the Richs will be arriving that afternoon. I told her to have Bert bring his weapon and join us. We had picked out the caves, back of the little lake, where we would live until time for the plane to depart.

Our table had been moved toward the center of the room, and we had a new tour director. He was jovial and spoke excellent English, and laughed loudly when we told him of "Gergel's Last Stand." He told me that he had heard of the American International Touring Association and that he hoped we would be sending more people from America. I asked him about his predecessor, and he made the universal sign — a finger gliding gently across his throat. I liked this man! We signed up for tours.

Howard, Bill and I decided to climb the large hill back of the hotel. It leads to a castle on the summit. One can get there by taxicab or by taking the path which leads through the forest. With experience gained in Scotland, we were seeking new mountains to conquer. We started the ascent early the next morning and I actually made it to the top by holding on to trees and putting my faith in a supreme being who was not ready for an in-person interview — yet.

The view from the summit is superb. It is better than Switzerland. The lake shimmers and the little island and church are white decorations on a blue cake. We descended and joined the ladies for a trip to the obstacle course. I took one look and had deep misgivings. No wonder the Yugoslavians were such fighers in World War II. There were signs indicating how many minutes each test would take: tree climbing, racing, jump across chasms, and snaking up cliffs. I completed one test in mediocre time and strolled off from our group and came face to face with a bull. Had someone timed me, I would have established a record in getting away.

The Richs with their young daughter, Miranda, arrived. They wanted to row to the island. We rowed to the island. They want to run the obstacle course and I showed them the way and warned them about the bull. It started to rain. I asked the tour director, my friend, what he thought and he told me that this was the rainy season and the bad weather might last for days. We had a council of war. Bert, Pam and Miranda would stay as they planned. They are seasoned British vacationers and nothing daunts them. Bill and his wife decided to go back to Opatija and try to find a room. The Gergels and Kastners headed back to Ljubljana. With great luck we secured seats on a plane to England, and the vacation was over.

Some day I may go back to Opatija and Bled. I had rejected a trip to Scotland and Yugoslavia only to have one of the most wonderful vacations in my life. A wonderful paragraph in a minibook, with a happy ending.

Chapter 24

Most of my trips were on business. I visited England, France, Germany, Italy and Israel to buy and sell chemicals. We represented Fluka in Switzerland, CEA in France and I consulted to Dead Sea Works in Israel. For a brief time, with my friend Kurt Niedenzu of the Unversity of Kentucky, we had an option on land in Kassel, Germany, or actually Fritzlar which is in the suburbs and briefly were involved there with Columbus Chemie. My trips often brought me to Paris.

Rhone-Progil is a division of the large French chemical super-company, Rhone-Poulenc and Progil produced fluorine compounds. I had to stay in Neuilles because all the downtown hotels were filled. Neuilles is in the outskirts of Paris, but fortunately not far from Rhone-Progil. After the bellhop had deposited my bags, I could not find my passport.

This happens in Europe, for a passport can be sold on the black market. I telephoned my friend, Dr. Henri Najer, and he came to visit while I took the room apart. My grief, and the time spent in the search, far exceeded in value what the miserable thief got for his loot. Najer and I discussed the problem while I bolted down a turkey drumstick in a Paris delicatessen. I always ate in the delicatessen for I do not like French cooking. This time I developed a tremendous bellyache worrying about the passport and failing to chew the turkey. It was a particularly bad time to have this happen for much of the staff of the U.S. embassy was on vacation (I had already called), and a

strike was threatened at Orly airport. Without the passport, I could not leave France in time to avoid this.

I telephoned my friend, Max Zeiss in Holland, and he promised to call KLM and book me home, provided I could get a passport. Without one you cannot leave France and must eat turkey until you die while your chemical plant expires from neglect. We returned to the hotel, and the telephone was ringing. It was the embassy telling me that no one had turned in a passport. The lady, who had a southern accent, was sympathetic and told me I could probably get one in two weeks. At $90 per night for the hotel and $20 per day for food, the plant would probably expire. I told her how truly desperate I was and she suggested as a long shot I might see the French police in Neuilles, tell them what had happened, and if they were sympathetic, they could excuse me from the normal ten-day wait, and then I could probably get the passport within three or four days. I told her by then there would be no planes to the U.S., and she told me that she was truly sorry. To complicate matters, I was due at the French Atomic Energy Commission at 9 a.m. the following morning, and they would be sending me a driver and car at 7:30 a.m. for the trip takes an hour. Najer had an urgent date with his sweetheart, but offered to drive me to the prefecture of police in Neuilles. It was almost midnight.

I called Orly. The strike was on. I called KLM in Amsterdam; they would hold a seat for me until 10 a.m. two days hence. I called Dr. Pichat of the French AEC, waking him up. He told me that the meeting could not be postponed but he would have my driver stay with me while I got photographs made and visited the U.S. embassy, but first I must come to Saclay for my visit.

There were a dozen burly policemen, called "flics" by the criminals and the man on the street. I was ushered inside with a guard on either side, just in case I tried to escape. A very large director of police perched in a box overlooking the station. He bellowed,

"Ques ce que voulez vous?" which in French asks what I wanted.

I explained in my poor French that there had been a minor problem, after his "Je ne parles pas Anglais." This means he does not or chooses not to speak English.

My "J'ai perdu mon passport" gave him the essentials but he was not satisfied.

"Ou avez vous perdu votre passport?" He wanted to know where I had lost it.

Inspiration!

"Dans un bordel," cracked up old stoneface and he announced to his fellow policemen,

"Cet American ci, il aime le product locale."

He had identified me as a Frenchmen in appetite if not by birth, and with a flourish of his pen announced that his precinct accepted my explanation and would waive the normal waiting period. I had completed round one of the passport ordeal. It was now about 1 a.m.; a cab brought me to the hotel where Zeiss had left a message. "Catch the 4 p.m. plane for Amsterdam at the Gare du Nord."This did not give much time.

The familiar small white and black automobile used by Saclay arrived at 7:45 a.m. As usual, the driver spoke only French, and after spirited conversation on his part and my wretched French plus pictures which I drew, and fortunately "passport" is the same in French and English, he took me to a photographer who opened early; I was told the pictures would be ready at 1 p.m. I met Louis Pichat and his associate, Mdm. Lydia Cassin, and we completed our business which involved our representation of their deuterated solvents in the U.S. Unfortunately, this was followed by a six course meal at the company dining room but with my wits lulled by good food, we drove back to Paris, visited the photographer and found the U.S. embassy. They were amazed that I had completed the requirements and immediately gave me an emergency passport which would last long enough for me to get home. In plenty of time, I arrived at the Gare du Nord and late that evening reached Amsterdam, and leisurely took KLM back to the states.

The business trips to Europe were hectic but there was time for sight seeing and shopping. I could enjoy a holiday without bothering my conscience.

I had consulted to the Dead Sea Works for nearly ten years and traveled to Israel approximately every ten months. In 1969, there was a change in administration and General Makleff, Shaul Tchetchik, Ariel Ginsberg and Enzo Nitzani all left the company, and I did not know the new people, with the exception of Zwi Waldman, who would be directing Bromine Compounds Limited. I had a year left on my contract, which gave me a final "expense paid" visit. I was 49 and had always wanted to visit Greece and see the Parthenon. I would give myself a birthday present.

My wife and I decided to not only go to Athens, but explore the country and also take a tour of the Greek Isles.

I had stopped many times at Athens Airport, where we would be herded into the transit lounge and with an hour or more to kill

could buy the awful thick black coffee, add the too sweet pastry, and buy Greek dolls and other souvenirs. One got back on the plane after barely sniffing Greece.

CEA in Paris had suggested I visit their agent, Peter Gricus, who would show me Greece. To complete the vacation, I reserved passage for a five-day cruise of the Dodecanese Islands. I would see him and his associate, Manuel Straitakus, before and after the cruise.

The hardy fly from New York to Athens direct. The fatigue caused by too much food and too little sleep had me virtually catatonic when we arrived. My wife was vivacious, for as usual she had slept, and ignored the aircraft cuisine. Adrenaline just from being in Greece dispelled my lethargy.

The airport was a milling mob of tourists, relatives of tourists, vendors, harrassed employees of the airlines, police and stray dogs. There was shouting, barking and the tremendous roar of the jets. Never having met Peter, we fought our way to the information counter and had him paged. It would not be possible for him to hear above the din, but we waited, hoping he would arrive, somehow hear the page, or us. After 15 minutes, we decided we would try later in the afternoon at his office.

My wife, waving dollar bills at the freight-handlers, had our baggage fetched. The suitcases were intact. Our trip was starting right, if only we could find Peter. While my wife remained at the Information Booth, I lugged 300 pounds of luggage to the taxi stand. In hot weather, this is not easy, although the handlers did the work. We feared they would make off with the bags. The odor of food, of perfumed women and unperfumed workers, the smell of cheap candy, the haunting odor of dog feces, brought on a recurrence of my nausea. My wife joined me at the taxi stand, where we beheld a line of ancient automobiles, none of which looked safe.

