

A
SURGEON'S
WORLD

AN AUTOBIOGRAPHY

BY
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SOMERSET BOOKS, INC.

NEW YORK

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To
FIM,
PHIL
and
POOKIE

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FOREWORD

THIS book owes its origin to the fact that I talked. Perhaps I talked too much! From time to time, over the years, I have related incidents of my career, explained emotions of my psyche to friends, acquaintances and traveling companions. And again and again the advice has been reiterated: "You ought to write a book . . ."

For a long time I brushed this idea aside. The knife, and not the pen, is my instrument. And, mindful of the opening aphorism of Hippocrates, "Life is short and art long," I was conscious also of an obligation to use my pen, when I used it at all, in the services of my art and profession. I felt I had to write books about surgery. How could I find time also to write this book?

But the time did come at last when the major tasks of surgical writing which I had set for myself were completed, though the need for continued writing in that field will be with me always. I began to think that, perhaps, I could write the story of my life after all. I felt the more inclined to undertake this new task because, as the years have seasoned my observations and my experiences, I have come to believe quite humbly that the material of my life may hold a message for the public, and especially for the younger surgeons of America whose welfare is so constantly in my heart.

My friends and advisers have, I know, thought of my life as story material because of the vivid contrasts which have given it at times almost a dramatic touch. Assuredly, the complaint of Browning does not apply to me:

Each life unfulfilled, you see;
It hangs still, patchy and scrappy:
We have not sighed deep, laughed free,
Starved, feasted, despaired—been happy.

I have done and been all of these things. I have sighed deep, and I have laughed free. I have known the utter bitterness of poverty, and I have basked in the sunlight of success. I have known hunger and I have sat at the tables of plenty. I have endured loneliness, and I have been given love. I have dwelt in hell and I have entered heaven. Long have I understood the full meaning of the words of Terence: "*Homo sum, humani nihil a me alienum puto.*" (I am a man and nothing that is human is alien to me.)

I know that in the surgeon's world in which I have lived and worked and suffered there are numerous pitfalls to be avoided. I have not avoided all of them. I hope that in these pages some of my younger colleagues may discover lamps shining to guide their feet where I have stumbled and fallen.

I wish to express my gratitude to the publishers for their co-operation in the preparation of this book; to Dr. Victor Robinson for seasoned editorial counsel and help; and to Mrs. Helen Van de Woestyne for aid in the revision of the manuscript.

MAX THOREK.

A SURGEON'S WORLD

PART I: PRELUDE TO AMERICA

1

FIRST MEMORIES

BETWEEN soft layers of goose-feathers, I lay sleeping—a three-year-old boy, safe in the safest sanctuary in the world, my home. Warm under my covers, with added warmth reaching my cold little toes from the porcelain stove with its bright tiles of yellow, red and white, I had peaceful dreams, shadowed only by the perplexities of a child beginning to discover a world outside the safety of home, not always kindly, not always safe.

Dreams floated into my slumbers—of the old gray gander who hissed me down by the river bank, my baby buttocks bare for his nips; of the neighbor's dog that barked at me and showed his teeth; of hurting tumbles when a careless step made the ground rise up and trip me; of surprises and dangers around the corner when I ventured away from my home. But those dreams had the undercurrent of security. I was at home. I was in my bed. I had, between me and the perplexing world, those ever-loving, ever-watchful guardians—my mother and my father.

Home had its shocks and surprises for an exploring boy, it is true. The roar of my father's voice when I reached for the lamp shining on the table or attempted an attack on a certain instrument case, or investigated pungent pots of herbs brewing on the fire, could make me quake in my boots. But the roar was followed by a smile. It was not as terrifying as the hissing gander and the snapping dog. It was, as I dimly sensed, in some mysterious way part of the protection which home gave me, part of the assurance that harm could never come to me there.

Suddenly fear invaded my sanctuary, borne by a sound new to my ears, a sound which made me stir uneasily in my sleep, a sound which, growing louder, more insistent, moved me to terri-

fied trembling. Outside in the street drums were beating loudly and menacingly. I could not escape that primitive sound. Drums! Drums! Drums! Something in my protoplasm reacted with violent and unreasoning panic. I fell out of bed and lay screaming on the floor.

That moment retains today in memory all the freshness of present experience. I live it over and over again.

Mother comes running. She bends down and picks me up. She holds me close, deriding my fears, trying to awaken my courage. I keep on crying. I am afraid, really afraid for the first time in my life.

Mother carries me to the door and quickly opens it. Encircled in her arms, I look out. The street blazes with spring sunshine, so bright my sleep-filled eyes blink blindly for a moment. In the window-box, a pink flower nods in the breeze. In doorways and on window-ledges, cats are sleeping, serenely indifferent to the strange insistent sounds. But every dog in town, irritated by the primordial call that comes down the cobbled street with its gabled houses, is barking in loud protest. My old enemy, the ancient gander—was it perhaps his ancestor who hissed to save the city on the Tiber?—is leading his harem away from danger.

Drums again! A mother's love battles with the fear she sees in the eyes of her first-born son.

"You are just a little dunce," she whispers, as she holds me close.

Down the street men are marching. Their polished boots gleam in the sunshine. Their scarlet trousers and blue coats are more splendid than anything I have ever seen. The hypnotizing rhythm of their stride makes me interrupt my screaming to watch.

"They are *katonák*," my mother tells me, repeating the word, which means soldiers in Hungarian, slowly, so that it may sink into my consciousness, teaching it to me as she has taught me the name of cat, chair, spoon, my mouth, my bed, my milk, the water, the sun.

Katonák . . . In the hands of one of the men, marching beside the group, I see a pair of sticks. I watch him in interested wonder. With these sticks he is beating steadily upon his red-tassled drum. I am thrown again into childish chaos.

My mother pets my cheek. Into my ear, she whispers those soft jumbling sounds which mothers have used since the first

days of the human race. She fights against the fear of her child.

"Look, you little fool! See the pretty Huszárs! Hear the music! Hear the Rákóczy! Listen! Isn't the music of that little *trommel* pretty! Father must buy you one like it, and I will make you a fine red and blue suit to wear when you play it."

Memory begins for me from that day. It begins with the staccato rhythm of drums, with the primitive fear stirred by the primitive throbbing sounds which speak directly to the beating of men's hearts. It begins with the comfort and the reassurance of my mother's voice.

Since that long-ago morning, the sound of drums has woven itself into my life as a minor theme. Whenever I have heard, in some luxurious and opulent home in Europe or America, the snare drums roll out the percussive refrains of Meyerbeer's Huguenots; whenever I listened to the martial music as men marched to war or home from war, the sound of drums has always power to carry me back across the years and across the miles, back to my first encounter with terror, back to the shelter and protection of my mother's care.

Aesculapius had marked me for his own before I was out of the cradle. His staff and twined serpents were the aegis of our home, and his healing art was practised by both my parents. Into our tiny cottage, along the path that led from the cobbled street, came an endless stream of visitors—Jew, Catholic, Protestant, Turk, Magyar, Tartár, Greek, Bulgarian, Rumanian, Russian—ready to share our food, including those Hungarian cabbage pastries "*kaposztásrétes*"—the thought of which can make my mouth water even today—but even more ready to talk. It seemed to me that there was always discussion going on in our home, before the fire on winter evenings, in the flower-sweet garden in the summer.

Had I recognized my predestination then, I might record that I listened to those discussions with eager interest. I did not. They were disappointing and often boring to me. I felt neglected and left out while my elders talked.

Sometimes the talk began with promise. Someone would mention the appalling news from the hunting lodge of Mayerling, about Crown Prince Rudolph and the beautiful Maria Vetsera.

Someone would bring bright vivid pictures of life in far-away cities. I was all ears. I could have listened all night. But inevitably, just as my interest was at fever pitch, the talk would turn. It would run into speculations as to why so many people should die of *Bauchfellentzündung*. (We know today that it is due to perforation of the appendix.) Or it would become an argument about the best way of treating typhus or how to use or discard leeches. Or it would swing from bright gossip about the great and near great to stories of an unfortunate Hungarian physician named Semmelweis. Always and forever, medicine! These men and women seemed unable to talk of anything else.

The Austro-Hungarian stork left much work for my mother. She was called to the hovels of the river-bank and to the mansions of the rich. It seemed that babies were always coming. Short, erect, beautiful and slender, with her thick, brown hair parted in the middle and drawn softly to the nape of her neck, my mother looked in her youth like the Madonna the artists painted. And her goodness, gentleness and patience had something saintly in them which contrasted with the more vigorous irascibility of my father.

Father could have sat for a portrait of Mars—majesty, beard, and all—and he had all the fierce dignity which the prophets of old ascribed to deity. Every child in town, including his own sons, dwelt in genuine fear of his wrath. He was a skillful man and a good Aesculapian disciple for all his severity. Like all his contemporaries, he had to depend on his five senses to guide him in his diagnoses. He shared the faith of his colleagues in such treatments as cupping, bloodletting, leeches, cataplasms, clysters, and he never dreamed that many people who died of “bowel inflammation” could have been saved had some wise man discovered appendicitis earlier. No doubt the greenest medical graduate today knows more of the science of medicine than Father ever dreamed could be known—so great have the strides in that science been in the past fifty years—but he ministered with conscientious skill to his neighbors and kept, throughout his active life, an open-minded interest in the discoveries and advances being made in the medical world.

Very early he began to make me understand that he expected me to take up his staff and mantle when he should be ready to lay them aside. And unconsciously I absorbed some of the medi-

cal and surgical knowledge of our household. Watching my mother, time after time, pierce ear-lobes for the heavy earrings that Austro-Hungarians loved, I became adept in using the needle to prick the blisters that came on tender heels from the rubbing of a sabot or a knot in poorly carded wool. I learned deftly to dig out splinters imbedded in any section of the human anatomy. My skill in extracting thorns was most often drafted to relieve the paws of limping beasts. I even aspired to the removal of "dirt in the eye."

* Among the Tatra Mountains nestled our lively town. It was only a day's travel from Budapest and from Vienna, but in the days of my youth those cities seemed as far and strange as the North Pole. Few of the ten thousand citizens of the town traveled far from their homes, and the community life had a stability which not many communities retain in this day of rapid movement.

Weaving and leather tanning brought the town its livelihood. (Sometimes a shift of wind in Chicago, bringing with it the effluvia of the stockyards, touches my nostrils with recollection of the pungent odors of those tanneries, and I can see again the workmen walking the cobbled streets of my home town.) Weaving, however, was only beginning its transition from the home to the factory, and it is the home industry which I remember most vividly as characteristic of the life of the community in which I spent my boyhood.

Our home, like most of the village homes, had its loom where wool for the sturdy Jaeger was spun. Jaeger, in the eyes of most villagers, stood second in importance only to religion. Every peasant's home—most of the homes of the scholars and gentry as well—had its loom. Day after day, old men and women plied their gnarled and wrinkled fingers to spin and weave the all-important cloth. Carding the wool was a familiar, homely task. Knitting needles clacked with the vigor of contending creeds. It was a sloven household which did not turn out its own Jaeger. And once spun and woven, the prized cloth saw long and strenuous life. It began as underwear for a grown man or woman. Then it was cut down, handed down from big to little household members, until the last shred saw duty as a baby's belly-band, or a

lad's ear muffs. We lads all wore our Jaeger belly-bands into the "big" years, but we dispensed with shirts.

No traveler coming into that town in those days, however, could ever have noticed first the evidences that men and women toiled for their bread and butter. Modern towns, with their towering smokestacks, emphasize the economic aspects of men's lives. My town did not. My town was conspicuous for its churches.

For those who found life's chief solace in Almighty God, Franz Josef's land was rich in outward signs and tokens of religious faiths and convictions, various, often hostile and clashing, but all speaking of man's concern with the things of the spirit.

Over the magnificent, stately edifices of the Church of Rome, ruled from the cloistered Vatican, towered that indomitable aristocrat, peerless diplomat, and far-sighted humanitarian—Leo XIII. Between Leo's thumb and fingers with the legendary fisherman's ring, was long held the leash that kept in check the dogs of war. His strength and his influence were truly and deeply felt in the great Catholic churches which dominated our little mountain town.

To me, a boy on the threshold of life, those Romanist churches were holy places because they held statues and pictures, understandable to any faith, of the Mother, always with the Holy Child in her arms, often at her breast. Countless times I have stood before them and before those roadside shrines, so numerous in the Tatra, where the Madonna waits patiently for votaries. Crudely carved from wood or stone, stained with the dust of years and the grime of highways, these shrines are enriched by the prayers of the penitent and the tears of the forlorn. For me their compelling interest was the soft-eyed Madonna, holding her child, as Mother at home held little Philip.

Philip was my younger brother. I thought he cried too much. Yet he hushed promptly when my mother, opening her bodice, loosed to his mouth that blue-veined alabaster globe, holding for her child the fountain of life. To the shock-headed boy that was I, this almost automatic action of practical maternity held as much magic as lay in the legends told by huddled old crones of the town, or between the covers of the Brothers Grimm. Here, indeed, was "Little Table, spread thyself."

Later, when I was a man grown, to me as to others stood this ubiquitous, commonplace gesture of fulfilled womanhood. In my

boyhood days, in my native town on the Austro-Hungarian border, a nursing bottle was a symbol of shame! Although it was well known that in the imperial palaces of Vienna and Budapest wet-nursing was a well-paid profession, the true mothers of the Dual Monarchy nursed their own children.

The Catholic images of Madonna and Child stood in my childish mind as symbols of this holy mystery I felt in my home.

The Catholic religion dominated our town, but did not monopolize its devotion. Less pretentious than the cathedral but signifying a faith older than Christianity, a faith whose annals hold bloody records of relentless, ceaseless persecution, the Synagogue drew its own faithful followers. In our town the Synagogue was of Moorish design, built upon a mound. In it the men worshipped below. Women were permitted only in the balcony. The sexes were not allowed to intermingle at prayer.

Judaism found expression also in the *Yeshivah*, which met in a one-story building, stove-heated, poorly ventilated, with many of its windows broken and its floor only partly boarded so that the ground was exposed in spots. This Talmudic school is the oldest institution of Jewish learning, higher in rank than the *Chedar* or the *Talmud Torah*. Burning devotion marked the pale faces of the *Yeshivah Bachurs*, who consecrated their lives to the study of the *Talmud*, following their holy study by flickering candlelight through the long nights. Inexorable sadness permeated the atmosphere. Mysticism, sorrow, and poverty met there every night. With heroic tenacity and self-sacrifice, the Faithful held fast to their traditional belief and remained true to their God. In an abyss of destitution, self-denial, and abnegation, they never for an instant doubted the wisdom of their way of life. "Does not life quickly pass?" they argued. "It is the *Olum habu* (the hereafter) in which every righteous son of Israel is appor-tioned a share, that is the important goal—the goal beyond the grave."

Even Martin Luther had his handful of stout followers in my Tátra Mountain town. They fought the Reformation over and over again. John Calvin and John Knox left their imprint in these Hungarian mountains. I remember one native called "Calvin," and Scotland meant Knox to all of us. The Protestant minority was, of course, anathema to the Catholic majority as it had been everywhere in Europe for centuries. Communicants of

both faiths sought the same God, whom they called God of love and mercy, and they reached out to him with hands stained with the blood of their fellow men. It is tragic to record that, among my earliest recollections, are memories of the religious hatreds of our town.

A boy's choice of his church was, of course, in our land as everywhere in the world, made for him by his parents. We possessed no veto power in the domain of religion. Each of us went to the church of our parents for the same reason that we went to school—because we could not escape.

Most of us would have gladly escaped the school if we could. Its long hours and stringent disciplines went against the grain of our freedom-loving souls. The currently discredited maxim, spare the rod and spoil the child, operated in full force. And woe to the lad who happened to be in the class of a sadistically inclined schoolmaster.

Our secret world, the world in which we really lived, was the world of play. The scent of spring in the air brought to us the same truant impulses felt by boyhood the world around. When the ice was melting in the frozen rivers and life was stirring in the thawing earth, we were irresistibly moved to forget church and school and run out into the sun to greet the world as it sloughed off its winter garments. There were snails to watch, hares and leverets to chase, and robins, wrens, and thrushes to startle. If we went far enough and high enough and had enough luck, there were water ousels. If we could not actually catch carp and trout with our hands, at least we could frighten them.

Closer home there were hoops to be rolled over the cobbles of the marketplace, with a troop of dogs and younger brothers and sisters at our heels in full cry. Cats were made to be chased by boys. New chickens and kittens and puppies, calves, lambs, pigs, and kids gave us endless delight. We played with balls, like other boys of other lands, but our balls were made from ends of yarn, or from a bit of kidskin or tanned leather stuffed with hen or goose-feathers or combings or linters my parents used for dressing wounds, obtained by separating the threads of linen fabric, made into a fluff called *charpie*.

Thus the years passed. While the elders sat at the table or in the pleasant courtyard at eventide, eating and arguing as the sun

gilded the grape arbor, and the advancing dew distilled a softer fragrance from the pine firs, I grew up. There came the spring when I had nice trousers of huszár red, with hand-moulded silver buttons, and the old cobbler Lukás made scarlet-topped boots for me. I was ready to meet my destiny.

STRUCK BY LIGHTNING

I HAD been sent to Filipek's apothecary for some perchloride of iron. Like family messengers of all ages, I was taking my time. How could I know that so prosaic an errand was fraught with destiny? Boy-like, I stood with my hands in my pockets, admiring some charcoal drawings in the window of Landau's Book Store. I looked up and saw a young girl crossing the square.

Up to now my life had been normal. Like other boys of my age, I was kept fully occupied with the tyranny of school, my father's discipline, the ceaseless procession of events in our home, with my violin, with the honest amusements of childhood. I knew about sex, just as I knew that a man must earn a living, but I had always taken it for granted that mature matters of love and bread-winning must be left for consideration by mature adult minds. They need not concern me yet. Most of the boys I knew felt that way about love. Precocious and perverse boys were not conspicuous in our town. Krafft-Ebing and Havelock Ellis would have found few case-histories among my playmates. Free from the fires of puberty, I had laughed at older boys who cast sheep's eyes at girls or sent mimosa glances after them as they passed.

Now all was changed in a flash.

I had been sent to buy medicine for an anemic patient, and as I lingered—destiny walked across the square. There I stood in the sunshine, a lusty lad with new-found pulses. The world had changed, and I knew it.

The girl arched her neck as proudly as a swan. Her feet were small, her ankles slender. Her reddish-chestnut hair, stealing all the glory from the sunshine, gleamed with a soft, yet fiery, radi-

ance, like a nimbus around her head. She passed—completely unaware that she had transformed a human life.

Something in her dress and in her bearing warned me that she belonged to a class wealthier than my own.

I gathered my courage and looked at last at her face. Her eyes were large and soft and dark. Her skin was white as the alabaster vase we had at home. Against the smooth pallor of her face her cheeks were as red as though someone had dipped a brush in crimson and splashed them with generous vigor.

She walked past me without even seeing me. I might have been a lichen or a cricket in between the cobblestones on which she stepped. I had been struck by lightning, but the bolt had left her unscathed. She did not know that I was in the same world with her.

I loitered no longer. I rushed home like a whipped and routed dog. I could think of nothing else than the vision I had seen. Nothing else filled my dreams at night.

Unbidden, there came to my mind the Song of Songs, which is Solomon's, and in my heated mind I repeated over and over again the words of the royal lover of old, so ancient, so familiar to me since childhood, and so charged now with new meaning.

Behold, thou art fair, my love; behold thou art fair . . .

Thy teeth are like a flock of sheep that are even shorn, which came up from the washing; whereof every one bear twins, and none is barren among them.

Thy lips are like a thread of scarlet, and thy speech is comely: thy temples are like a piece of a pomegranate within thy locks.

Thy two breasts are like two young roes that are twins, which feed among the lilies.

Until the day break, and the shadows flee away, I will get me to the mountain of myrrh, and to the hill of frankincense.

Thou art all fair, my love; there is no spot in thee.

Thy lips, O my spouse, drop as the honeycomb; honey and milk are under thy tongue; and the smell of thy garments is like the smell of Lebanon.

Many waters cannot quench love, neither can the floods drown it . . .

My obsession, like King Solomon's, was indeed "terrible as an army with banners." Had I not been so enchanted, I would have said she was more terrible than the drums, whose staccato I had

never ceased to dread. Spring may awaken with devastating force in the youthful male. Frank Wedekind did not exaggerate when he wrote the tragedy of adolescence, *Frühlings Erwachen*.

I was beside myself with frustration and suffering. Daily, I went to the square at the hour when I knew my beloved would pass that way. Daily I saw her. But never once did she give any indication that she saw me. Once I ventured to ask her a question—some stammered boyish attempt to break the ice, to establish a desperately needed contact. The *Jungfrau* could not have frozen me more completely. The Empress herself, the haughty and exquisite Elizabeth, could not have put more disdain into her manner as she turned away without answering.

I could ask help from no one. I knew that I could not live without that girl, yet I did not even know her name. And I could see no way to discover it unless she told it to me herself. And she would not—I was hopelessly sure of that.

If there had not been so much sickness in our town just then, my parents would surely have noticed that something was wrong with their Max. But they were unusually busy, unusually perplexed. They did not realize that their child had made his first step into manhood, that he was desperately in love, and that he was too young, too helpless, to do anything about it but suffer. They would have found amusement in the situation if they had realized it—a lovesick schoolboy must always be a little ridiculous—but they might have had the understanding to ease my plight. They would have, I know, if they had seen it. But they did not see . . .

I suffered vastly, but it would not be strictly accurate to say that I suffered in silence and alone. My friend Sigmund lived at our house. He came from a country village and his parents had sent him to town to go to school. "Zsigy" and I shared a little room in the upper story of our house. Sometimes I was glad he was there. Sometimes I wished he would go away. In my anguish I wished that more than ever. Why didn't he live with his own parents as I lived with mine? Why couldn't I be alone with my grief?

Zsigy detected the wound which my father and mother had overlooked. He could not very well fail to notice the moaning and mumbling and mooning and trembling which afflicted his

roommate. One day he threw down his school books and asked me point blank what was wrong with me.

Nothing was the matter with me, I declared. But it is easier to deceive one's parents than to hoodwink a bosom friend. He wormed his way nearer and nearer to the truth, questioning me insistently and cleverly. At last a mocking smile across his face warned me that he had guessed my secret.

"Oh, you fool!" he shouted. "I know what is the matter with you! Our little Max is in love! Who would have thought it! Ha! Ha! Ha! He's in love with a girl! He thinks he is almost a man! Ha! Ha! Ha!"

I cringed under his laughter. I could hear no sympathy in it. But there was relief of a sort in just sharing the burden of my woes. To be laughed at was better than to be so suffering alone.

"What can I do?" I asked him pitifully.

"Come on!" cried Zsigy, reaching for his cap. "Let's go to the square and we shall see what we shall see." His eyes sparkled with excitement. Here was good adventure—adventure which for him held no hint of agony. I followed him silently, despairingly, yet feeling somehow that I had found help.

The town clock said it was only a little after two when we reached the square. Nearly an hour, I knew, before we could expect my beloved to pass.

Like a pair of conspirators, Zsigy and I took our stand at the corner drug store, from which I had first seen my vision. I remember its old red and green globes in the window and its swinging sign of pestle and mortar. My attention tried to focus on those impersonal objects as Zsigy improved the waiting minutes by teasing me, making jokes, imitating a swooning lover. I felt like a fool and I was sure that every passer-by knew it. The fateful hands on the town clock climbed the dial with tantalizing slowness. Just as the wheels began to whirr, to strike the hour of three, I clutched Zsigy's sleeve.

"There! There she is! Look! Do you see her?"

"Of course I see her," he said. And then he added words which seemed to strike a light of dazzling hope across my dark mind.

"Listen, Max," he said, "I know this girl. This is where I can help you in return for all you have done for me."

I could not believe my ears. How could Zsigy know her? Was he still clowning? I looked at him sharply. There was a kindly

light in his eyes. He meant what he said. He really did know who she was! He said that the girl's family name was Unger, that the Ungers were rich and lived near the Park. He said—and how my pulses leaped when he said it—that he would take me to the Unger home on Saturday!

I had not always appreciated Zsigy. Sometimes, I remembered with shame, I had thought him my mental inferior. How wrong I had been! He had suddenly become my dearest and wisest friend. He had lifted the hopelessness from my soul.

Zsigy was true to his promise. He did take me to the Ungers on Saturday. But I was no credit to him when I got there. I was tongue-tied, too embarrassed to say a word. I watched my friend with envy. I would have given my right arm to match his ease of manner, his self-assurance, his boyish smile. My agony of shyness grew worse and worse. I knew I was a failure. I knew that the Ungers would surely be saying to Zsigy:

"Who is your silent friend?"

Worse, they might even be saying—and who could blame them: "Who is your *stupid* friend? And why did you bring him here? Please don't do it again."

Even the sight of my beloved could not quiet the panic in my heart. Yes, she was there—Fanny, whom they called Fim. And here in her own home, no less than in the town square, she was as distant as the stars. I knew that if she saw the dark slim boy who watched her with moon-eyed adoration it would only be with displeasure at his awkwardness. I could almost hear her say, gently but firmly: "Remember, Zsigy, don't bring him here again."

The Ungers belonged to the wealthy bourgeoisie. They were, Zsigy had told me, scions and relatives of such prominent families as the Schochets and the Krebs. Their home stood in quite another part of town than ours and it was elegant enough to overwhelm a tongue-tied boy.

The Thoreks were "comfortable." My father had many books and my mother fine linen. Above all we had several violins, a mark of some distinction. But compared to the Ungers we were poor.