The driver of the first car in line got out, bowed low, and removed his hat. I tried the only word I know in Greek,

"Choriati!" (which I had been told meant "greetings"]. It obviously did not mean anything to the driver who mumbled in English,

"Where are you staying?"

He was an old man wearing a full-vested suit, despite the savage heat. He insisted on lifting the baggage into the car by himself. He informed us that he had lived in America ("Issa rich country"), and run a restaurant in Chicago.

Making one last effort, I screamed "Peter" at the top of my voice.

The milling mob paid no attention except for one seedy person who asked, "You wanna cab?"

With constant horn blowing, we left the airport and began driving through miles of stucco houses. Then we saw the Parthenon capping the sprawling city of Athens.

The cab pulled up to the D Hotel, which was assigned to us as part of the "Greek Adventure Packet." The D was obviously not an AAAA hotel, nor even AAA, nor AA. It was not even a grade A. It was what is known in America as a "fleabag." It may have improved in 12 years. It may now be remodeled and luxurious, but in 1969 it looked pretty bad. My wife was, for once, speechless, but our bags were there, and the taxi, overpaid, had driven away. My small financial error in paying him could have poisoned the afternoon for me had there not been more serious problems to consider.

The man at the desk had long, black whiskers and a serious appearance, conditioned I am sure by listening to the complaints of visitors to the D. He examined our package of coupons, took it into a little office where we could hear him discussing it or us in a foreign language, and then reappeared all smiles and took our bags to the elevator. We waited for about five minutes, and it was obvious that the elevator would not join us. He smiled again, in friendly helplessness and we began the ascent on foot to our domicile on the top floor. I helped with the bags. My wife gave a look that I knew would be prelude to conversation when we were alone.

Our room had neither air conditioner nor fan. It was heavy with heat. There was a small night stand, a very old chair, and a bed that had probably been used for orgies by the Germans when they occupied Greece. The color of the linen was dull gray.

My wife went to the open window, and seven grinning Greeks welcomed her to Hellas with outstretched arms and salutes to her loveliness in English and Greek. They suggested that she abandon me and come and live with them. They were destroying the building next to ours and were not in a hurry. My wife gave a pull on the window curtain, which collapsed to the vast amusement of the workers. She sat on the edge of the bed and said she wanted to cry.

I asked her to cry on the way to see Peter Gricus, for it was getting late.

Fifteen minutes later, we were in his office. We had taken a cab, which carried us around the city, because the driver was bound to show us the Parthenon, whether or not we were ready to see it. Peter's office was, in fact, only two blocks from the D. Peter was

waiting and apologized for not being at the airport on time. He had been held up by traffic and, after an hour, had telephoned the D, where he was told that they had no guest by the name Gergel. He told me that the D was actually not a bad hotel. It did not have bugs (obviously he had never stayed there), and for a few drachmae we would be able to rent a revolving fan. In came a tray of pastries and black coffee, fetched by a full bosomed young lady, who acknowledged my looks of appreciation with a look of equal interest. This was far more entertaining than the conversation my wife and Peter were having relative to the pros and cons of Greek hotels.

It was arranged that we would return to the hotel and relax. They would pick us up at 7 p.m. and we would make the tour "Athens by Night" when it was cooler and there were fewer tourists. Peter admitted that we would not relax very well right now at 4 p.m. with a sand drill working overtime. He suggested shopping, but we were too tired. Then Manuel Straitakus, his associate with whom I had corresponded, came in and charmed my wife by kissing her hand. He promised to bring his wife and join us that evening.

Back at the hotel, my wife communicated her distress to the desk operator. She spoke for ten minutes, her voice gradually rising in passion. The desk person said that he did not speak English but would get his father who had lived in the United States and had run a hotel in Chicago. My wife gave the bewhiskered manager a five-minute tirade, halted only when he raised his hand, palm exposed and said, "Spik slowly." My wife was now incoherent. A friendly Greek who had overheard the conversation walked over and offered to help. He spoke rapidly to our host, who smiled appreciatively and brought out a small, decrepit fan. I reached out to take it, but it was withdrawn seductively. Then I noted the other hand, making the international request for baksheesh by gently stroking the palm with a languid middle finger, we smiled, delighted with our newfound ability to converse, and I gave him a dollar. No! No! he gesticulated, still smiling, and held up two fingers, which were withdrawn when I supplied another bill. We fetched the prize to the elevator, pressed the button, waited a few minutes, and once again ascended the stairs.

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The freighter-converted-to-passenger ship was of the type known as "stinkpot" in the trade. The passengers were herded aboard and sent to small, poorly lit cabins, which were not air

conditioned and smelled vaguely like the D. One could escape to the rather dingy salon or stare over the side of the vessel at a view of Athens that somehow made it all worthwhile. We were recovering from a wild night in which the floorshows and night life of Athens were now a blur.

The "package" consisted of three different night clubs and three drinks, and was obviously intended for tourists. There were no Greeks except Peter, Manuel, and their wives. Wine tastes the same to me no matter what its age or origin, but our expert, my wife, told me that it was Retsina, and good. I preferred the entertainment, which was bazouki, with its hypnotic rhythm. The young and old men rise to sway solo to the sound, the singers relate their lost loves, and the young Greek girls twist their tummy in the belly dance. Only a eunuch could resist these ladies.

We got in late, and I felt terrible, having eaten too much highly-spiced chicken. The hotel was dark, even in the lobby. The elevator was marked, "temporarily unfixed," and we had to stagger up the stairs. There was no telephone to summon help should I have acute indigestion, even if I spoke Greek. I had to go back downstairs. An old gentleman, acting as night concierge, indicated in fragmentary English that the hotel was short on light bulbs. I got one by unscrewing it from a lamp in the lobby. As I left I noticed a late arriver methodically walk over to a lamp, remove a bulb, and ignoring the elevator, proceed up the stairs. It was obvious that he was a veteran of the D.

In the room was a solitary fly. My wife absolutely refused to go to bed while it buzzed. She had thrown one of my shoes at the creature and missed, for they are very quick. They must be stalked for they are alert as well. I managed to destroy him with the same shoe.

We hooked up the rotating fan, which unfortunately did not rotate, so that one of us roasted while the other courted pneumonia. The temperature of the room was boiler-hot. My wife complained of insomnia.

I suggested that perhaps we might make love, which would give us something else to think about. There was no response, for now my partner was, or pretended to be, asleep.

At times such as this, usually after a hectic and frustrating day, I first calculate my finances and then review the nice things that have happened, and then plan the things I want to do next day. One of two familiar pattern-dreams begin: I am either facing ruin at the chemical plant, which has just burned, or am stalking strange fish in dark ocean depths. These fish are easy to catch but horrible to look at, and

ferocious when brought to the boat. The dreams make me happy to wake up, and, after a particularly exciting one, I am prepared to face with equanimity whatever the day may bring.

This one woke me to a frantic wife. The dispatched fly had revived, or a kinsman had come in search of him. The curtains had not been drawn, and the workmen from the day before waved happily at us through the open window, not at all embarrassed that we were completely unclothed.

The taxi was late. We solved the transportation problem by taking the suitcases two at a time to a taxi stand a block away. The porter part of our marriage did the actual work. It was a lovely, clear, Greek morning, and the cab driver at the head of the line spoke excellent English:

"I ran a restaurant in Chicago."

The reader will observe that most Greek cab drivers ran restaurants in Chicago before returning to their native hearth.

We drove past the Parthenon, required of all tourists, we now realized, no matter what their destination might be, and then, five minutes later, past the D. It was early morning and there was little traffic. Ten minutes later we had left Athens proper and were in Piraeus. We admired the steamers and huge tankers ("They're all Greek," from the former restauranteur). At last we reached the dock where our vessel, Diana, was tied down. If they could get her started, she would take us to Delos, Mikanos, Rhodes, Crete, and finally, Santorini, which is rumored to be the site of Atlantis. Our fellow voyagers were waiting in a large pen, ensuring that they would board Diana rather than her sister ship, the Euphrates, which was loading for Cyprus. Diana looked pretty bad. So did the prospective passengers, all of whom had probably stayed in the counterpart of the D and taken the equivalent of the tour "Athens at Night."

There were some 150 of them, none Greek. A well-dressed descendant of camel herders who had obviously "made it" came over and explored through subtle small talk whether or not I was Jewish. This established, he asked me in Yiddish whether my wife, who was 100% Jewish ("My father," she announced proudly, "was descended from Revolutionary War forebears, four generations in America, German stock — that's where I get my blue eyes and blond hair") is a "shiksa." This he accompanied by a leer indicating that perhaps my wife and I are not married but are being naughty and I have probably left a proper Jewish wife at home with the kids. He was corrected by an enraged Jewish hausfrau who speaks Yiddish.