I cannot describe that home. Often as I visited it, I had eyes only for the lovely girl who lived there. I scarcely saw the setting in which she lived. But I do know that its spaciousness made our

little cottage seem suddenly cramped and shabby. I know that the servants who moved silently among the guests made me feel like a peasant boy in some royal court. I know that listening to the gay, sophisticated conversation, centering in art and music and the life of cities far away, made me more than ever dissatisfied with the medical "shop talk" I heard in my own home. Even our most prized possessions were trifles not worth talking about when I gazed with pure, unadulterated envy at the mother-of-pearl inlaid music box from Vienna and the small pianoforte in the Unger home.

Apparently the Ungers had not noticed me enough that first afternoon to warn Zsigy against bringing me again. And like a faithful friend he tried to break down my shyness, to give me a chance to be at home in the place where I most wanted to feel myself at home. He talked to me and insisted that, in spite of my adolescent despair, I go back to the Ungers the next Saturday—and the next. It was no good. As soon as I was inside the Unger home all trace of self-possession left me. I could not talk. I could only suffer. I had met my beloved, but I was not one more step nearer to knowing her than I was when she first flashed upon my vision in the town square.

Then Zsigy came to the rescue once more, this time with a breath-taking idea. The Ungers and his family were old friends, he said, and he knew that the Ungers held monthly musicales in their home. He could easily arrange for me to play my violin at one of those recitals and he urged me to let him do so. My heart went out in thankfulness to him. My violin could speak for me even if my tongue refused to move. At least Fim would see that I could do something besides stammer, "No, thank you." I began to practise with a concentrated fury . . .

I will never forget how my fingers trembled when I first stood in the Ungers' drawing room and ambitiously played a simplified version of one of Brahms' suites of Hungarian dances. It would be pleasant to record that the magic of the violin solved my problems with a sweep of the bow. It did not. If the lovely Miss Unger heard my music at all, she gave no sign of it. Carrying herself like a queen, she moved among the other guests, animated, interested in their chatter, gracious, friendly. And the musician who had played for her, and for her alone, sat forgotten in the corner.

For more than four months I endured life in a briar-patch of torture. Zsigy would not let me give up. And by this time, too, a certain doggedness and determination had begun to assert itself in my abject soul. Faithfully I attended the musicales. Earnestly I tried to contribute my part to the music. Again and again I came away with a burning sense of shame and failure.

At last I was rewarded. I remember the day that brought the first faint ray of hope. It did not begin auspiciously. I was wearing a new suit with a coat collar too big for me. My new shoes were too tight. I felt thoroughly miserable as it came my turn to play. I lifted my violin and played Dancla's *Resignation*. To my surprise, there was an outburst of applause. I saw, out of the corner of my eye, that Fim was one of those applauding. She was tapping her exquisitely chiseled fingers against each other. At last she knew that I was alive. Bending low, I kissed her hand. The youngsters in the room giggled. Zsigy grinned. That didn't matter now. I was above embarrassment. I had kissed Fim's hand.

Zsigy's rôle of mentor and friend was not over. He praised me for my playing and he told me that I had made an impression. And then he counseled patience. I could not expect things suddenly to become smooth. I could not hope for continuing triumph. If my expectations soared too high they must surely fall heavily to earth again.

It was good advice. It was a long time before I was able to kiss Fim's hand a second time. But that time did come. I grew bolder. I asked her to join me in my rambles through the town and, to my joy, she consented.

Those walks together, always in daylight or in the early evening before dusk began to fall, were idyllic experiences for both of us. Perhaps because we were touched with the melancholy of puberty, we liked best to visit churches. There was one little church with a lovely Madonna inside. There was another with a tree-shaded shrine just outside which was our favorite trysting spot. Sometimes, in a gayer mood, we listened to the gypsy bands that frequently strolled through the town.

Fim and I, walking hand in hand, began to plan our future. I was to be a doctor, we decided. That meant, we knew, that I must soon go to study in Budapest, first at the gymnasium and later at the university. The only shadow on our happiness and

comradeship was the knowledge of that coming separation. But it would pass. I would finish my work. I would come back. And we would be together always.

I began to realize that I could not separate in my mind the days when I had not known Fim. I seemed to have known and loved her always. She was, and she is today, the beloved center of all my memories. Her love has been life's greatest gift to me.

I stood by the apothecary shop and Fim walked across the square of our little Austro-Hungarian town.

STUDENT IN BUDAPEST

THAT I should go to Budapest to prepare at the gymnasium for university and medical training had been decided early in my childhood. I cannot remember when the decision was made. It seems, looking back, that it was one of the things I always took for granted, just as I took for granted all the many mysteries involved in growing up. Yet my heart pounded painfully when the great day came and my parents at last decided that the schoolmasters of our town had carried me as far as they could along the road to education. Farewells, especially my leave-taking from Fim, had the poignant finality which only the first going-away-from-home brings. And I can still remember vividly the mingled feelings of self-importance, helplessness, fear, and eagerness for adventure with which I stood at last in Budapest, the beautiful, the glorious, the brilliant, the wicked city on the Danube, a shy and awkward lad, too sensitive for my own comfort, but conscious of my momentous step into manhood and resolute to acquit myself with honor as any knight-at-arms.

I had come to Budapest to study. And study I did. No American schoolboy, especially in these days of education made painless, can have any idea of the rigorous régime which governed the life of the gymnasium student in Europe when I was a boy. The studies were difficult, the discipline strict. And yet, as I look back in memory, I find myself recalling, like any lively boy in any land in any day, not the lessons and their grueling drill, but the pranks which lent a dash of laughter and light to the dusty schoolroom.

One dreaded chore we students hated and fought was the required commitment to memory of Latin verse. From twenty to

thirty lines of Virgil a day was the common assignment. And how we floundered and stammered when, at intervals of a few weeks, the days of reckoning came and we must stand before the class to recite the pages and pages which we had thus learned! Love for the poetry of Rome was pretty well squeezed out of us in the process, and I have always read with the sympathy of a fellow-sufferer Byron's outburst: "Then farewell, Horace, whom I hated so!"

We boys in that Budapest gymnasium developed a very healthy hate of Virgil. But, as our recitations grew worse and worse, our wits came to the rescue of our saturated minds and we hit upon a plan to vindicate the honor of our class. The plot hinged on the fact that the teacher, whose lot it was to guide us in the performance of our memory stints, suffered from defective sight and hearing. We decided, in secret session, that whenever one of us was called upon to recite, that student would silently move his lips, leaving it to an accomplice just behind him to read the correct lines from the open books. It was a perfect plan. It would have worked and we should have gained great glory for our class, if only we could have repressed our own bubbling spirits. But when we saw our first performers solemnly carrying out their rôles of reciter and *sugó* (prompter), they looked so droll that the rest of us were promptly convulsed with gales of laughter which, of course, gave the whole show away. The professor, who saw nothing funny in the classic lines of the *Aeneid*, became suspicious. Near-sighted and hard of hearing as he was, he had little difficulty in uncovering the fraud, since we had so obligingly helped him. Recitations were henceforth conducted on a new plan. The victim recited his lines standing in front of the class. He was beyond the help of his fellows. The result was an abundance of flunks.

To repress the young spirits of a bunch of schoolboys is a task which makes carrying water in a sieve seem simple. Some of our teachers tried it. I remember one in particular whose sense of dignity and decorum was outraged every time he saw a student running in the hallways. He instituted a one-man campaign, and the hunting down of running students became almost an obsession with him. When he caught one, the punishment meted out most neatly fitted the crime. The culprit was forced to kneel at

the spot where he was caught. During class hours, the hallways were frequently dotted thick with kneeling students.

Recreation had small place in the gymnasium curriculum, but resourcefully we made up for the lack through our own initiative and ingenuity, using the materials at our hand and whatever opportunities we could snatch from under the eagle eyes of our mentors. The cabinets in the hall next to the lecture room where paraphernalia for our work in art were stored kept us joyfully amused for a long time before their unorthodox use was discovered.

We found that a student, by drawing up his legs jack-knife fashion, could conceal himself in one of these cabinets. When the young Houdini was safely hidden, an initiated accomplice would lure some unsuspecting victim before the closed door. Then, at a given signal, the fellow inside would kick out his legs suddenly and sharply. The door of the cabinet would fly open and the dupe would find himself sprawling on the floor. If he was any sort of fellow at all, he would pick himself up, brush himself off, and be eager to pass along the experience to the next unsuspecting victim.

We were hilariously occupied with this fascinating game one day when a certain short, bald-headed, pompous professor stopped before the cabinet to investigate the cause of the unseemly uproar. In the cabinet a student had already taken up his position. One of the ex-victims of the game stood nearby and was suddenly struck with an impulse to revenge. He gave the signal; the cabinet door flew wide open. The professor went down like a bowling pin, his cherished dignity lost beyond recall. We thought he was going to have an apoplectic attack on the spot, but he managed to gather himself together. He dragged from the cabinet the surprised student who had been the instrument of his downfall. With ancient exhortations and modern methods of inquisition, he rounded up all the conspirators. That was the end of that sport. And our deportment marks at the end of that semester can best be left to imagination.

Meager opportunities for the supervised recreation which has become such a fetish of American education resulted at times in the mushroom growth of secret clubs among the schoolboys, clubs related to the hoodlum gangs of New World slums which I was later to know so well.

I studied at Budapest and studied hard, building a good and solid base for future education. Latin I dreaded, and mathematics, in spite of the best efforts and skill of good schoolmasters, remains something of a mystery to me today. But history! History was sheer delight.

How could any boy fail to feel the enchantment of history there in Budapest where it was written, not only in dusty books pored over in the school room for class assignments, but on every stone of a city which has felt the storms of Europe for centuries?

The Huns under Attila swept across Hungary, writing their bloody chapter in human history, yet only an incident in the life of my native land. Celt, Roman, Avar, Slav stood as conquerors in Budapest before the Magyars made it their capital city in 1002. And each new wave of conquest left its mark, so that past and present live together in the streets and buildings and the people of the bridge-linked cities of Buda and Pest which unite their names and their life in the modern Budapest.

Buda, on the right bank of the Danube, is the older city, Pest having developed into a metropolis in scarcely a hundred years. In the old military camp of Aquinicum, Valentinian II was proclaimed Emperor of Rome in 375 A.D. On the same site, St. Stephen, first king of Hungary, built the fortified town of Buda. During the reign of Matthias, in 1458-90, that fort settlement developed into a royal residence of medieval splendor. Then the Turks came. Their reign of one hundred and forty-five years left both Buda and Pest in ruins, treasures of art destroyed, buildings razed, desolation everywhere. Reconquest by the Magyars came in 1686, but the rapid restoration of the city did not take place until the second half of the eighteenth century.

The Budapest I knew as a student echoed the struggles of thousands of years. It glittered with the new glory of the Austro-Hungarian empire. Both sides of the river were lined with palatial buildings, including the Royal Castle which Maria Theresa built and which Franz Josef I made his residence in his Hungarian capital. Many a time, as a student, I stood awed and impressed to watch that Emperor enter his palace in state.

I read my history with the buildings and monuments of Budapest to guide me—the old fortress in Buda, the hill of St. Gerard and the Hill of Roses, the equestrian statue of St. Stephen, first king of Hungary, the coronation church of St. Matthias. Land-

marks a tourist seeks, Baedeker in hand, were more than landmarks to an eager, agile boy, whose young mind soaked up impressions as a dry sponge thrown into an ocean absorbs water.

The sense of history moved, too, inside the walls of the gymnasium, stirring in student hearts that fierce political partisanship which is common feature of European student life and which is usually oddly lacking in American schools and universities.

Fires lighted by Kossuth in the unsuccessful War of Independence in 1848 were still burning in Hungarian student hearts in the last decade of the nineteenth century. The immediate aftermath of that war had been the brutal execution of the thirteen generals who led it and the institution by the Hapsburgs of a rigid reign of absolutism. But by 1867 the king had reinstated the parliament and Hungary began again to hope for progress from absolute feudalism to a realization of the potentials of the rich country. Back into the minds of the people came the old slogans of the War of Independence—freedom of the press, freedom of assembly, general suffrage. Back into the souls of the people came the longing for independence from Austria, a new life for their country, politically, economically, and culturally.

This spirit of reform and revolt was nowhere more violent than among the students in Budapest. Their demonstrations, staged to make vocal their clamor for the rights of the Hungarian people, took the form of political struggles in the halls of the university, lectures and debates, street meetings, parades. Often the police were called in to quell such "disturbances of the peace." Sometimes military intervention, with violence and bloodshed, was necessary to silence these fiery young men ready to give the best that was in them in the service of a hopeless cause.

For the cause was hopeless then. The powers in the saddle were too strong and too firmly seated. Some of the boys who were students with me in Budapest were to learn its hopelessness as they reached years of maturity. They would either give up the struggle or become part of the army of voluntary exiles who, in the ten years before the First World War, left Hungary to find in other lands scope for the abilities suffocated by the corrupt political system of their homeland.

Kaleidoscopic Budapest comes back to me across time and space. There were excursions to the *Zúgliget* or *Hüvösvölgy*. I

can hear again in memory the indescribable, conglomerate hubbub of the markets where business of all kinds was conducted loudly and where all kinds of goods, from factory clothes to food from the farm, were haggled over by buyers and sellers. Scores of nations mingled there. All ages, all classes. Children, mothers, almost mothers. Memories of tastes and smells and colors come thronging back as I think of those markets. Those rare and luscious fruits! That *görög dinnye*—the largest, juiciest water-melons I ever saw in the world, the most delicious I have ever eaten in any clime, was indigenous, it seems, to Hungarian soil.

Walks along the *Körzö* come back to my memory, too, and longer strolls along the *Dunapart*. Records of Hungary's history live in the faces of her people. Budapest remains the most Oriental city in all Europe, and the sensuousness of the Far East, like the scent of musk, seeps through her crowded streets. But the Orient mingles here with the Occident. Each troop of invaders, each band of refugees, has left its mark on this city caught for centuries on the point of spear, crossroads of conquest. Those far-apart eyes, that butterish skin, those high cheekbones are a legacy of the *tártárs*. The Prussians are responsible for those blue eyes and flaxen hair; the Turks for those curved noses, those black eyes, sharp as gimlets or languishing as pansies.

Itinerant tintype men, bird and white-mice sellers! Acrobats! Troops of trained animals! Fairs! The city theater where men of God found many a lost sheep to lead back to their fold! Budapest offered intoxicating excitement, fresh every day, to an eager student. Over in the *Csárda*, I watched a Hungarian gypsy band which would make even poor cripples twitch on their crutches. Gay couples whirled in brisk *csárdás* tempo to the music of the cymbalon. All about there swirled the savory odors of frying *palacsinta* and *pörkölt*, and everywhere the essence of the grape flowed as swiftly and almost as ceaselessly as the Danube winding through the town.

Color, light, music, gaiety! But there are other memories as well. Even in my student days, I realized that Budapest was dangerously romantic for a boy away from home. Whatever sexual education students brought with them to the city was easily swept away in the rising tide of the hormonal flood. Some boys, with the connivance of indulgent parents, found Budapest a shrine to Priapus. At the public swimming pools, mixed bathing

was in vogue, and they were favorite haunts of youth eager to assuage in their waters the fires of puberty. Vividly I recall the voluptuous outlines of Rubenesque women in those public tanks where male and female freely intermingled.

The high class demi-monde paraded the *Körút*. Students could look upon them, but few could buy. The slender purse of the average student was better adapted to *Conti*, *Fecske*, and *O* Streets. Here unhygienic houses, reeking with venereal infection, were open for thriving business. The inmates of these places were as shoddy as their exteriors. The ubiquitous blind piano-player banged out ribald songs on an unstrung piano. The girls, in scanty attire, sat around, waiting for business. There was neither drinking nor loafing. These houses were straight business enterprises. The customer picked his choice, notified the Madame, who made the notation in the "business ledger." Then the buyer went through a courtyard with his purchase. Business was carried on both on a cash and on a credit basis. Some students were regular customers. The usual fee was two kronen.

Odd incongruities marked the personalities of the girls who plied this ancient trade. Some of them were, I recall, insistently religious. Helen, a Jewish girl, would never "work" on the Day of Atonement. When the church bells rang, Mariska would promptly interrupt her business, jump off the bed, and begin to recite the Angelus.

I knew these places only as a spectator, not as a customer. The surroundings were too sordid to appeal to one of my upbringing. Sheer poverty, too, helped guard me from contamination—I could not afford even that two kronen fee. Imprinted on my impressionable mind, moreover, were warning recollections of the many patients who had come to my parents as the result of promiscuous indulgence of their carnal appetites. But even these strong deterrents might not have been enough had I not had, as shield and buckler against temptation, my memory of home, and above all, my love for Fim. I discovered early that to be in love is the best prophylactic against carnal contamination.

Budapest is lovely, gay, beautiful as a dream. But Budapest, perhaps because of its very loveliness, is also melancholy. Even in my day, too many of the depressed, the destitute, the romantic found the city's bridges an irresistible temptation to death; and

in the years since I was a student there the suicide record of the Queen of the Danube has gained the world's attention.

Back and forth over the bridges which thread together the two halves of the city on the Danube, my thin, nimble legs carried me, and, having too much zest for life to find those arches with the swirling water underneath beckoning me to destruction, I nevertheless felt a macabre fascination in the stories of despair and frustration that ended there.

Below me, as I stood on the bridge, I could see the sentinels of the suicide squad, the *Rettungsgesellschaft*, alert to the splash and the scream which would send them on their mission to salvage human life which had become to its owner a thing good only to throw away. I suppose those sentinels still watch those Danube arches unless under the grim teaching of wartime, as psychologists surprisingly observe, the urge to suicide is lost in blacker hopelessness. It was after my student days that the rescue squad reached its peak of organization and equipment. The fragile rowboats ready to push out into the stream were later equipped with outboard motors and manned with two gendarmes, one to watch and one to engineer the boat and keep her machinery ready for instant action. The sentry-floats moored near the bridge heads installed telephones for quick communication.

The six bridges which span the Danube, swiftest river in Europe and second only to the Volga in depth and breadth and length, each had, even in my day, its special clientèle among those who sought a safe and speedy rendezvous with death. Popular then and later with masculine suicides was the enormous Suspension Bridge built by the English engineers Tiernay and Adam Clark, with its chains resting on pillars and its mighty stone lions flanking it on either side. Statistics for the period from 1926-1937 recorded not one woman victim in a long list of suspension-bridge suicides. I knew no statistics on the matter when I was a Budapest schoolboy, but I knew that bridge was shunned by maid and wife and widow. The women preferred the Elizabeth Bridge, named for the Emperor's consort who was assassinated; or the Margaret Bridge, which points upstream. Perhaps a sense of kinship with the ladies who gave the bridges their names softened the despair of the moment before the leap.

The poor of Budapest used the Margaret Bridge too. And for the would-be suicide who sought a dramatic and spectacular exit

from this world of woe, there was the Franz Josef Bridge. This bridge is of great height, suspended from four tall slender columns, each crowned with a bronze figure of the legendary Tural bird, the great eagle which, tradition tells, led the Magyar race from their cradle in the heart of Asia to the promised land of Hungary. These Turals have thwarted many a suicide. They rise so tall and high that only the most intrepid souls have courage to leap from them into the waters below. The end, for the faint-hearts, who hesitate before they leap, is usually prosaic—the fire department of Budapest pulls them down and takes them to the police station.

Far to the south, where the Danube slips along its course like a subtle stream of Hades, the railroad bridge gives surest results for unhappy men and women bent on self-destruction. The noise of passing trains can be counted on to cover the noise of the splash of a falling body, or the involuntary last scream. Budapest's largest crop of suicides developed at that point.

Many years have passed since I pored over my books in Budapest. Yet even today I need only close my eyes and I am back again in that beloved city. I am that youth hurrying over the bridges of Budapest, bewildered at life but desperately eager to meet it, dreaming the dreams of the future and finding at the core of every dream the beloved face of Fim.

I have never revisited the scene of those hopes and dreams and aspirations. When time and money at last brought opportunity for travel, disturbances in my native land, border fighting, unrest, confusion, discouraged the idea of revisiting Hungary. How much Budapest and Hungary have changed in more than forty years only my reading and the tales of travelers can tell me. I remember a land feudally aristocratic, aristocratically feudal, strongly Catholic but with a stout minority of Calvinist faith. Have those feudal aristocrats still managed, in the earthquake shocks of today, to keep their unrelaxing fingers on the arable land of this rich homeland of mine? What is the future for that rich and smiling country which once produced one-third of Europe's wheat, wines of a fire and potency no other land could match, fat cattle, luscious pigs . . . ? Some day, God willing, I shall go back and see.

LOST HOMELAND

IN the Spring of 1897, when I was seventeen, I went home for the Easter vacation. The air of a conquering hero blew about me, as it blows always about a student who returns home from a metropolis. I felt that I had changed immeasurably—and for the better—within the few months since I had waved a boyish goodbye to family and to Fim. My native town had changed, too. It had become much, much smaller. My lifelong companions had changed—they had become provincial bumpkins. Even my parents seemed less awesome. They treated me as a grown man—almost as an equal!

Like all homecoming students, I basked in glamor for a few days. Then everything fell back into its normal proportions. I was home again. Budapest was a far-away dream.

That vacation, however, was destined to be a tragic turning point in my life. It was to rob me of my old homestead and turn my eyes to a new land dim and far across thousands of miles of land and sea.

Passover and Easter, central holy days of two great religions, were unusually close together that year. Perhaps that very coincidence quickened antagonisms always latent where churches of all denominations stood side by side in a European town. But that alone could not account for the restlessness, the uneasy stirring, the ominous threat borne on the winds of spring.

During the winter, the town, usually so peace-loving and law-abiding, had had its first taste of organized vandalism. No one knew who the rowdies were, the first "gang" our town had ever known. At first, the gypsies were blamed. But every townsman knew that the easy-going nomads were incapable of such forays

against those who never harmed them. The scum of our town had risen to the top with the sap of spring. That much we knew, and no more.

Our neighbor, Etelka, a good housewife, had labored for hours over her poppy seeds and walnuts, pounding them in a mortar as a filling for her Easter cakes. As she had always done in peaceful years, she left them to stand overnight. She wept as she reported that someone had destroyed her precious seeds. They had been thoroughly mixed with the black axle grease used on the carts of the town. Another housewife discovered that the "*Gänseschmalz*" she had been hoarding for the Easter table had been filled with sand and dirt.

No one will ever know the true cause of this strange outburst of lawlessness. But it was a lighted match carelessly thrown among the powder barrels of our tensions and antagonisms. A threatening whisper began to move in the spring breeze. I remember the day when that whisper became almost a shouting in my ears.

Pisz, the tradesman, was sunning himself in front of his shop. Complacently, he liberated from his voluminous pocketknife, much in style then, the ear spoon with which he dug out the cerumen from his ears. That operation completed, he proceeded to the esthetic pastime of picking his pyorrheal teeth with the ivory toothpick housed in the same knife. He wiped perspiration from his fat, plethoric neck. He gazed into space. His flushed face became redder and redder. His yellow hair, cut porcupine fashion, bristled in the sun of Easter morning. He did not see me as I stood, with Fim's hand in mine, looking at drawings by an itinerant artist exhibited in a near-by window. Pisz's neck bulged. His temporal arteries labored visibly under hypertensive effort. His gaze was fixed. He muttered:

"Soon they will get those Jew bastards . . . I hope they kill them all!"

Appalled, I stood transfixed, shocked by the brutality and venom in that voice. Then my hand was touched gently. A beloved voice said:

"Come, dear, let's walk on."

Toward our trysting place, Fim and I walked across the public square. From the largest church in town a procession emerged. The chanting of the choir, the splendor of the vestments, the scent of the incense, the sacred vessels borne aloft and shining

in the sunlight of spring, spoke to us, not of hate, but of a religion of peace and love. We felt reassured and comforted. Pisz was one man, ugly and violent. But the church and its communicants that spring morning were noble and strong. These people were our neighbors and surely in their exaltation in their holy feast they had room in their hearts for neither hate nor violence.

Then it began . . . Someone broke a window in the market. Passers-by looked and ran. Shutters on the shops in the square were torn from their hinges and used as weapons. Pots of growing flowers became dangerous missiles in the hands of half-crazed men and women. A mania to hurt and maim and kill had seized the town. People we knew as kindly, harmless folk were suddenly transformed to attack with murderous frenzy their neighbors, their fellow townsmen, even their friends.

The victims scurried for shelter, dazed, bewildered, frightened. Instinctively I pushed myself in front of Fim. Just as I did so, a hard ear of corn caught me squarely in the face. I put my hand to my cheek. I felt weak. There must have been considerable loss of blood, for I fainted.

When I came to, my father stood over me, a grim light in his eyes. Mother was not at home. She was away in a neighboring town in the mountains, helping a woman in childbirth. Fim was beside me. She wiped my brow with tenderness, her eyes fixed with pity on my wounded and bandaged face. I knew that she would have kissed me at that moment if my father had not been there. I saw tears in those beautiful eyes, but I noticed that she held them back and would not cry. Only one thought flashed across my bewildered brain to give me courage and hope. America! I would not stay here in this place of hate and violence. I would go away. I would find that new land where men were free and equal and where horrors like this could never happen. Fim read my thoughts. She half-smiled as she leaned over me and whispered:

"We will go away."

That night was even more terrible than the day. Violence unleashed gathered to crescendo pitch in the dark hours. Outrages which have never been mentioned in print were cloaked in the darkness. It was a night of terror. But dawn came at last.

On Monday morning, the merchants went back to their shops, prepared for business as usual. Their booths displayed the usual

herrings, geese, jewelry, boots, dry goods . . . They hoped and believed that the storm was over. It had shaken them and torn them, but they were ready to forget it now, to patch up their broken windows, replace their shattered shutters, resume the business of living with no thought of reprisal or revenge.