The American public is familiar with the cruise ships, which take

honeymooners, the aged, and the bored to Caribbean islands, where they can observe natives and enjoy the sun. These luxury vessels are large and immaculately clean. They offer delicious food in copious quantities. Diana also takes honeymooners, the aged, and the bored, and, in fact, she will take anyone — but instead of visits to Jamaica, Puerto Rico and the Virgin Islands she takes them to the Greek isles, which most of the year, and especially in summer, are rocky, sunburned and native-free. In fact most of them are uninhabited. They have changed little since the days of Jason and Ulysses. The Diana is neither a Starward nor Skyward luxury ship. She is a stinkpot, and her captain is a ferocious, unsmiling ruffian who nurses a grudge against humanity and, in particular, Diana's owners who chose him for island hopping rather than the command of a supertanker.

After we were "signed aboard," the gangplank was withdrawn so that no one could escape, and muffled explosions from the hold indicated work was being done to prepare for departure. There was a mighty burst of black smoke from the stacks and a throaty SQUAWK from the horn, and the loudspeaker announced in 12 languages that those wishing to leave the ship should do so at once, a caution rendered meaningless because we had already left the dock. There was a perfunctory boat drill should we have to abandon the Diana (the sound of her diesels indicated that this was a real possibility), and then we clustered around the rails just like passengers have clustered around rails of countless ships since man carried his fellows to sea. Piraeus and the Niarkos fleet, Athens, and the Parthenon glided by.

We were summoned by the ship's bell to dinner. There was a great deal to eat, literally platters of food, all prepared for people of simple appetites. The accent was on starch and economy. I thanked God for the chocolate bars and peanuts I had stored in my briefcase, hidden from the eagle eye of my weight watcher.

Our company at table included the couple we had met and two men, one young, the other about my age, both nattily dressed and obviously honeymooning. The older man looked tenderly at the young man, who was quite handsome and rather shy. They were too much in love to eat. The conversational chap who had been interested in my wife's forebears confided that he was a movie producer, which made a profound impression on my wife who was active in the local Town Theatre. She whispered that she felt sure she recognized him; that he was indeed famous.

The producer was greatly disturbed by the quality of the meal,

which was what we call in the South "greasy spoon special." Looking with horror at the platter of meat and potatoes, he spotted a fly drowning in the liquid. He thundered for attention. A heavily-bearded kitchen helper came over and removed the fly with two fingers. I observed that it was a very large insect of the genus that we Southerners call horsefly. The helper smiled apologetically, crushed the beast between his thumb and forefinger, and dropped the still struggling remains on the floor. The producer was extremely upset, and his eyes actually rolled up in his head, a terrible sight that so unnerved the Greek helper that he scurried back to the kitchen. This tableau was a welcome distraction from the food, which was edible but plain. Then in a mighty blast, like a storm which has been preceded by rumbles and flashes of celestial fire, the producer roared a tirade on cleanliness, at the kitchen. He warned the unseen chef that he planned to notify the authorities when he got back to Athens. This brought two chefs and an assistant from the kitchen. They tried to calm our extremely upset companion. I promised him a candy bar, and proceeded with the meal which was not too bad if you are not fussy on cleanliness and like cold potatoes.

When we emerged topdeck the sky was blue-black. We were anchored off Delos, the home in ancient times of Apollo. This truly holy place in the starlight was a charnel heap of rock and exhausted olive trees. A path to the ruins had been worn by tourists from Diana and her sister ships. There were lights from a small village close to the docks, and the wonderful sound of a dog calling to his friend.

The producer, eating my candy and smoking a cigar, was feeling better. He told us about the personalities and eccentricities of the people working in Hollywood. Taking passage on Diana had been a whim, now deeply regretted, to kill a few days before going to Israel. His daughter was studying there. Abe was a large, plump, well dressed and badly spoiled man. He had little affection for Diana, its crew, Greece, its islands and antiquity. He had little interest in his adoring wife but was well aware of mine, starry-eyed, taking in every word, a would-be actress in Hollywood, buttering up a tycoon. Abe was a type we loved to annoy when I was a Boy Scout at camp. He had a small enthusiastic admirer in his wife who would interject from time to time such comments as,

"Tell them about John Barrymore, Abe."

Abe, thus encouraged, told my wife, for I managed to escape.

Diana was crowded. One had to arrive early to find better spots on deck. Of course, you could stay in your cabin provided you did not have claustrophobia and liked the sound of ship's engines. The

honeymooners had gone to bed early, provoking witty comments from the loathsome Abe. He informed me that he rarely ate peanuts and candy while decimating my small stores. We sat in a sea of stars, intoxicated passengers enjoying the beautiful night. There was a hint of breeze. When the sun set, it grew cool and many of the people put on sweaters. While I relaxed in the rapture of this first night at sea, Abe told me how he had made his first million. One by one, Abe, Hannah and my wife headed off to bed. Strolling toward the stern, I heard the sound of a bazouki, then another joined it and then a gentle voice sent a tribute to some distant love. The two bazoukis filled the night with throbbing rhythm and the singer went on to describe in detail the charms of his sweetheart. I do not know Greek, but a small, quiet man, himself Greek and similarly attracted to music, told me what the man was saying. After three songs, I was half in love with the sweetheart myself. In the village a dog barked his own lovesong, was soon joined by a friend in another street, and soon every dog in Delos was joining the discussion. It was a great night, a glorious night, and I spent a large part of it sitting on the deck, listening to the love-mad singer and the bazouki players, and chatting with my fellow insomniac.

At breakfast next morning, Abe entertained the table and all who could hear with protests over the eggs. Now everyone knows that only in South Carolina and on the Diana does one fry eggs in bacon grease. The health books that Abe quoted consider this an evil practice, for one gets a great deal of cholesterol if he eats the mixture. The Greek chef and most Carolinans don't read the books nor care too much about cholesterol. He is used to it, I am used to it and so are our stomachs. I actually prefer eggs fried in bacon grease and usually mop up the greasy remainder with my toast. My wife was rendered almost manic by this hideous breach of etiquette, which she says is akin to picking one's nose, which I have done to her horror in moments of stress. I proceeded to devour three eggs and six strips of bacon, plus a small pool of grease.

Abe was a diet freak. he had a delicate stomach. He liked his eggs fried separately from the bacon; the former in Mazola or some polyunsaturated oil, and the bacon prepared in a microwave oven or at least served crisp and grease free. The kitchen help, the waiter, and later the chef gathered at our table while Abe expounded. They nodded sagely and seemed to understand, even to feel compassionate, and all retired to the kitchen. Abe looked around the table at his rapt audience and smiled triumphantly. The waiter brought Abe a special tray with the eggs and bacon prepared precisely as he

had directed. I did not have the heart to tell him that chefs throughout the world when provoked can take silent revenge by doing terrible things to one's food. In the case of Abe, I am sure they did. He commented that the eggs had a funny taste, and complained later of cramps. He retired to his cabin and later skipped lunch.

Delos was a long, sunburned island with none of the greenery I had expected on my first Greek isle. Boats were ready to take us to shore and soon we were on the dock, walking past the small town with its miserable stores and wide-eyed children. We followed the path in a straggling line to the ruins. They are on a hill overlooking the harbor. The Greeks built their cities on hills so that attacking armies would have to advance upwards making better targets for arrows and spears.

Like all ruins, these are colorless, lifeless and simply a sandy skeleton from which time has picked away most traces of man. There are subterranean streets, clay buildings, and a few truncated columns that had no doubt supported a temple or a bank. It is hard to believe that people had lived and worked in these crowded quarters until you visit a suk in any of the North African countries. They had to be small people owning small donkeys to get through the streets. I am sure that Apollo, if he actually lived in Delos, had superior quarters elsewhere on the island.

I was impressed as I am always impressed by the sameness of abandoned cities. When one vacates a house and new tenants move in, and this is repeated many times, the original character is lost. Delos had been invaded so many times and its inhabitants replaced so often that hardly a tree remains. The tourists have removed the few potsherds. I searched in vain for any I could remove myself. It is indeed barren. A lizard darts from a crevice, disappearing in a tiny plume of dust into another. I see no birds. The *raison d'etre* of Delos is to provoke revenue for the owners of the Diana and her sister steamers.

We returned to the ship for dinner. The Diana, with a toot and puff of black smoke, left Delos and was off for Mikanos, our next port of call. Abe was not at dinner. His wife said he had indigestion. She told us of their early courtship, the struggles to get ahead, the first Cadillac.

The honeymoon couple listened apathetically; they looked tired and probably had quarreled. The "girl" part now wore sneakers and a sport shirt, and her friend was similarly preppy. Everyone else looked as dull as Delos. We left the dusty shore and howling dogs and passed other yellow, rocky islands. It is hard to believe that this

was wooded paradise when Homer sang.

I sat on deck and worked on my report for Zwi Waldman, the new director of Bromine Compounds Limited. This would be my last trip to Israel as a consultant for the Dead Sea Works, and I wrote suggestions which would no doubt be filed without review but this is something that happens to consultant's reports and the writer must not mind. It is part of the cleaning out of one's desk when the job is over. It was a lovely day and I wrote, read, eat peanuts and dozed as islands glided by.

Once more it was evening and time for the big meal of the day. I was beginning to like Diana food. This time the main course was dolmaites, which looked just like fresh dog turds but is actually a meat dumpling served in grape leaves. In a pinch if you don't have grape leaves, any old leaf will do. I idly wonder what leaf the chef used. You eat the meat and leaf at the same time — that is *you* do and seeing that you survived, your wife eats hers as well.

Abe did not eat. He was having trouble with his digestion. His face was greenish and he didn't talk. I suspected the bacon and eggs of the morning before and revenge on the part of the chef. Abe stared at the dolmaites which is fatal for if you look at them hard you will not eat them. He spoke wistfully of Brennan's in New Orleans. I have eaten once at Brennans and the prices are simply astounding. Abe confided that he would probably jump ship in Mikanos, hide until the Diana had gone, and then bribe someone to take him by the fastest boat available to Athens or Istanbul. I suspected that he planned to leave Hannah on board.

My mind conjured up a vision of Abe, freed from the restraints of matrimony, never leaving the Dodecanese, but instead setting sail for some island, meeting a young Greek girl, becoming a local Demosthenes. I can picture the enraptured audience as he tells of his adventure with Errol Flynn. I see him beach his boat, wash his hands in a convenient stream, chase his Grecian nymph through a sylvan wilderness (and catching her, I hope).

The object of this reverie rolled his eyes and said, "I feel temible."

I was beginning to like Abe. He confided in me that he wasn't really as rich or as well known as he claimed, that he actually hates Hollywood and temperamental actors and actresses, and really would have liked to be a scholar, perhaps a psychiatrist, and study Gestalt. he was bored with Hannah. She was lousy in bed.

He told me the joke about comments made by three nationalities of women at an appropriate time:

The French woman, "Mon Dieu."

The Italian woman, "Mama Mia."

The Jewish woman, "Oscar, the ceiling needs painting."

I had heard the joke but he told it well.

I told him about the husband and wife passing the gorilla cage at the zoo. The gorilla reaches out a hairy hand, drags the woman between the bars, and disrobes her.

"What should I do?" she questions her mate.

"Tell him you have a headache."

I could tell before I finished that Abe had heard it before, but he laughed appreciatively and told me that I tell a joke well.

We agreed that Hannah and my wife are great girls but we should really be single. We ate peanuts and he asked me about brothels in Tel Aviv. He planned to visit one if he recovered his health and escaped from the ship. He confided that Hannah was his only experience. He was always shy with women. There must be a better life.

I liked him more and more.

My new friend and I took the girls shopping in Mikanos. The girls had shopping fever. You could tell this from the taut muscles of the face, the feverish eyes, and the imperious demands for money. My wife modeled a perfectly gorgeous green evening dress, hand embroidered in gold thread. It would be delivered to us in a few months. She was tall and clothes looked good on her. Hannah was an "Im-glick," a disaster with one breast higher than the other and twice as large, and a "fanny" that will be immense by the time Abe is a grandfather. He has tentatively suggested that we swap wives, and I have tried to refuse tactfully. Actually I would end my life by jumping in the sea before I would mate with Hannah. The vessel signaled us to spend our last money and return to the docks. The women, exhausted from shopping, are silent. I smoked one of Abe's cigars.

There were two categories of eaters at dinner, those who have adapted to Diana cooking and those who have not. The former eat anything. In this instance, dinner is stew and potatoes. The latter class, which includes Abe, Hannah, and my wife, bitched. They pointed out recognizable dolmaites in the stew, a holdover and economy on the part of the kitchen against which they rebel. The waiter nodded and agreed. He had become accustomed to our table's complaining and agreed with anything. There was plenty to eat, it was simply poorly cooked. I had eaten food like this at Y camp years ago, and although I have no gall bladder, I eat anything — and eat it with gusto. This brought comments from the non-eaters who

are losing weight. Abe, for example, was surviving on chocolate bars, peanuts, and cigars. My supply of goodies had almost vanished. The ship's canteen had baklava, Turkish delight, and excellent halvah, but all of these dripped and attracted flies in the showcase. They were so sweet that only children could keep them down, and there were no children on board. The honeymooners ate nothing — they just stared at each other. Abe was holding out for Rhodes, where we docked next day. It is large enough to have restaurants and an airport. His secret plan was to eat a huge meal, abandon ship and fly somewhere, Athens, for example, and then direct to Israel. He did not mention Hannah, whom I assumed would be left behind to die of ship's cooking.

It was night and I sat with the others until they got sleepy and retired. I was the private in Carson McCullar's *Reflections In A Golden Eye.* I listened to the bazouki music and the singer. The fare was varied but quite good. I decided that he is not lonely for one girl but actually lamented the indifference of women in general. I added a *bel canto* sob of my own. My Greek friend told me that he, too, had felt the pangs of rejection, and he, too, felt kinship with the singer.

A lovely bronze-skinned girl with deep blue eyes and blond hair waited on the dock for those taking "Tour of Rhodos." I asked her about the blue eyes and blond hair and she told me in English that she was not Greek but Macedonian, and that all the girls in Macedon had her color.

She shepherded us to our bus, tallying numbers by counting heads. When she got to me, she smiled. She knew that I had fallen in love. She sat in the front of the bus and briefed us using a walkie-talkie: where we would go, what we would do. She wore an embroidered dirndl and was about my height. I enjoyed Rhodos very much. We visited the hill overlooking the city, the museum, the governor's office, the harbor, and the shopping area. As she talked, she gave me the same faint smile. I asked her if she could give me a personal trip around the city, and into the countryside.

She laughed out loud. "Only if you bring your wife."

We waited for the bus to fill. I dozed. She became a hologram and no matter which way I turned, her eyes found mine and her lips puckered in a kiss. The bus started and I was awake.

The harbor has a long pier that leaves the shore and stretches far out into the tossing sea. The small, alert boy who fetched me here reached his hand out for the dollar bill.

At the end of the pier, a tall, sunburned man was renting sailboats. He helped each adventurer hoist sail, gave a little push,

and the vessel foamed out into the sea. His name was Klaus, and he was from Hamburg. He was about my age. I told him I would like to rent a sailboat. he suggested that he was booked now but if I came after lunch, he would have one for me. He looked skeptically at my wife and asked her if she could sail, and she said, "No." He cautioned us that the seas are rougher in the afternoon, and perhaps it would be better for him to accompany us. My wife replied that she planned to go shopping.

After two hours, she found the wares of the merchants not to her taste and accompanied me back to the pier. She had a tendency to *mal de mer*, but it was a lovely afternoon and Klaus gallantly invited her aboard. So she joined us.

The boat was sloop-rigged, slim and with an open cockpit. It would be a wet passage.

I explained this to my wife, that the sea was rough and that she should not go just to oblige me, and in fact I would feel better if she stayed behind. She wavered but decided to go. The Aegean Sea, according to Homer, is not a mill pond. Jason was an expert (this is where he went to get the "golden fleece").

We left the quay, hoisted sail, and a gust of wind sent the boat over on her side with the mast bent at 45 degrees. As we shot for the open sea with Klaus and I on the high side, there was an urgent cry from the cockpit, now partly filled with water, that our passenger had changed her mind. Klaus promised that it would be smoother when we get further away from land. My wife decided to stay. We raced along, heeled over, and carrying so much sail that she regretted the decision vocally. Somehow we put in a reef, that is I tried to hold her into the wind which blew fiercely and sent waves boiling on either side of the boat, and he lowered the main, put in the reef, and then hauled up the main once more. There was a problem with the center board, but there is always a problem with a center board boat in the ocean. Give me a heavy keeled vessel which can't turn over. You take what you get. My companion was a super sailor, a wizard. Every minute I decided this was the time we would turn over, and then he fell off just enough to spill the wind and take the strain off mast and tiller. We sailed all afternoon. The wind gradually calmed. The air was sharp and cool; there was a faint odor of jasmine from the hills. The sea was laced with whitecaps, and each tack brought a wail from our companion, who was now seasick. We started back, racing the tide. We docked, moored, shook hands, and took down and folded the sails. There were customers waiting to rent boats, but Klaus told them although the wind had slacked, the sea was still rough and he had

closed shop for the day.

"Come with me," he said, shaking off my offer to pay.

We climbed the long main street of Rhodes, which slanted up the hill. It was a wonderful, smelly, quaint old street. There were dozens of little shops with all sorts of things one could buy. The owners wearing tarbushes smoked the narghila and waved to Klaus as we passed. We reached an establishment selling wine. They knew Klaus and produced two bottles of Mavrodaphne, a sweet red wine. We opened one and drank it on the spot.

"Max," he said, "this is my pay. There is joy in making a friend."

I gave the merchant $2, which was all he would take. Wine is cheap in Rhodes, friendship as precious here as anywhere else.

"I shall keep the other bottle on my mantel in Hamburg," Klaus told me. "And when you visit, we'll drink it."

Alas, I have never gotten back to Hamburg nor to Rhodes.