Peace marked the passing of the morning hours. But it was a short-lived peace. As the town clock pointed to noon, terror struck again. From a side-street swooped a yelling mob, laying about with clubs. Blood of an ancient race flowed where they struck.

An old Jew with his skull caved in, his brain exuding from its encasement, was still breathing, his glazing eyes turned to an overcast sky. One of his fellow townsmen leveled another thrust of an iron bar at the dying man's skull, snarling, "You damned Jew!" A faint ironical smile played about the ghastly countenance of the old man as he breathed his last.

A pregnant woman lay prostrate. Pointed shoes were kicking her prominent abdomen. A policeman chuckled as he toyed with the waxed tips of his mustache.

"These bastard Christ-killers! What a joy to watch them die!" he remarked to a friend.

Like a frightened hunted animal, I ran toward the safety and security of home. But safety and security were no longer there. I saw my father. He had been stern, erect, majestic, powerful. But something had happened to his strength. Something had crushed the spirit in him. He stood before me a broken, bowed old man. He looked at me with a strange dark light in his eyes.

"Your brother is dead," he said, and turned away.

Most of the rest is mercifully dim in my memory. My mother's sad return from her life-bringing mission in the mountains. Her heartbreak. My own sorrow. The dark and dreadful tragedy of those days when we who were left clung together in sorrow and terror. These things come back to me veiled in mists.

I remember that it began to rain. I remember human blood, as of old, washed down the gutters. A rat from the sewer, bloated with men's blood, stands for a moment in the flash of memory . . . It thunders again and the rat is gone, washed down into the bowels of the sewers . . .

And I remember the drums. Soldiers marching in the village streets, the staccato tramp of their rhythmic feet timed by the

drums . . . The sky cleared. Order was restored. One more bloody paragraph of religious persecution had been written indelibly on the page of history. It might be repeated soon. It might be repeated only after months and years of peaceful neighborliness and trust. For the present, it was over. Forget it. Turn to the common task of life. That any minority can escape its dark destiny is unthinkable. Let them accept it with stoicism. There is no other hope— Not here. Not in this land.

The skies cleared and order came back into the streets and markets of our town. But not for us. It was forever an alien land to us from that moment. With one accord we turned our eyes to another homeland. We would go to America. We were already Americans. There, far away to the west, was our true homeland. Our hopes and our hearts were at rest there long before our bodies took the first step.

MY UNCLE BERNARD

It is bitter when life in the land of one's birth becomes intolerable. For my parents emigration was a solemn undertaking, but youth could not remain long depressed with the vision of America before it. America!—the very word was a tonic.

Aside from the thought of going to a land where all men were free and equal, our family possessed a decided advantage. We had a rich uncle in America. Only immigrants can realize the significance of such a possession. Immigrants were then divided into two classes—the many unfortunates who did not have a rich uncle in America, and the fortunate few who did. In those days, to have a rich uncle in America was like having an ambassador in a royal court, or like knowing the Pope. To receive a letter from the American uncle was an event which threw the whole household into excitement for weeks; the precious letter passed from hand to hand, and was kept on the mantelpiece for the perusal of all visitors.

It is true that Bernard Schwager, my Uncle Bernard, did not write frequently. Yet it was not necessary for him to apologize. We knew he was too occupied with important affairs to be able to spare much time for family correspondence. When one of his rare letters did arrive, it glittered as if written on gold leaf with water of emerald and ruby. I was now in secret communication with Uncle Bernard: he approved of the family's emigration to America, and promised to help us. My eyes grew moist as my grateful heart melted in love for Uncle Bernard.

We were not moving from one house to another, or from an old neighborhood to a new one—we were going to a new world. Natives of a land-locked country, we must tear up our ancestral

roots to cross the seas to a new life. For us it was as much an adventure as it had been for Columbus, and our uncertainty would have been equally great—except for Uncle Bernard's letter in my pocket, a magic letter saying, "Come!" Doubt disappeared in the joy of anticipation, and I grew impatient for the day of departure and deliverance.

Yet as that day approached, a dark cloud of sorrow blotted out the sunrise of my happiness. Fim could not come with me. We could not even mention our desire, for we knew that both families would refuse their consent. There was no enmity between those families. In fact, there was even an unacknowledged bond in their complete agreement that the love between Fim and me was "puppy love," not to be taken seriously, and that marriage for us would be completely "unsuitable" on both sides. They did not dream, I know, that their good children would really question the inalienable right of parents to make matches. They need not assert that right now, for we were both too young to think of marriage. Time, they were complacently sure, would solve the problem.

But Fim and I were not of their opinion. Time, with its impending separation, seemed to us like an ogre and a monster threatening our happiness. Our anguish grew acute as the moment for that separation came near.

Then, as so often in the days since that time, it was Fim who faced the inevitable with calmness and resolution and whose strength provided strength also for me. When we met for the last time before my departure, I was almost hysterically desperate. I could not go, I told her. What if the preparations were all made? What if my family did expect me to go? I couldn't do it. I wouldn't do it. Life would not be worth living if I could not be at her side.

We had met, for that last farewell, down by the quiet river at the edge of our town. The moon was full; so were our hearts. I felt Fim's loveliness and freshness and sweetness flood through my whole being. I told her passionately that I would never leave her. I would give up America and stay at her side. I could see her eyes in the moonlight, sad and tender.

"It would be wrong and foolish for both of us if you did that," she said. And then, as her eyes held mine, she spoke again slowly and steadily:

"You mustn't be afraid, dear," she said. "You must go on ahead to America. But you must know, every minute of every day, that I will come to you. Nothing will change me. I will come. I will surely come. That is a promise."

She kissed me, as we stood on the riverbank. And I felt once more at peace with the world.

Bremen! What had been a dot on the map, marked as a port, was now a real but strange city to the emigrants. Missler's shipping concern arranged for our passage on the *Kaiser Friedrich der Grosse*. It so happened that at the last moment Uncle Bernard had been too busy to remit the transportation money—rich men are apt to overlook these little details—and we waited with anxiety. A sad yet hopeful group of father, mother and son, we waited for the ship and for Uncle Bernard's money. The ship came, but Uncle Bernard's money did not, so my father opened his pocket-book and bought three steerage tickets. Babel of voices, smell of tar and oakum, human sweat and human curses, scurry of rats, strange sounds, out into the stormy Atlantic as steerage passengers. The bunks in our crowded quarters were arranged in shelves as one used to see in old-fashioned jails. I was terribly, disgustingly sick, but what did it matter? We were on the way to America. We did not know the language, but I remember we had a subconscious feeling that somehow in America we would find a magic Rosetta stone by which all tongues would be as one.

Everything ends, even a seemingly endless steerage voyage to America. My drooping spirit was uplifted by the sight of the noblest statue on our planet, Liberty Enlightening the World. Then Castle Garden, which was neither castle nor garden to us—even Jenny Lind's song which still lingered on, cast no glamor over the dismal immigrant station. The motley throng of new arrivals, men and women with knapsacks containing their worldly possessions on their shoulders, pressed against the bars, looking eagerly to the freedom outside. Would they be sent back to Europe? The stoutest heart blanched at that thought, which in many cases would have meant irretrievable ruin. Several of our steerage companions had spent their last coins to make this trip. The dread possibility of being returned to their Fatherland could be read in their questioning faces. The first-class and second-class

passengers were treated with what seemed elaborate courtesy to those who came over in the steerage.

We waited and waited. We were hoarded in cage-like enclosures. A doctor inspected the conjunctiva of our eyes for trachoma. The examinations were cursory. We were asked how much money we had. Father displayed proudly fifty American dollars. A letter from Uncle Bernard told the Government that he would sponsor our welfare. The one flaw was that he forgot to send railroad tickets from New York to Chicago. Why we were released from Castle Garden is still a puzzle to me, for we had no proof of means of transportation to our destination. Nevertheless, we were released. Perhaps fifty American dollars was considered a large sum for an immigrant family. Soon we found ourselves in the waiting room, free to roam as we desired. I beheld my first bananas, a revolving barber-pole, a shoe-shine stand, and the peculiar nonchalance of the good-natured policeman.

We feared to inquire too much. Bepkó, the oracle of our steerage, advised us that the cheapest way to get out of Castle Garden was to buy tickets for Philadelphia. We arrived there at midnight, alone in a strange world. A Negro took us to a rooming house, and the next morning we beheld strange people and listened to a strange tongue, yet with a certain sense of security. The following evening I beheld the Salvation Army, as it marched past our "Hotel" to the beat of a hoarse bass drum.

We wired Uncle Bernard that we were stranded in Philadelphia, without funds. Railroad transportation was then forthcoming. The journey westward is one that I have never forgotten. My mind felt as if it were a piece of brass upon which impression after impression was being pounded with the heaviest of hammers. Everything was queer to the palate, even the water was odd, and the bread and butter, the coffee and the milk had strange tangs and savors. We were nostalgic. I looked at my mother. She sat with her head held high, like an empress reviewing her people. My father was absorbed in thought. Mountains, rivers, valleys, the rocking, cindery train bore us farther from the past, and closer to the future . . . We were homesick, yet if anything failed us, it was our bodies, not our hearts, our hopes, our courage. And like a beacon guiding a vessel across dangerous seas to a peaceful harbor was the thought of our Uncle Bernard, waiting for us in the Union Station, Chicago.

Dear Uncle Bernard—he was the rock of refuge to which three greenhorns clung. Our trousers, our coats, our caps, our haircuts might cause snickers and stares from our traveling companions on the train. My father's luxuriant beard might be as provocative of mirth as my waxed mustaches. But Uncle Bernard would change everything. First there would be the warm welcome and hearty embraces, then feasting and merry-making at the reunion of the family, then he would install us in a nice house, and show us where to buy American clothes, and I would go to the marvelous schools of which I had heard so much, and I would send for my beloved, and Fim and I would be married.

So the wheels of the train went around and around, and I dozed in my seat, dreaming and dreaming. Across our new country, we slept little in the three days that it took our local train to reach our Mecca. We slept little, but we dreamed much. "Union Station, Chicago!"—the voice of the conductor called out—"Union Station, Chicago." We could not believe our ears. He might just as well have called out, "Utopia!" We jumped up, as from a dream. All our thoughts were of Uncle Bernard. Ah, Uncle Bernard, mystic compound of Kris Kringle, Queen Mab, and Pot of Gold at the End of the Rainbow. An American millionaire, but our relative after all. My mother's brother, whose mere presence would end all our troubles. Uncle Bernard was not at the station.

Uncle Bernard was not at the station, but everyone else seemed to be there. The train carried Hungarians, pale but sturdy Scandinavian settlers, pioneers for the glowing wheatfields of the golden northwest; there were Italians too, headed mainly for the middle west, though some were going straight through to California; there were a minor number of Greeks, a stray Armenian or two, and already the forerunner of that vast migration from Poland that was to make this racial unit outstanding in Chicago's census in 1936. There were not so many Irish, though the Celtic contingent had made a brave showing at Castle Garden, and gone through the formalities with as much of a rush as water from a siphon. There we all were, samples of humanity on the loose. There were reunions by the scores and even more disappointments. For us there was frustration—Uncle Bernard was not at the station.

One glance at the pale tired face of my mother, over which a

swift wave of homesickness was sweeping, a look at my father, his shoulders bent with fatigue and distrust, almost overcame my own feeling of utter weariness. A distant relative singled us out at the depot, and informed us that Uncle Bernard could not come because Aunt Bessie had died the day before. We would all meet at the funeral . . .

At best, a funeral is a tragedy of routine. Personal emotions aside, there is something annihilative about the mere and perfunctory attendance at the last rites of even an unknown stranger. Aunt Bessie was someone we did not know. We could not be expected to have any deep honest human sorrow over her passing. We were at the end of a long voyage from the land of our ancestors to the land of our posterity. We had left a home of comparative comfort in a small town where we knew everybody. We were in a strange and unknown country. We could not speak the language. We had arrived at the moment when the house of our host was a house of mourning. It rained and rained and rained.

Time passed, and the funeral was over. Aunt Bessie was dead, but we were very much alive. Uncle Bernard? Do you remember the uncle of Louis Golding's *Magnolia Street*? Such was my Uncle Bernard. It was another case of "uncle me no uncle." He could do little for us. But let us not forget—his boast of wealth had helped to bring us to America . . . And for this, blessed be his memory.

PART II: SURVIVAL IN CHICAGO

6

FIDDLE AND DRUM

THE slender ginkgo tree may be moved. Its shallow roots will strike easily into new soil and thrive and flourish there. But an oak grown to maturity cannot be transplanted. I realized that at the very moment when, led by a saddened and discouraged Uncle Bernard, we stepped into the little flat that was his home and would now be ours also.

My father stood stock still. Then he turned to my mother.

"Cecelia!" was all he said, but in that single word, uttered in a voice throaty and broken, was the ring of utter defeat.