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We were back on the ship. Abe and his wife never left it; despite his plan to escape. Abe was unable to "navigate" and sent a messenger, who informed him that the only plane that could take him back to Athens was a rebuilt German bomber, which was then, unfortunately, in the shop. Abe had mustered other potential deserters but since the mechanic could not advise when the plane would be able to fly, all were afraid to wait. Hannah had taken to her bed suffering from "Agamemnon's Revenge," or as I would call it, the "Diana Dixie." Abe now planned to charter in Crete to save Hannah's life. The lovers purchased Rhodes t-shirts, which say, "Love is the answer, what was the question?" As we streamed toward Crete the bazouki started its lament, and the singer, his never-ending song of unrequited love.

We awoke. The boat had stopped moving. Through the port hole, we saw a very large island, Crete, the most fascinating of the Dodecanese, rich in history, scene of savage wars and even more savage earthquakes. Everyone was excited and, because there was no docking facility, we queued up for the launches.

Like all the days on the islands, this one was lovely. We arrived on shore at 10 a.m. and were taken by bus to the museum. There we saw an astonishing collection of gold vases, armor, and jewelry. Then a bus took us to the ruined palace of Minos. It is not sumptuous, but, after all, four thousand years or more have passed since Minos and Pasiphae lived here.

We were shown the cellar and the famous labyrinth where the monster, called the minotaur, ate the young boys and girls sent by Athens as tribute. He would have eaten Theseus, too, but if you remember Bulfinch, Theseus so bedazzled Ariadne, the daughter of the king, that she gave him a thread, which he used to find his way through the various arms of the maze. You know the story: he met and slew the minotaur, found his way back, abandoned Ariadne (men were equally heartless and ungrateful in those days), and sailed away. She died of a broken heart. Giving it due consideration, my sympathies are definitely with the minotaur.

This place is great for musing. I recall Proust's "Les Filles des Minos et des Pasiphae." Pasiphae, depicted on vases of the period, was wasp-waisted, black haired and voluptuous, like other ladies of the time. She was a "looker" and as much a source of joy to her husband as it is rumored she was to Zeus. I share their taste.

The tourists, i.e. those who do not like antiquities except as a background for shopping ashore, were eating popsicles supplied by a merchant outside the Palace. I wandered off into fields which had been freshly plowed. Fragments of pottery were everywhere, and I stealthily pocketed several. Later in Israel, my friend, Avram Ber, who is an authority, told me they are Turkish, circa 1915.

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We climbed the winding path that leads to the top of Santorini. This is a very tall island, visible many miles at sea. No one lives on the side of the mountain, but there is a small community on the summit reached by this road. The island and its neighbor survived an enormous volcanic explosion many centuries ago that dumped the center into the sea. It is rumored that Santorini is all that is left of Atlantis.

The normal method of travel is by donkey; there are no cars on the island. You travel from the dock to the village by donkey. You pay for the animal and the starry-eyed ruffian who leads him. The wise make it on foot, but one must be an athlete.

Because I suffer from vertigo, I did not venture to ascend by donkey, and since I am not athletic, ambled on ahead of my wife, her donkey, and its driver, who was cross-eyed. They moved very slowly because both the donkey and its master were aged. Somehow I survived the climb, probably because I did not look down at the harbor from this giddy height, nor at the cross-eyed one leading C and her steed.

At the summit, people were gathered in little stores or sat in

front of them playing games, eating and tourist-watching. Several of the streets were roped off due to a land collapse that had left a chasm ten feet across and 6,000 feet deep between two sections of the village. Santorini is still settling, I gather.

We joined Abe, his wife, his donkey, and his guide. Between them they had one donkey, Abe's. His face was the color of his beast. Hannah followed in typical Arab fashion. The driver lingered behind trying to humor the animal, which had developed a dislike for Abe and periodically tried to discharge him at the edge of the cliff. By this time I was astride my wife's beast, for she wanted to get some exercise. While we conversed, my donkey did one of the things that come natural to donkeys, and when I dismounted to get a better view of the harbor, I stepped into the mess.

A group of newcomers from another ship offered such unrequested comments as, "I say, friend, do you know you have stepped into donkey hockey?"

As one interested in semantics, I felt happy to know that this phrase for feces is also common to England and Australia. I removed my foot.

The Diana honked for us to return.

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The voyage was over. There were no new islands to visit; not on this trip at least. All we had to do was get back to Athens, which is not very far from Santorini. It was with regret and fondness that I boarded our old rusted ship. Another night and we would once more be masters of our own destiny. She wheezed at anchorage, and as I watched, there was a spurt of smoke from her stacks, and a minute later a doleful toot. Diana was ready to sail. Yes, I would miss her and the bewhiskered captain, doomed like the Flying Dutchman to take ever changing groups of tourists to his far-flung kingdom; to listen to their complaints with the proper mixture of respect and compassion. I would miss the eager-to-please crew, one of whom played bazouki and was very much in love. This night the Captain gave a party for passengers and crew. We had lamb shashlik and a cake. The captain played his accordian. Abe shook hands with him, and then with the chef, and then with me, vowing that we would always be friends. He asked me, *sotto voce* , if I would like to prowl with him in Tel Aviv. I told him I am closely watched, but wished him luck.

Once more it was midnight, and the others were asleep. The small man who had spent the late evening hours with me came to the

rail and we watched the islands depart. Just before the late rise of the moon, the bazouki played ever so softly, followed by the now familiar melancholy song.

Diana had completed her labors and was docked. We were once more in Piraeus. We made it from Santorini in record time. Like an old stable horse, the ship wanted to get home.

People hurry off ship. The lovers had quarreled and obviously lost sleep. They pretend they do not know each other. A woman, obviously the wife of the older man, waited for him in a car; he left without a backward look. Several tall, attractive young men came for the young man, who was obviously their friend. He was chewing gum and seemed more relieved than anything else at the separation. We observed all this from the small mountain of luggage deposited by the ship's steward. Abe and his wife followed two large carts of luggage. They barely nodded. Abe was once more a VIP. The captain came ashore, then the crew. They smiled and waved.

There was no one left but us. Several cats sniffed at the bags and were prepared to make friends. My wife, a determined cat disliker, made go-away noises and motions. Rebuffed, they went away.

We were supposed to be met by Straitakus. He had obviously forgotten, and left already for Corinth. Then Straitakus drove up with his plump, olive-skinned wife, and somehow we got ourselves and the luggage in the car.

Once more the D Hotel. The proprietor, smiling, gave me my fan. I put my money in the outstretched palm, whose middle finger inscribes the gentle, ageless caress, reminding the purchaser to pay.

We paused in front of the elevator, then joined our host who was waiting, smiling, at the stairs. He indicated by hand motions that the elevator was temporarily out of order. The window in our room was open, and the construction workers were still destroying the building next door.

"How were the islands?" one of them called out. I tried to tell them while my wife tried to close the shade., There was a new fly in the room. Home to the D Hotel. The next day we would leave for Corinth and Epidaurus, with Manuel and his wife, if we survived the night.

Chapter 25

It was another beautiful day in Greece. We spent a half hour trying to get our luggage into Manuel's car. I had recommended checking it, but my wife did not trust the management. With barely room for four adults, the small car, bent like a donkey under all this weight, picked up speed and we drove through Athens in the early morning. Lo and behold, here we were at the Parthenon once more, and this time we got out and climbed the hills leading to it and were soon in the gutted chambers of a truly large old building. It was lovely and quiet and there was a fine view of the city, just waking up.

There are several ways to get to Sparta from Athens. You can sail it, if you are rich, have a sailboat and can afford a crew. You can fly, if you can rent a helicopter, for there is no landing field where we are going. Or you can join thousands of Greeks who make the trip by car and cross at the Isthmus of Corinth.

We drove in an idyllic, azure, Greek morning through the suburbs and past Piraeus. The night before, Manuel, his wife, and a host of small-fry Straitaki, had joined us for an evening of bazouki and Greek fried chicken. The composer of the music that accompanies "Never on Sunday" was there, and he and his family played all night. I never saw his face. He was bent over his instrument, completely absorbed in the music. Manuel and I were the only ones who stayed awake. Late in the evening, he joined several "loners" swaying by themselves to the beat. There was a miniscule stage.

Soon we were on the open highway leading out of this century into the BC era, to Sparta and parts of Greece as austere as the islands we had passed on our voyage. Crossing the bridge, we stared down into the fantastic canal that separates old from new Greece. It was built by Jews' slave labor following the fall of Jerusalem during the reign of Titus Caesar. A small comfort station perched on the far side, crowded as its counterparts along America's superhighways. We bought Coca-Colas and little dough sandwiches that scald the mouth but hardly dent the pocketbook. Parked on the concrete expanse was a line of cars containing lean, brown Indians with their black-eyed children.

"Gypsies," whispered Straitakus, crossing himself.

One of the little girls, spotting a "softie," came over, stared at me, and held out her hand. My friends tried to shoo her off, but I gave her a coin. She said nothing, turned and rejoined her friends and they started a wild game of tag, a delightful dance performed by actors not yet aware that they were different.

From the Isthmus to Corinth is just a few miles. There is a new and an old Corinth, and the new one is like any Arab or Greek village. Old Corinth is an excavation revealing a tremendous city with temples, residences and an agora, or market place. There is a section that in ancient times was the red light district.

Corinth was a sinful city, as Bible readers know, and the old-timers in the scriptures railed at its iniquity. I detect a certain zest in their denunciations, perhaps the writers had visited and even sinned a little. One has to use his imagination to conjure up Old Corinth from what is left. There are narrow streets barely wide enough for chariots, and I can imagine the sidewalk stalls, the shoppers, and dirty old men out for fun. I really like Corinth and this could be a wonderful place for a modern version of its old specialty. Amsterdam gets a part of its revenue from the red light district along the waterways back of the Krasnya Polska. Hamburg has a railroad station district which packs in masculine visitors from a half dozen countries. I strongly urge the city fathers of New Corinth to take advantage of their location, and historical reputation. Reopen the houses; bring in sloe-eyed orientals and Circassians, and for those of other tastes put in a restaurant with a decent steak, and a hotel several stars above the D. Between the people who come for entertainment, and the churchmen who come to reform, business should be brisk. It should be re-established as a carnival city, boosting the economy considerably.

Unfortunately, there is little left to see. Like our visit to the ruins of Delos, we viewed excavations that revealed honeycombed small rooms and narrow streets. The Temple of Jupiter has lovely columns. The ones stretched out on the ground are too large for easy removal, or tourists would long ago have carted them off. There is marvelous blue sky, and distant red mountains, and farther away is the sea, the wine-dark sea. The air makes you feel young and alive. I hated to leave.

We drove to a suburb where a potter was making imitation vases, replicas of the ones found in museums. He used local clay and the same motifs. I watched lovely wasp-waisted women form where his brush kissed the wet clay. While working the wheel he chatted with me in English. I told him I was in love with Greece and especially with Pasiphae. We shook hands and he introduced himself, his helpers, and his wife peeping out of the kitchen. American Express had contracted with this small merchant. He had its machine, took my card and charged my purchases. I bought so many vases that additional problems were posed for Manuel's car.

We were now friends and he offered to teach me Greek, and had there been any location nearby where I could have put a small chemical company and customers for the products I would make, I would be in Corinth today.

His wife served tea. I was prepared to spend the rest of the day watching the production, the decorating and firing of the vases, but my friends wanted to push on. Manuel had a secret present for me, which he promised would make me happy; I guessed it was 27 packages of peanuts and a dozen Milky Ways. He said, "Would that this were the case, Max, for you I have an antiquity," and gave me an ancient coin.

The potter and his wife followed us to the car, and we were hugged and kissed and made to feel just wonderful. Then we were once more on the road, 25 pounds of pottery heavier.

The countryside here is bare, sere, and unpopulated. No wonder the Spartans were tough; they eliminated their weak and old people, and had to work hard. After a half hour, in a particularly desolate region, we noticed a motorcycle in pursuit. Manuel drove like a madman, and the old car, heavily burdened, did its best to outdistance the relentless pursuer.

"A bandit," Manuel announced, "I have no gun."

The "bandit" was waving his hands madly, blowing his horn, flashing his lights.

"It is a policeman," Manuel observed, sadly. he pulled his car over on the shoulder, sighing, as I always sigh, and automatically reached for his billfold, extracted his driver's license, and collapsed, a small, plump bundle of woe.

But lo, happy day, it was my friend from the pottery.

I had left my American Express card, and he had followed half the length of the Peloponnesus to return it.

Everyone rejoiced, and we embraced as intimate friends. I had to be restrained from hopping on the front of the motorcycle and leaving America, my wife, and Columbia Organic Chemicals forever.

At noon, we arrived at a fishing village, bursting with visitors; the cars stretched for half a mile. Everyone was Greek. This was a community of Manuel's kinfolk and friends. Manuel told me that we were probably the first Americans in recorded history to visit. There was much excitement, lots of kids, lovely young Greek men and women, all wonderful, happy people; all vocal and all hungry. Manuel had made a reservation at one of the local restaurants, and the proprietor brought out a little bowl in which a half dozen small fish swam around and around. This was the Greek equivalent of the

lobster chamber presented to lobster lovers in American and French restaurants. We doomed several of the little swimmers, and they later appeared with a garnish of olives and radishes and small glasses of ouzo, the Greek licorice-tasting whiskey, and a small bowl of peanuts. The proprietor pointed to my stomach and then to the nuts, and smiled. I gathered that Manuel had filled him in on my weakness.

After lunch, we waded in the quiet blue water. There was almost no wave action, which Manuel explained was due to the reef. Soon the water was teeming with Greek vacationers. Then there was the first yell as contact was made with the ubiquitous sea-urchin. The victim was young and comely and I had to be restrained by my wife from offering her first aid. I assumed this wonderful little beach party was the secret Manuel had promised me.

"No. That comes later."

We drove in mid-afternoon through the wide, sparsely populated valley until we could see a hill gently sloping into the sea. I knew where we were from reading. This was Mycenae, and in a few minutes we were facing the twin lions which have guarded the entrance for centuries.

Mycenae is a huge hill covered with massive blocks and rubble. As with other Greek coastal cities, it faces the sea to give the inhabitants height and time should attackers come. Back of the hill is a sheer drop of over 500 feet. From a distance, the city is small, but when you enter the gate and look up the ruins are immense, and getting up to them is not easy unless you are a goat, or Manuel Straitakus. For an overweight man 54 years old, it was murder. I followed Manuel, who seemed to know the way. There were other climbers. In fact, we resembled a stream of ants ascending the rock-strewn slope. Once at the top, the view was wonderful and I could even see the little village where we had eaten lunch. This had once been a mighty fortress. Now it was a collection of enormous rocks.

Suddenly I was seized with a terrible pain in my stomach. The little fish was taking revenge. I suffered breathless agony and had to find a bathroom. I sweated fearing the next convulsion. There were too many climbers to seek the shelter of a boulder. I hollered to Manuel I was going down. Propelled by cramps, followed by an avalanche of dislodged stones, hastening over fallen pillars, following tortuous bends, piercing a knot of returning climbers who commented in German, I rushed to the foot of the mountain. A guard who spoke only Greek but had excellent insight pointed the way. I entered a small building with a neat, comfortable men's room. Rushing over, torn by another spasm, I crashed into and destroyed a

small Greek commode. Then, the dire desecration completed, I slunk out, hoping the destruction would be blamed on someone else, or perhaps the ghost of departed Schliemann.

We went to the pits which he had dug, and from which he had taken a ton of gold ornaments and armor. He was certain that these were the graves of Agamemnon and Clytemnestra.

The large tombs may have belonged to the doomed people, but they are impressive no matter who was buried there. We left in the late afternoon when the two lions cast long shadows and the crowd had dwindled to a few, like ourselves, reluctant to leave. The graves and the ruined city at twilight were dark and forbidding. Straitakus said that we should hurry for the evening was not complete and we still had 50 miles to drive.

We traveled in the gloaming, the road, narrow bitumen badly cracked in places. The setting sun threw grotesque shadows. Sparta is poor and desolate. Our destination was Epidaurus. Twenty miles before we reached it, we merged with traffic from Athens. The plays given at Epidaurus are famous thoughout Greece. Soon we were bumper-to-bumper and Manuel fretted about the time.

The city is small but its amphitheatre is huge. Normally Epidaurus has very few people but it comes alive on weekends when the plays are re-enacted. The actors speak in ancient Greek, wear the old uniforms and fashions of over 20 centuries ago. The chorus performs the strophe and antistrophe. By its swaying, attention is drawn now in one direction, again in the other.

There is a bedlam of cars converging on what appears to be a giant football field, but traffic is handled deftly, and cars and buses are efficiently routed. We have an appreciable walk to the arena. The path is thronged with play-goers and vendors selling peanuts and hotdogs, just like football games and county fairs at home. For those who scorn modern fare, there are little plates with cheese, bread and olives. I munched on peanuts, cheese and olives in a seat near the top of the bleachers.

The action had started. Meneleus, Agamemnon and Nestor were arguing with Odysseus whether or not to sacrifice Iphigena, Agamemnon's daughter, in an effort to bring a favorable wind. As a sailor, I found this a perfectly sensible idea, and have been tempted to sacrifice my wife during races at the Montego Bay Yacht Club. Back to play action, Clytemnestra was wringing her hands. She would get revenge in another play. She besought her husband to spare her daughter, who was bashfully hanging her head. Agamemnon was unmoved, not realizing that the helmet he was now wearing would

soon hide horns.

Clytemnestra had two friends and admirers in the peanut gallery, Gergel and Straitakus, who hissed at the scoundrel Greek conspirators. We were prepared to rush down, grab Clytemnestra and Iphigenia and carry them into the Attic hills. We laughed at the thought of two startled actresses imploring the manager to rescue them. We munched peanuts like mad, and while the action continued on stage, I observed the majestic passage of one of our country's satellites across the brilliant, smog-free sky.

The play was over. It had left me with an idea of last ditch devices for invoking wind, and I was in love with Iphigenia's mama. it was after 10 p.m. and we were over 100 miles from Athens. We all dozed, except Manuel who guided us safely across lower Greece, across the Isthmus and through the darkened streets to our second home, the hotel.