I knew, as I heard it, that although my father might move and breathe and talk and carry on the routine of living for years to come, he had, in reality, died at that instant. My boyhood was over. My father's mantle had come to rest heavily on my young shoulders. I, and not he, would be head of that household from that day on.

His tragedy saddened me then; it is heartbreaking to remember, now that years have added to my understanding. Outwardly, Father in America was not greatly different from Father in *Mittel Europa*. Stern, dignified, proud, Sphinx-like, he still moved among us. But the iron had departed from his soul. He could not make the hard adjustment to a new world. He could not even find work for his hands in that world, for he had relied too much on Uncle Bernard's bright promises; he had not even troubled to put his professional papers together. He could not practise his profession in America; he could not do anything else.

My father was a fallen oak, but my mother was a resilient pine tree. Shocked as she was, homesick as I know she often must have been, she began, with that quick buoyancy of spirit which

was her greatest strength, to put down new roots. She held her head high and smiled. Her skilled hands, which had given Franz Josef so many little subjects, now worked to usher into the world lusty Americans. She worked too hard. Her patients, living in the slums of Chicago, could pay her very little. But she managed with what she earned.

It is amazing that we ate at all in those first hard days, but we did. And I had my first lessons in the magic of money. At home in Hungary I had thought little of money and its power. We had been comfortable; we had had enough. And now, thinking to exchange a comfortable life for an affluent one, we had suddenly been plunged into abject want. Here we were in the land of golden plenty—and we were having a hard time to buy enough food to keep us from starving.

Had thirst for gold been our motive in coming to American soil, I believe that none of us could have borne it. Disappointment, disillusionment, despair would have overwhelmed us. But poor as we were, friendless as we were, bewildered as we were, we had nevertheless put behind us the cruel shadow which, for all of us, would ever darken our homeland. We set our faces to the future.

We did not stay long in Uncle Bernard's crowded home. My mother's quick wisdom knew that we must rely on ourselves, gain our own foothold in the new country while we were struggling with our difficult adjustments. We rented a few rooms of our own. I am afraid that I left Uncle Bernard's roof with ungrateful relief. I was never again in my life so happy when it came time to move into new surroundings, into a new home.

We lived on Halsted Street. The color and smell and flavor of that long thoroughfare are woven inextricably into my memory. The street has changed much in the four decades and more since we moved in to become part of its teeming life. The beneficent Hull House of Jane Addams, which was to have so large a share in bringing the change, was then struggling in swaddling clothes. Cesspools and political corruption were distinguishing features of the street I knew. The great slaughterhouses poured their stench into the air and their refuse into the streams and streets. The graft-ridden red-light district was blatant and shameless. The Oriental section had its *Yoshiwara*, with American business methods added. Transplanted sons of Hellas, with coffee shops

and candy shops and flower shops and gambling dives, collected American dollars which flowed in a golden trickle overseas to provide for an old age in a Greek olive grove. The Jews thronged the ghetto. The Irish ran the police force. The Everleigh Sisters were becoming a tradition. State Street bred dynasties and scandals. And in the midst of the brashness and rowdiness and lawlessness and poverty and misery, Old St. Patrick's on Jefferson Street, Old St. Mary's on Hubbard Court, and Old St. Peter's on Polk Street, with its barefooted Franciscan friars, stood as islands of quiet—bits of another age and another world—the old ecclesiasticism of medieval Europe transplanted to America just bursting into the twentieth century.

Laughing the stormy, husky, brawling laughter of youth:
Half-naked, sweating, proud to be
Hog butcher, Tool maker, Stacker of Wheat,
Player with Railroads,
And Freight-handler to the Nation.

That is Carl Sandburg's Chicago. That is my Chicago, too, the Chicago I wandered in, an immigrant boy. The "City of the Big Shoulders" pushed me aside. I was unknown, alone, friendless, penniless. And I was also ambitious. And lovesick.

Again and again, as I wandered the city streets from which no answer came, my mind turned the same endless wheel. I must become a doctor. I must marry Fim. Therefore, I must go to medical school and study. And to go to medical school took money. And I could not earn money—not enough, not fast enough. So I could not be a doctor. So I could not marry Fim. And that was unthinkable!

It was my violin which opened the first crack of opportunity for me. I heard that the father of Moissaye Boguslawsky, noted pianist, was organizing a gypsy orchestra. I asked for a job.

I was not a gypsy, but then neither was he. And when at last I reported for my first rehearsal, in a dark little basement room on Bunker Street, I found that my fellow musicians were few of them sons of Romany either. Five of them were the real thing, with the dark hair and the untamed eye and the restless soul. But the rest were a fine mélange of Russians, Hungarians, Italians, and Americans. That didn't matter. Gypsies we called our-

selves—Boguslawsky's Gypsy Orchestra—and as gypsies we gained glamor in the eyes of our audiences.

My first job! I was overwhelmed with joy. And more excited than ever when I learned that the job was one of wandering minstrell! We were to go to Indianapolis. I should see something more of this vast new country of mine.

Our engagement was in one of the Indianapolis parks. We were a tremendous success. The newspapers sang our praises, and the audience almost smothered us with its admiration.

My waxed mustache, my gilt-braided uniform, my dark hair and complexion gave me an air of authenticity in that gypsy group. And my difficulties with the English language helped the illusion. A friendly young girl spoke to me and I struggled helplessly for unknown words with which to answer her.

"Gypsies don't know our language," said her escort, as they moved away. I knew enough of my new mother tongue to understand that.

Back in Chicago when the season for gypsies ended, I took my first examination in America, and passed it. I also became a member of the Musician's Union. I was proud of that membership card, and I am proud of the card I still hold, showing me to be in good and regular standing as an honorary member of this union.

I carried my violin into lodges, beer-parties, lectures without audiences, noisy political gatherings. I played for saint and sinner—for church festivals and for the "ladies" who lived on Plymouth Court or Federal or South Dearborn Street. Sometimes the "girls" in those parlors cried when our waltzes became too dreamy, and we would have to swing quickly into rollicking two-steps and cakewalks.

The boy from the Tatra Mountains was getting acquainted with some famous addresses in Chicago, and getting also a view of his new city from an odd angle. Flashbacks of that view would come to him at unexpected moments after he had moved from the Halsted Street slums into the "better" sections of his city, among the "better" people. Why is the face of that judge—or magnate, or clergyman, or social leader—so familiar to me, though I have never met him until this evening? he would ask himself. And the picture would come before his mind of some dimly remembered patron, visiting those mansions which an emigrant

boy had entered, fiddle in hand, back in those early days. Chicago did not then and does not now observe the traditional rule of "within so many miles from the flagpole." The constant demand for entertainment was, in those days, just beyond the back doors of the best residence district. And today the section runs like a scarlet thread throughout the town.

Other odd jobs filled in the spaces between violin engagements. I did whatever I could to earn an honest penny. And, in spite of my union membership and in spite of my eager willingness to work, I went hungry more than once. Only the greatest resolution enabled me to hide from my parents the secret sorrow and despair in my heart. I could not possibly make a living this way. At this rate it would be years and years before I could hope to send for Fim. Medical education—I might just as well hope for the moon! And what use living if I could not have Fim, if I could not realize my dearest ambition?

And yet, though my suffering had the unrelieved blackness which only youth achieves, I seemed dimly to sense that there was greater tragedy than mine in the blank resignation of my father and the brave uncomplaining battle of my mother. I did try, and I am glad to remember that I did, to keep my upper lip stiff and my eyes dry for their sakes.

So I scurried around, picking up whatever jobs I could find. I obtained some pupils whom I instructed in playing the violin. Later I was successful in getting some translations to do. When I finally arrived in college and medical school, I was to find that my need to turn any and all of my talents into cash did not at all set me apart from my fellow students. Working one's way through an education was an honored tradition in America, I learned somewhat to my surprise. Some of the boys I went to school with waited on tables for their board, some were red-caps in the railroad stations. During vacations they would run up a surprisingly varied assortment of jobs—everything from street-car conductor to sewer inspector!

I had quite a collection of jobs myself, first and last. Oddly enough—and in entire contradiction to all the rules for a success story—I was never a newsboy. Not even for a day. The barrier which kept me from this traditional first stepping-stone to fame and fortune was language. The truth was that I did not speak English well enough to yell the lingo required to sell the *Chicago*

Chronicle, Journal, Record, Tribune. I might have peddled the *Staats-Zeitung*, I suppose. But I was already far too much of an American for that!

Somehow, I do not remember just how, I learned about "student aid," at the University of Chicago, and a ray of light, dim and watery but nevertheless real, crossed my despairing mind. Was it really possible for an ambitious boy to earn money while he went to school? Was it really a policy of this great university to put such opportunities in the path of promising students? And would the powers who dispensed this "student aid" see in Max Thorek, immigrant, one of those promising students?

The last question was too frightening even to think about. I put it out of my mind. I would *make* them see the promise in me! I simply had to have this student aid. My whole future, my happiness, Fim's happiness, depended on it. With determination masking any inner doubts, I went over to the university office and applied confidently for student aid so that I might enter Rush Medical College in the fall.

I thought that luck was with me when I found that the only opportunity then open was a place on the university band. Did I not carry a membership card in the Musician's Union? Had I not been making money with my violin for months?

With my violin? Ah, but that was the catch. With sinking heart, I heard my interviewer, Professor Hobson of the Physics Department and able conductor of the band, explain that a violinist would be of very little use in a brass band. What they needed, he said, was a snare drummer. They needed one desperately, he added. And he looked at me with eager hope as he said:

"Are you a snare drummer?"

A snare drummer! All the terror of my infancy, all the horror of my adolescence, all the dark fears which drum beats had ever stirred in my heart, came surging back over me, almost overwhelming me. I had an impulse to run. I hated drums. I had never touched a snare drum in my life.

My answer seemed forced from my throat by necessity, against my instinct and will.

"Yes—I am a snare drummer."

I hoped that would end the interview. I had no strength to carry it further. I wanted to get up and walk away. But I had opened the way for conversation and more conversation.

The university band, explained my questioner, wanted a *good* snare drummer or none at all. It was easy to get just an ordinary snare drummer. That wasn't good enough for the university band. That band deserved and was determined to get the *best* snare drummer in Chicago. Was I the *best* snare drummer in Chicago?

I had gone too far to retreat. I swallowed hard.

"Yes, I am the best snare drummer in Chicago. I am the best snare drummer in Chicago . . ."

I could not believe that I was hearing my own voice say those words which were so far from the truth and which yet had to be true, for only in their truth lay my future.

I took the initiative at that point. What compensation was offered, I asked. I learned that the university policy was to allow a maximum of half-tuition costs for service on the university band. And then, in a long Socratic parley during which my boldness and firmness grew steadily, my surprised interviewer learned that the most extraordinary snare drummer in Chicago must have full tuition costs if he was to honor the university band by his membership.

Helpless against my adamant insistence, my interviewer finally got President Harper himself on the telephone. Thinking of President Harper as I came later to know him, of his far-sighted policies, of the burdens he carried as he pushed the university he served into the very front rank of American institutions, I am amused to remember that, in those far-off days, life at the University of Chicago was so simple that the president himself could be called by telephone to decide on the hiring of a snare drummer for the university band!

I heard one end of that conversation only, but the rumble of "prexy's" protesting voice sounded in the receiver. That I was most unreasonable, that my demands certainly should not be granted, seemed the gist of the talk on both ends of the wire. And yet suddenly the interview was over. And I had won! In return for my services on the university band—since I was the greatest snare drummer in Chicago—all my tuition at Rush Medical School would be paid.

Just one more bad moment before the interview ended. My new employer would be very glad, he intimated, to sample my drumming on the spot. But he readily understood that, having come prepared to offer my violin, I had obviously been obliged to

leave my snare drum at home. He could see that there was no drum concealed about my person. He was reasonable. It would be quite satisfactory, he agreed, if I reported for a snare drum test in the early autumn before the university opened. We set the date.

From the moment when he had asked me: Are you a snare drummer? that interview had soared higher and higher into the realm of make-believe. I had been acting a part, and acting it so well that I had, during all those moments, completely believed in the prowess I claimed. The fresh air of the campus blew away the rosy clouds of illusion and the warm summer sunshine completely melted my Icarus wings. I came down to earth with a crash! What a fantastic idea, that I of all men could play the snare drum. I did not even know how to hold the sticks. And the thought of touching them, the thought of making with them the terrible music of my nightmares, set me into a cold perspiration. "What one hates, one has." Whoever created that old folk-saying knew what he was talking about. Well, there was nothing to do but face the situation which my brash and boastful lies had brought upon me. The price of my education had been set—it was the conquest of an old fear.

In a pawnshop on North Clark Street, I took the first step. I bought an unredeemed snare drum. I took that hated instrument literally to my heart. And I still hated it.

Friends from the gypsy band helped guide my first efforts, taught me the elementary techniques of the new instrument. Before long I had mastered the trick. I had less than three months in which to learn to "outsnares" all other snare drummers. And I was not disposed to waste a single instant of those precious months.

The Thorek family lost many friends that summer. Every neighbor for blocks around heard nothing but the beating of the snare drum, morning, noon and night. And the chief sufferers of all were those of my own household. No cotton stuffed in ears could keep the drum sounds from hammering on the brains of my father and my mother. My father became so exasperated that he refused to speak to me. My mother said nothing, but looked weary and harassed.

It was a fish-peddler who finally brought the indignation to a head. I still think it was ironical for a mere snare drummer to

be hailed into the old police-court in Maxwell Street, by a man whose cry of "Fre-shh Fee-sh" and whose irritating insistent bell murdered the peace not of a block, not of a neighborhood, but of the whole town.

For the first time in my life I saw a judge on the bench. It was Judge Albert J. Sabath, later to be congressman, and I warmed to him on that day. He listened kindly to the story. Perhaps he felt sorry for me. Perhaps he had a grudge against fish-peddlers. Anyway, he discharged me with a gentle admonition to keep the peace in the future.

I spent the rest of that hot summer snare-drumming in the stifling cellar, with doors and windows tightly shut. The perspiration rolled down my face. My clothes were wet. But the sound was enclosed in the four walls, and my neighbors and the fish-peddler knew some peace and quiet.

Sometimes I was almost cocky about my increasing skill. I had mastered this strange instrument. I really was a pretty fine drummer. The university had made no mistake in hiring me.

And sometimes I knew with devastating certainty that I was no good at all. I could hear the business manager's scorn as he said—as he was sure to say:

"So you're the greatest snare drummer of them all, are you? You made us break our rules and pay you double because you were so good! Good? Why you sound like an amateur who has had only three months' practice with a drum. I'm calling your bluff, young man. Wait till Prexy hears about this!"

The dreaded and yet hoped-for day dawned at last and my heart did a very creditable snare drum performance itself as I carried my drum to the Cottage Grove Avenue Cable car. I summoned what nonchalance I could as I entered the room, which had all the atmosphere of an execution chamber.

I sat down and cleared my drum with a mounting series of bravado rolls. . . . It was grand rehearsal in Mandel Hall . . . I played the parts placed on the music stand. . . . Drum solos and all. . . . I was drumming, in so much of a daze that I could not tell whether I was doing well or badly, when Professor Hobson rushed to the phone.

"President Harper," I heard him say. "This fellow is a wonder. He's a find. He certainly deserves full tuition. He has just snared

Meyerbeer's *Coronation March* as I have never heard it played in my life. He's as good as he says he is. . . . He's better!"

Open Sesame! I could almost see the forbidding gates which had seemed so securely to bar my way to medical learning, swing wide and free as he spoke.

DISCIPLE OF AESCULAPIUS

SOLOMON with his wisdom would have recognized a peer in the budding medico who presented himself at the gates of Aesculapius that September day in 1900. The young neophyte's fellow students, however, lacked that wise king's appreciation of splendor—they only snickered.

As soon as I knew that I really could begin my medical education that fall, my mother and I had begun to prepare the appropriate costume. We both knew what a well dressed medical student should wear. Had I not watched with awe and admiration those godly young men of the medical school in Budapest?

It had been a struggle to get those clothes assembled and ready. Many an ounce of butter, many a portion of meat, much needed by our hungry household, had been sacrificed on the altar of my pride. Mother had toiled with skilled and weary fingers to perfect each detail of the wardrobe. And as I left home that first morning, pale-faced, trembling, undernourished as I was, I was sustained by the knowledge that the clothes I wore were perfect. No classmate, of that I was certain, could present a more faultless exterior than I when the first class roll was called.

I wore a top hat of silk beaver—Budapest medical students often wore hats like that. I wore a pair of neat striped pants which would have passed muster at any daytime wedding or fashionable tea. I wore a long black broadcloth coat of the style once lovingly named a "Prince Albert." I wore haberdashery to match, fashioned according to the dynastic dogmas of medical outfitters of my father's youth.

A *rara avis*, indeed, was I, and well deserving of the grins and guffaws which greeted my advent at the Rush Medical School.

I know that now. But on the day when, dazed with happiness, I went through the formalities of registration and set off for my first class, I was blind and deaf to ridicule.

Students of those days at Rush remember the big old amphitheatre at the top of the building, with its oil paintings of Gunn and Ross, and its sloping seats. Puffing up the long stairs, I came into this room and looked around me for a seat which would put me in a position to get the very maximum from the words of wisdom about to be uttered there. The front seats were empty. In the mongrel medley which served me as English, I asked a classmate whether those seats were reserved for dignitaries.

He assured me they were free for all. He urged me to take one. I sat down.

I was engaged in an absorbing mental debate about what to do with my beloved hat, when a cyclone struck me. Rough hands seized me from behind. Up out of my seat I came, struggling but helpless. Propelled by strong arms I moved rapidly over student heads until, gasping and bewildered, I plumped into the topmost seat in the room.

It was a traditional stunt, I afterwards learned, a bit of hazing which always went with the first day of school. The feat was one of muscle, not of malice. My tormentors had not meant to hurt me. But they had chosen their victim that morning better than they knew.

For I was completely unprepared. I had done my share of hazing my teachers back in the gymnasium of Budapest. But I had never heard that, in this topsy-turvy land, students hazed each other! My instinctive reactions were right. Hazing, no matter who the victim was, was something that had to be accepted like a sport. That much of the hazing tradition was just the same here as in Europe. So I dusted myself off and grinned as best I could.

It was a feeble grin, however. My rough passage through the air had proved too great a strain for my new, fine, beautiful professional clothes. They were ripped to shreds. And what was I to do about that? I had no money for new ones.

Dismay was written on my mother's face when she saw me that evening. But she gallantly took up her needle and worked all night to put my wardrobe into some semblance of respect-

ability. She literally embroidered those clothes together. And I wore them more than a year after that, wore them even after I fully realized how inappropriate they were, and suffered because of their difference from the clothes of my fellows.

What else could I do? The only other "suit" I had that year was the band uniform issued to me as crack snare drummer in the university band. It glittered with gold braid and brass buttons. A broad gold stripe ran up the side of the pants leg. It was a very fine uniform. But even I knew that it did not belong inside the halls of learning. It belonged outside, out on the gridiron and diamond. And there I wore it, while "snaring" at every football game, every baseball game, every athletic event in which my fellow students participated.

That band uniform was a passport, probably, to a part of American student life I might never had explored without it. Eager to soak up every bit of knowledge I could as fast as possible, I am sure I should never, of my own volition, have worshipped the great American fetish—college athletics. But I had to go to those games. And I found plenty to wonder at, those autumn afternoons, as I contrasted these serious young gladiators with the students I had seen in the university at Budapest.

There, as in most European capitals, the favorite sport of the undergraduate medico is fencing. Perhaps that is because the saber gives them such rare opportunity to display their skill in dissecting. Carousing comes next, some of it colored with a purplish tinge. The student seems bound and determined to do his "living" before he gets his sheepskin and settles down to science. He does it with the help of at least one "girl" established in a "ménage" suitable to his pocketbook, whether that pocketbook is lean or fat.

The American medical student, on the other hand, takes his athletics as he takes his morning oatmeal. Usually, but not always, he is too fastidious to "keep" a lass from the streets. He leads a wholesome, vigorous life. But privately I thought athletics a bit stupid.

I remember being with the celebrated physiologist, Professor Jacques Loeb, one day while he was watching a football game on the University of Chicago's Marshall Field, presided over by the venerable Alonzo A. Stagg. The great man looked long and silently, and with poorly disguised contempt, at the pigskin, the

fullbacks, the quarterbacks, ends and halfbacks. At last he threw up his hands in a gesture of horror.

"What horrible nonsense!" he exclaimed.

It seemed like nonsense to me, too, though I would not have dared to say so. After all, these strange maneuvers on the playing fields were bread and butter to me. At least, they were food for my mind which meant even more than bread and butter. I would have much preferred to spend all my time at my studies. I wanted to get through and start practice. It seemed to me that I never had time to learn all that had to be learned. But only the rattle and roll of my snare drum made it possible for me to spend any time at that learning. I knew I must make the best of it, and I did.

My band uniform and my drum gave me entrée also to certain events other than athletics which seemed to me much more interesting than football games, almost as interesting as books. There was that memorable occasion when John D. Rockefeller, Jr., paid one of his visits to the university which his father's millions were building into a front-rank educational institution. My band gave a concert in his honor and we all thumped and tooted and blew with our best flourishes. We put the best we had into that concert, but we did it, not for the young scion of Standard Oil whom we were inclined to view with suspicion, but for the honor and glory of our college and its chief.

Whatever reservations we had about the guest of honor, however, vanished in the genial sunshine of his appreciation when the concert was over and we met him at the reception following. Whatever people might say of his famous and reputedly parsimonious father, here was just a modest and likeable young man, not a bit different from the rest of us. He appreciated our music, and our appreciation of him soared to the skies when he invited us—all of us on the band—to dine with him at the Del Prado Hotel.

That hotel was in its heyday then. The story was that Colonel E. R. Bradley, Nestor of horseracing in America, had stayed here with his wife on one of his trips to Chicago. Mrs. Bradley had not been feeling well. The stop in Chicago had been decided upon to give her a needed rest. And the Del Prado fulfilled its mission so well that Mrs. Bradley spoke of it to her husband in terms of such affection and admiration that he forthwith bought

it for her, tossing it in her lap with as much nonchalance as though it had been a bunch of orchids. The story gave a touch of romance to the elegance of the hostelry. To youngsters like us, especially to those of us who came from foreign countries and who lived in none too comfortable homes in Chicago, an invitation to dine at the Del Prado sounded like an invitation to take tea at Buckingham Palace.

That dinner, with young Rockefeller acting as a genial and gracious host, might have been an occasion for long philosophical thought. We could have pondered on the irony of fate which gave the power to command Del Prado meals to a man like the elder Rockefeller, whose digestive troubles prevented him from enjoying them. We could have found a satisfaction in thinking that we, poor students as we were, were getting a nice fat bite out of the Rockefeller pocketbook. We could have learned much about the life and habits of America's millionaire No. 1, by pumping our amiable host about his parent. I fear that we thought and did not one of these things. We ate. And the memory of that meal is still with me. There were not many full and hearty meals going into my hungry stomach during those years.

Other obstacles, in addition to the necessity of earning my tuition, complicated my student days. My classmates groaned and sweated and struggled over the mysteries of anatomy and correlated subjects. All of them agreed that it was a tough, stiff course the school required before it was willing to put its stamp of approval on a medical graduate. But can you imagine how doubly difficult that course would be to a young man who must decipher and decode instructions in medicine given in English by using a German dictionary and textbook? My lack of English put me through sufferings which still sting my memory.

And the conditions of my home were such as to handicap me further. Halsted Street was as cold in winter as it had been hot in summer. It smelled worse—if that were possible. There were rats in the little frame house of which we occupied the upper story. I still have a scar on one finger to prove that. One evening I fell asleep over my books. A flash of acute pain awakened me. A huge and hungry rat whisked back into the hole in the wall as I jumped. I never had quite enough to eat myself in those days, and perhaps I should have felt a fellow feeling for the

hungry Grey Whiskers. But the glimpse I had of him showed that he was fat. I wasn't.

Since I was a "foreigner," and therefore something of an odd stick in the midst of my lively American schoolmates, I think I got a little more than my share of the hazing which every American boy seems to consider fully as important in the day's work as preparation for a quiz. Secretly I was annoyed more than once to have my studies interrupted with horse-play, but I believe I never showed it. I knew I had to take the jokes in my stride or lose face with my fellows.

We had all been down in the morgue—a dozen or so of us. The study of gross anatomy by the dissection of cadavers is a *sine qua non* of good medical instruction and the day has fortunately long since passed when an anatomist had to rob a grave to get one. But even a doctor, certainly a medical student, retains always a certain special respect for cadavers. He is not as tough and hard-boiled about it as many people think.

Suddenly I felt a new note in the silence around me. We had not been talking as we worked, but this quietness had no companionship in it. It was different, and somehow disquieting. I looked around. I was alone. I went to the door. It was locked. The wretches who pretended to be my friends had locked me in to spend I did not know how long in the gruesome company of the dead.

Now a cadaver is not altogether a helpless thing. A good cadaver has ways and means within itself to startle the living daylights out of a man. And a dozen cadavers, such as were now ranged around me, could be expected to multiply the surprises and shocks if their mere presence did not unnerve me.

I cannot say that I enjoyed that half hour. But cadavers were no strangers to me, thanks to the professional activities of my mother and father. And I managed to meet my tormentors with a grin when the door of my prison finally swung open, and to wave aside with a scornful gesture the smelling salts they had brought along to revive me had I fainted. But my dreams that night were troubled. I was back in the dissecting room, alone, with corpses which suddenly found voice and talked with me.