Packed and ready to follow in the steps of Jason the next morning, I observed a bus loaded with tourists pull up, and stepping off nimbly was my old friend, Professor Frank Case of Temple University, who now consults for GFS Inc. in Columbus, Ohio.

"How do you like Greece?" he asked.

I told him, "Greece is wonderful," and, having said our goodbyes to Manuel at the airport, we faced the problem of getting a flight to Israel.

Chapter 26

Athens airport was just as crowded as when we arrived ten days ago, maybe a bit more, for the season was more advanced. Due to a cancelled flight, there was even more noise and confusion. I was uneasy for I did not have a reservation and was on "waiting list." There was a happy crowd of Israel-bound vacationers, including Abe and his wife, who seemed to have forgotten that we existed. All were waiting for the plane to Tel Aviv, which was late. All seemed to have reservations.

In those days I had a secretary who suffered mental lapses. She was a dear lady who tried hard to keep my letters filed and my desk in a semblance of order but she was inclined to make errors booking, and she had our reservation for the wrong week! I had once arrived a week late for a speaking engagement in Pittsburgh. Alma, like many of our Columbia Organics staff, never reached high gear.

The girl at El Al "reservations" did not offer much hope. The

people from the cancelled flight would have priority, and the plane was booked aside from them. She told me that all El Al seats out of Athens are booked weeks in advance, and no one ever cancels.

One had three choices: you could wait a week in Athens, lucky even to get the hotel in "high season." You could skip Israel and return to London via Switzerland. Or you could stand in line at the ticket counter and hope. The murmur from my companion commenting on the intelligence of my secretary and her employer was a *leit motif*.

"Intelligent people do not make errors like this."

A pause while she decided what to bitch about next.

"When you get home I certainly expect you to fire her."

Alma was as much a part of Columbia Organics as Bobby, who drank, Joe, who was frail, and "Mr. Max," who was as forgetful as Alma. She was my friend.

"Do you realize the strain you are putting yourself to, not to mention the strain you are putting me to?"

I wondered if it would be considered an unpremeditated homicide if I drew out a weapon and silenced this reproach forever. The odor of sugar and spice, Greek and Israeli, dog feces and perfume produced migraine. If I were a single man, with only one suitcase, I would have left the airport, rented a car, driven to Corinth and opened up a whorehouse.

I finally reached the head of the line and faced the attendant, fortunately Israeli, not Greek. He was cool despite the heat, calm despite the bustling crowd, courteous despite the vocal rage of the unbooked who had proceeded me. I told him in a whisper that I was on an emergency visit to Israel with my wife at the urgent request of General Makleff. That my secretary, in error, had booked me for the wrong week.

"Call 123 Hahashmonaim Street in Tel Aviv and confirm."

"Mr. Gergel," he said. "If you will wait a few minutes, I believe we can do something for you."

Twenty minutes later, he gave me two first-class tickets in place of the two tourist seats I held for the following week, and told me he was glad to help.

We sat waiting to board the plane. Smoking was called first, then Tourist by row. The California King and his Lady left the lounge. We stood up, filed into privileged First Class, made a performance putting things away and noted with satisfaction that we had been observed by the baleful couple in the rear of the plane.

The trip takes less than two hours, and the flight was

uneventful. I was a veteran of previous trips to Israel, but it was as exciting as when I came the first time. There were bearded rabbis, Chassidim with rolled-up sideburns and small neat beards, Israeli hostesses and an Israeli crew. The food was kosher, thus milk was not served with meat.

There is the thrill of seeing Israel first as a blur of land, then as an airport; of being a part of the din and confusion characteristic of Lod when an airplane full of friends and relations arrives. We checked through customs and looked to see if Gershon Segelman, Ariel Ginsberg or Chezi Rappoport were waiting, and then, a bit saddened because they were not, walked down to Hertz, picked up the car they had waiting for us, and drove to a new hotel erected since I was last in Israel. Waiting in the lobby was my friend, and brother, my "chaver" (comrade), Gershon. He hugged us. We checked in and sat in the lounge. It had the luxury of any first class hotel in the world. Gershon was unchanged. He joked and acted as if it had been two weeks rather than a year since last we saw each other. He had lots of news and lots of questions.

"How long will you be in Eretz (the land)?"

I told him this was my final trip as a consultant. With Makleff, Nitzani and Ariel gone from the company, Avram Ber no longer running the S'Dom plant (Sodom), I shall resign. This little trip was a bonus I was giving myself for ten years with the company. He did not seem surprised. Gershon had recruited me in the early Makleff days, but he, himself, had left Mifale Yom Ha'Meloch (Dead Sea Works) two years ago and was directing new development at the Miles Laboratory plant in Haifa.

He suggested we visit a kibbutz (collective farm), Nir Itzhak, in the Negev. "They are setting up a pilot plant to produce specialty chemicals with emphasis on bromine compounds to support BCL as backup."

I was at Nir Itzhak on my last trip when they were setting up. I had met Shaul Kohen. "Perhaps they would hire you as a consultant but can't pay you; they'll just feed you to death, and it's a nice place to stay."

Gershon was an old kibbutznik and, in addition to his work at Miles, he was an advisor to the Kibbutz directorate and had a warm spot in his heart for their endeavors.

We went to the dining room. Chumus, tahina, pita and a baked hen. I recalled the wonderful evening in Tel Aviv when Gershon, Chezi Rappoport and Oded Vared told me of a special restaurant on the outskirts of the city with unusual cuisine. After leaving the city and

suburbs, we reached a small cafe with an amazing number of cars and a door with peephole. When they identified Gershon, they let us in. The crowd was quiet, as if we shared a base secret. We dined on pork chops and barbecued ribs.

We talked about wives and children. His three sons were in the army, my three daughters were growing up. My wife discussed her family. Chezi joined us. He was an officer in the Israeli navy before going into trade, first joining Philip Brothers, and then representing Dead Sea Works in New York. We planned to get together in Beersheba later in the week.

Next morning we drove to Yavne, a little town famous in history as the refuge of rabbis from the destruction of Jerusalem by Titus Flavius. It has a large market place and stalls run by Yemenite farmers. Years ago, I regularly got lost in Yavne trying to find Zion Chemical Company. Now I reached it without any trouble. The quest was complicated, for in the boondocks the signs are in Hebrew. My Hebrew is fragmentary.

There was so much construction going on at the chemical company that I hardly recognize the little research laboratory which had multiplied ten-fold in size. Alfred Bader of Aldrich, Ernst Bergmann of the Israeli Atomic Energy Commission, and I had founded this company 12 years ago. The rumors were that Galun, the director, had sold his interests to Koor, the financial giant owned by the Histadrut (National Labor Party), which, like kindred labor organizations in the U.S., has money to invest.

I am an old timer in guessing what a company is making from the drums of raw materials that are stored on site, if they are labeled. The Security was at a low level, the drums were labeled (a serious indiscretion), and I knew at once that the chemicals they were making at Zion were chemical warfare-oriented. This explained the construction. They were working for the government and the products were destined for the military.

I introduced myself at the reception desk and we were seated. In a few minutes, Arjeh Galun fetched us to his office. He looked good, the entrepreneur who eats well.

I tell Arjeh I have come to Israel to say goodbye to Dead Sea Works, and after five years or so would say it to Columbia Organic Chemicals as well. He told me he was planning to leave Zion Chemical Company and take a job teaching. We agreed that one must not stay in the same job forever. Two veterans of small chemical business congratulated each other on having retained some common sense. The inevitable tray with small cups of oriental-type coffee was brought

in. I opted for oranges, the huge Jaffas with thick skins that can be eaten with the fruit. Arjeh, just like a donkey relieved of his burden, smiled. We discussed family, kids and personalities in our profession and I say, "Lehitraot," which is Hebrew for goodbye and "Sholom," which means peace, hello or goodbye, and we promised to get together in Israel or Europe when I returned as a tourist. I was eager to visit Ashkelon, and he to get back in the lab where he was running an experiment. He went back into the building and I sent a prayer heavenward that none of the reaction vessels would break making the stuff I knew was in them.

Like most modern cities of antiquity, Ashkelon is a combination of the old and the new. Today's Ashkelon is like a small city in Florida, with similar temperature and similar people. If you go down to the beach for a walk, you can see the ruins of the old city, which was considerably larger. It was famous in Biblical times, and David, hearing of the death of Saul, says in 2nd Kings, "Tell it not in Gad, tell it not in the streets of Ashkelon, for the daughters of the uncircumcised would rejoice." Ashkelon was Philistine, and this is where Delilah and Sampson loved. David spent a great deal of time and energy fighting Philistines and his revenge on them after the battle of Gilboa is impressive in the hallowed words of the Bible.

One can pick up pieces of mosaic and pottery by simply scuffing the sand with one's foot. My good friend, Josie Epstein of BCL, found a very large piece of mosaic at Ashkelon and gave it to me. If one wets it, the colors are vivid. The beach is sandy, and the water is a lovely blue-green. I picked up lots of lovely blue and pink shells. The shallow water extends no more than 20 feet and then the slope is precipitous. The waves come in strong, without protection from reefs. It is lovely and peaceful. On weekends, Israeli vacationers and locals saturate the beach but now my wife and I have it to ourselves. We walk through the ruins. Samson caused some by pulling down the walls of the temple. Between Samson, Saul and David, the Philistines had a rough time.

We bought balls of fried dough containing herbs, called "falafel." They are dynamite, an excellent substitute for castor oil. I think they were introduced by the Arabs as a method of weakening, slowly and subtly the defenses of Israel. They are consumed in vast quantities being cheap and tasty. It was early afternoon, time to go to Beersheba.

The coast road divides into two parts south of Ashkelon, and by turning left you ultimately reach Beersheba. Even before you can see the city, while you are barely out of the Negev desert, you pass

the Desert Inn. This modern, lovely hotel housed me many times in the years when I consulted; now we would stay at the Ein Gedi, which was close by, actually within walking distance of the Potash House where Dead Sea Works has its offices. Everyone takes afternoon siestas in Israel except the lizard poised on the main step leading to headquarters. He extends his scarlet throat, no doubt for the benefit of the unseen lizard lady in the bushes. Dedicated employees return about 3:30 p.m., and I waited in the sun for Ora Toranto, who was the main secretary for BCL, for whom I was making my final visit.

Ora was originally from Egypt. She was a sensitive, highly competent lady. Long ago I recommended to my associates that she be given executive status, but the company was chauvinistic and had no women in responsible positions. In her office she served hot tea and cookies. We gossiped. Ora and I had been friends for years. She was concerned about her fate in the new organization. I told her that as soon as Zwi Waldman returned to Israel from the Hague, I would pay my respects and "hang it up." She told me that Zwi knew I would be in Beersheba and told her to tell me he would see me in a few days. Ora was overworked, underprogrammed and underpaid. We could have used her at Columbia Organic Chemicals but she would not have been happy. She was an Israeli, proud to be in Israel. A Deborah without soldiers.

All told me that Waldman would arrive in a few days. We were "waiting for Godot." I strolled around the lovely building past Saul Tchetchik's office; he had been the treasurer. There was a new name on the door. I passed Gershon's old office. Everyone had retired or found new jobs. Few of the old timers were left. I was an old timer and would soon be a co-retiree.

One of the wonderful things about working for DSW was the freedom to do what I wished, go where I pleased and work or not work. I drove out to the BCL Labs, by Machtashim's factory. Machtashim makes agricultural chemicals and, like Zion Chemicals, is owned by Koor. The director of Machteshim at the time, Zwi Zur, was a good friend of Makleff and I would see him at parties at the General's house. Zwi Waldman was then director of BCL and would now come back as director for DSW.

I entered the gate. An old man was watering the flowers. Another old man was bringing the water. Two women carried mops and brooms to clean the labs. The labs are spic and span but Israel tries to give employment to its elderly. I noted a new building had been erected, and there were large glass-lined vessels newly placed and forming an assembly line. The operation was open to the

weather, just a roof and cat walks. It hardly ever rains in Beersheba.

I strolled over to the area where bromine bottles and methyl bromide tanks are filled. It had been modernized. No longer is the filling done by hand, using illiterate newly-arrived immigrants. The machine for filling methyl bromide cans had been imported but never worked; it has been replaced by one designed within the company, and works. I noted that a worker was stenciling signs in Arabic on cylinders of methyl bromide. These would be shipped to Austria and then delivered to the Soviet Union as Arab material. The Russians are not stupid; this was simply a face-saving gesture. The deal was put together in the U.S. The methyl bromide is used to furnigate wheat.

Israel Sachs was running a bromination. I strolled into his laboratory and there was Israel in a white lab coat, puffing away at his pipe (everyone in Israel smoked at work and even in no smoking areas such as this lab). He is making p-dibromobenzene from benzene by adding bromine in the presence of light and a catalyst. He is following Vogel's text prep (Vogel is the Bible of organic chemists) and the room is full of hydrogen bromide. The two of us are fairly resistant but the four chemical neophytes watching the boss are coughing and retching and not enjoying the display at all. Sachs gave another puff on the pipe, reached over and added a squirt of bromine from the separatory funnel, and saw me. The room filled once more with fumes and he and the four watchers were swallowed up but readily located by the coughing. Then the exhaust fan did its job and they re-emerged, Sachs, his pipe glowing, came over to shake hands and give me a hug.

"How are you? How is your mother? How are the cats? How are your kids? Are you married?"

I remember when he visited me in Columbia, shortly before the death of my second marriage. We sailed a catamaran to the other end of Lake Murray. The wind gave out, and we had to paddle five miles. We got very sunburned. He suggested that we go into his office, coffee was immediately served. We discussed chemistry and the old days and the new regime. He told me that Ariel Ginsberg was directing a phosphoric acid venture in Arad. The project was a fiasco, and mortified the Israeli Chemical Industry. I told him I planned to visit Ariel and we agreed to meet for dinner the following evening. I told him I plan to give up my consultancy. He confided that he plans to leave the company, too.

I always found the drive from Beersheba to the Dead Sea exciting. One takes the same road to get to Arad. It was a cloudless morning, already warm. It would be over 110 degrees within a few

hours. I was impressed with the large, concrete plant and offices, but there seemed little if any activity. No more than a half dozen automobiles were parked, no fork lifts which one would expect to find swarming around such a large plant. I was shown into Ariel's office. He was unchanged, handsome, urbane, witty. He smoked his pipe, not outwardly concerned that he presided over a lifeless organization. He told me the plant was a joint effort with Allied in the U.S., built to utilize fluidized bed techniques developed by Allied. It was obvious that Allied had saved money by doing its pilot plant work on someone else's budget. The Israeli government was financially poorer and not happy. The phosphoric acid plant had limitless raw material; the machinery or the process simply did not work. I admired Ariel's aplomb; fortunately neither his job nor his personal finances were involved.

So passed the days: visits with the labs in Beersheba and discussions with their chemists; visits to the Arid Regions Research Labs which located next to ours, devoted to dialysis techniques in water desalination and the development of bromine-containing dyes. I saw Rudi Bloch and we discussed his new scientific endeavors. He was the director, and like myself a consultant to Dead Sea Works. It was his genius that led to the dyeing of the Dead Sea water to hasten evaporation in the crystallization fields. Now he tells me he is sold on the use of IUD devices to forestall pregnancy. (Time would disprove its usefulness). I drove everywhere, saw everyone I knew, and enjoyed the last days of my vacation.

On the third day in Beersheba, Zwi Waldman arrived and invited me to his office, apologetic for his inability to get home quicker. He offered me the choice of continuing to consult or a preferred purchasing arrangement so that we could sell BCL products to advantage in the U.S. I opted for the latter. We had a nice lunch together, talked over old times and then, since he was busy, I "got out of his hair." After ten years, I was an ex-consultant for the Dead Sea Works.

During the next ten years, the company prospered and continued to grow at a respectable rate. After a few years, General Makleff returned and brought back most of his old team including Ariel, Gershon and Enzo Nitzani. Even Shaul Tchetchik came back. In the summer of 1977, I visited Israel again, this time as a tourist. I spent most of the time in Tel Aviv, Jerusalem and Haifa. While with Shaul he suggested that I call General Makleff.

"Max," he said, "It is timely that you called. You remember Mike Shinar? I have him running the new company we have bought in

Germany, Giulini. I want you to visit Mike and give him advice on products to make and sales possibilities."

"General," I said, "you know I have not consulted to Dead Sea Works for five years."

He laughed.

"Nonsense. We never dismissed you. We just quit paying you."

He once said he liked me because I was the only man older than himself in our group. He drove himself hard, as an officer in the British Colonials, as a General in charge of the Israeli High Command, and as the director of Dead Sea Works. he was busy until his death, around 1980.

From time to time I get news. Ariel is now director of BCL. Mark Wilsker is head of the Fertilizers and Chemicals group in Haifa and I consult for him. Gordon Osborne and Monk have retired. Israel Sachs left chemistry completely and moved across the street to a porcelain factory. *Sic transit...*

I consult for Giulini!

One has to give up his child when it grows up. I was 50 when I left DSW. In 1977, I was 56 years old and ready to give up my own child, Columbia Organic Chemicals, which Jules, Max Revelise and I had started 34 years before. I had been its president since the start. I never had a promotion for I started at the top. Putting together a small chemical company nowadays is far different from what it was in 1944. With the new government regulations one is half-beaten before he starts. Stopping one's normal activities and retiring is equally difficult. Though the care and responsibility rests on other shoulders, the readiness to do battle goes away slowly. I fight fires and worry about orders in my dreams, and in them all those who have passed away join me in much the same roles. Bobby, marvelously restored to youth; Tommy, full of energy; and my wonderful uncle Max and my surrogate father Jules Seideman run a chemical plant at Cedar Terrace although Columbia Organics has moved.

And I? I look in the mirror and a man no longer young stares apprehensively at me, but in my heart and in my mind I AM NOT OLD. I AM AGELESS.