There were able brains in that company of students to which I belonged, brains fertile in the concoction of student pranks,

but brains just as fertile when used as seed ground for medical ideas. Many of the boys who went to school with me at Rush were to make their marks in the professional world.

Kellogg Speed, cheerful and ruddy, and A. A. Hayden, square-shouldered and solid, were, I remember, the first students who greeted me at Rush. Speed was to become a prominent orthopedic surgeon; Hayden, a trustee of the American Medical Association. George Dick, to become famous for his test for scarlet fever, was one of my classmates. D. J. Davis, dean of the University of Illinois Medical School, was another. Roger T. Vaughan, who consecrated his life to service at the Cook County Hospital; Archibald Hoyne, of the Contagious Disease Hospital of the Chicago Board of Health . . . I could go on listing many more with pride and affection.

All of us took our preliminary work in the basic sciences of anatomy, physiology, histology, pathology, organic and inorganic chemistry, and their scientific correlates, at the University of Chicago. During this period of novitiate, my greatest mentor was Professor C. B. H. Harvey, dean of medical students. I was greatly attracted to him. And I know, looking back, that his interest in me was more than a perfunctory serving of a student under his charge. He was attracted, I think, by such diverse traits in this particular young student as his difficulties with the English language, his ability to turn out exceptionally neat drawings, and his ardent application to the business of learning as much as he could as fast as he could.

Dr. Harvey and I became firm friends, and I shall never forget his unfailing kindness, the deftness with which he managed, without hurt to a boy's pride, to ease financial stresss and to solve problems which, without him, would have gone without solution. There was the summer, for instance, when he offered me the use of his bicycle. It meant that I could get a little exercise, some semblance of vacation—and I badly needed it.

A yellowed letter, written to me by this good friend in that summer, is among my cherished mementoes of student life. I quote it here in full because it gives, more eloquently than any words of mine, a picture of a great, warm-hearted friend; and because also it speaks of a Chicago, now gone, in which a boy with a bicycle could find rural rambles almost at the door of his

classroom and laboratory. The letter is dated July 3, 1902, and is written from the Marine Biological Laboratory at Woods Hole.

MY DEAR FRIEND:

I have just received your letter. I have only just arrived at Woods Hole and found it waiting for me. I was very glad indeed to get it. It was very kind and thoughtful of you to write to me—especially to write in German—your native language, which, I suppose, you will always use when you speak or write from the heart. I thank you for your good wishes and interest.

But it gave me especial pleasure to hear of the general improvement in your health. I expected that it would come when your work was over, and now I am very glad to know that it is coming. But you must not study. Do you not owe yourself a holiday? For two or three years back you have been studying all the time, and now your brain is tired, tired out. And if you make it work any more you will hurt it and your own health. Five years hence, indeed five months hence, you will be a better man if you do not work now. Your weakest point as a student is your health. Take care of it. For no man can be a good student or a good physician or a good man who has not good health. A physician especially, needs a lot of it—a superabundance so as to have good spirits and cheerfulness to give away to his patients.

I think you should not work at study until you learn to ride that Bicycle in spite of your unfitness. You are perfectly fit! All you need is to keep at it. Do not mind a few falls. Trust it. It will carry you and give you many pleasant rides this summer in some of the Chicago suburbs where the air is pure and the breeze fresh and invigorating.

Try a ride south through Jackson Park and then along the lake front to Manhattan Beach. Go along the shore from the south end of the Park—just south of the Waterworks. You will have to go through or under a wire fence, but you can do that very easily, and then go along next the water on the sand. You can ride easily and it is delightful. Wild roses grow there and other flowers. But look out for the Poison Ivy or Poison Oak. It is a vine which grows abundantly along the ground. It has red berries and dark green leaves. It will not hurt you to walk through it if it does not get on your socks. Do not get it on your hands. Then put on a bathing suit behind a bush and go swimming. Then buy a cup of coffee somewhere. Ride home. Take a hot bath, then a cold shower. (I use a bowl or wash basin and pour cold water on my head when there is no shower in the

house.) Then take dinner or lunch and rest an hour. After a few such experiences, you will have good health in every way. You must not allow your bad "gewöhnheit" to overcome your good health.

As for me, I have had a delightful trip here. I came down the Hudson River by steamer (165 miles) and saw New York for a week. I have some relatives teaching at Columbia University there. Then I came on here by steamer through Long Island Sound, Narragansett Bay, and Buzzard's Bay. The place here is delightful, with the salt water within a few minutes' walk in any direction and the sea breezes everywhere. There is a fine party here and everyone is working very happily and enthusiastically. I hope to do some work and collect much material for work on the low vertebrates and the changes they go through. Just now I am using *Squalus Acanthias* and *Fundulus*. Afterwards I expect to use some other forms also.

I shall be glad to hear of your success with that Bicycle and of your summer. Will you not write soon to me again? With sincere good wishes,

Your friend,

BASIL HARVEY.

Clinical studies over at Rush Medical College, that great institution on the West Side, began when our foundation studies had been mastered. Now at last we were really moving toward that medical degree which had hitherto seemed like such a far mirage.

Those were great days at Rush, the days of the giants in American medicine. Some of the men who belonged to the Rush faculty of my day would later become identified with other schools. Lewellys F. Barker, then an anatomist, was one of these. The biologist Jacques Loeb was another. He had not, when I knew him at Rush, become the father of the fatherless frog and departed for the Rockefeller Institute in New York. And there was John Benjamin Murphy, referred to as the stormy petrel of surgery by his biographer Loyal Davis, later to become the idol of students at Northwestern.

The galaxy of stars in that firmament seemed limitless. Frank Billings taught medicine. Arthur Dean Bevan, to become famous for his operation for cleft palate, taught oral surgery. Daniel Roberts Brower taught neurology, and the scholarly James Nevins Hyde, dermatology. In medicine, we had Bertram Welton Sippy, originator of the Sippy Method; in pathology, Ludvig Hektoen.

Dean Dewitt Lewis, subsequently professor of surgery at Johns Hopkins, had just come to Rush as instructor. John Clarence Webster, whose name became known in connection with the operation he developed, was the gynecologist. James Bryan Herrick, remembered for his classic description of sickle cell anemia and of coronary obstruction, taught us cardiology.

And towering like giants in the midst of giants were the Danish-born Christian Fenger and the Swiss-born Nicholas Senn, leading builders of surgery and surgical pathology in the American West of that era.

A boom was on in Chicago in 1835, when young Dr. Brainard rode his little Indian pony into town. The settlement had been growing amazingly. Less than one hundred people had lived there only a few years before; now there were about three thousand. The mortar was already hardening in the boom town's first brick building, erected by Gurdon Saltonstall Hubbard, and known as "Hubbard's Folly." Hogs still roamed through the business section, and when it rained hard, the placard "No Bottom" was posted near the chief mudholes of the principal streets. More potent reminder of the ghastly fact that men and horses could drown in those mudholes was given by an old hat floating in the slime with the laconic message pinned to it: "Keep away—I went down here!"

But Daniel Brainard had walked on the sunny side of the street. And he had seen enough of promise and of hope to embolden him to apply to the legislature for permission to open a medical school. The legislature had responded generously. It had sent the charter for Rush Medical School and it had sent also, in that same year of 1837, the charter which made Chicago a city.

The school took a little time to get under way, just as the new city was not built all in an instant. Six years passed before Brainard could issue his first four-page prospectus, full of typographical errors, announcing that Rush Medical College was about to open. The lectures were delivered in the office of Dr. Brainard's wooden house. The course lasted sixteen weeks. The faculty consisted of four men, and twenty-five students made up the first class.

Fifteen years later, Rush was a flourishing institution, with hospital facilities and famous professors on its staff. The whole

thing moved so fast that Brainard himself could not keep up with it. When his faculty began to demand that the two years of instruction which the college was then giving be lengthened to three, and that the course be graded, Brainard opposed the move. The pioneer of one generation had become the reactionary of the next. But his growing conservatism in his later years in no way dims his right to be known as pathfinder and trail-breaker—"founder and head of the first medical college in Chicago, an organizer of its first general hospital, the city's first health officer, and for more than twenty years recognized as its leading surgeon." That is a record of achievement few of us can match in any generation!

In spite of conservative caution, the college kept moving well in the vanguard of American medical education. It suffered with the city when the fire of 1871 wiped out the new building, only four years old, which was its pride. But even this calamity had some aspects of blessing, for it enabled the school authorities to choose for the new site a location closely related to the site chosen for the new Cook County Hospital.

It was this "new" building, at the corner of Harrison and Wood Streets, built in 1875 at a cost of \$75,000.00, which was the focus of my student medical life. To the plant had been added in the intervening years a fine five-story laboratory building, proudly presided over by Professor Ludvig Hektoen. That, too, became one of my most familiar haunts.

Most interesting developments were in progress at Rush when I entered as a student. Dr. Edward L. Holmes, who had become the school's president in 1890, was working earnestly toward an affiliation between his college and the new University of Chicago. He had succeeded in working out the arrangement whereby Rush students obtained their first two years' course, the preclinical course, in the Hull Biological Laboratories of the University, with their fine equipment and adequate endowment. The final degree of Doctor of Medicine was still, however, being given by Rush Medical College. Holmes wanted to make the affiliation complete, but he found it difficult to convince Dr. Harper, president of the University. Dr. Harper believed that the medical school of the university should be of the graduate research type favored by many of the older European universities, and he was afraid also that difficulties might arise were an old, established

institution like Rush to cut loose from its own traditions and try to adapt itself to newer ideals in teaching. Gradually Dr. Harper's objections were weakening, in the days when I was a student, but the complete affiliation was not accomplished until he was succeeded by Dr. Harry Pratt Judson.

The fortunes of Rush Medical College were, therefore, at their zenith when I was privileged to study there. Even the most lethargic student could hardly fail to feel the challenge of the great past and the great present of this institution. And I was far from lethargic! I was almost beside myself with eagerness to learn every single thing every single one of the great men of the Rush faculty could teach me.

They were all gifted specialists. And therein lay the one flaw in their teaching, a flaw which is characteristic of American medical education, and which, even today, is in need of thoughtful correction. Each one of these men, like all specialists everywhere, wanted every student to know more about *his* specialty than that of the other fellow. They knew better, of course, but to hear one of them talk you would have thought that medical science began and ended with that particular small phase of it which he had made his special field of study.

Not one of all the giants was concerned that we should study, except in passing, those small acorns of illness from which grow the mighty oaks of human misery. Most of us would go out to general practice of medicine, certainly as important a field to the comfort of general humanity as any specialty, and yet the training we were given was often a strange patchwork of the advanced and technical knowledge which only the specialist is ordinarily called upon to use.

Had the specialists of Rush not been men of good sense, and men pretty well used to students and their vagaries, they would have found a rich field for their special skills among the young men who sat and listened to their lectures. With an obedient suggestibility, we promptly developed the symptoms of almost every obscure disease which came up in the classroom lectures.

I was no exception. I can remember my panic and horror when I discovered an enlarged gland under my jaw. I cannot remember today just exactly what that gland portended in my neurotic mind, but I know that it practically sealed my doom. It meant that my medical studies would be wasted. I worried. I lay awake

nights. And at last, trembling but unable longer to live with uncertainty, I went to see Professor Senn.

He looked at me kindly and gave me what I thought was a rather cursory examination.

"Go and feel the glands in the other students' jaws," he told me.

After a fortnight or more of this special research, during which I canvassed the glands of most of the class, I was convinced that my malady was completely imaginary. I had been a victim of the neurosis which so often attacks the medical student, who ought, of all people, to be prepared against it.

We ran the gamut of morbid conditions as we studied them. We compared our symptoms carefully with descriptions in the textbooks. One or another of us, at one time or another, was sure that he had every disease known to medical science. Only one form of neurosis was never openly admitted, though I am sure that some of us were kept from fear of its symptoms only through some small saving sense of the ridiculous. We never became victims of pseudocyesis (feigned pregnancy)!

Most fascinating part of our course to me—and I am sure it was to most of my classmates—was pathology, especially the post-mortems under LeCount. Autopsies were then less common than they are now. But the days when the authority of the church and of public opinion held the pathologist's hand were already fast passing away; the day when both these great forces would be enlisted in favor of science was dawning. Laymen as well as doctors were beginning to understand that the beacon light illuminating the dark and devious obscurities of human ills and of human failures is held in the hand of the pathologist. They were beginning to realize that autopsies, serving two purposes—the study of disease and the disclosure of errors of diagnosis and treatment—are not insulting to the dead, and are, in a real and significant sense, a promise of life to the living. Many problems of metabolism, of structure, of health and of disease have already been solved in this way; many more are gradually moving toward solution.

No one would claim unvarying success in this or in any other department of the physician's art. Sometimes the most scrupulous post-mortem fails to reveal the cause of death; the mystery of life refuses to be unveiled.

I was present once, some years after my own student days, when a large throng of young medicos waited breathlessly in the auditorium of Cook County Hospital for Professor Richard Jaffe, master pathologist, to expound the findings of the autopsy he had just completed on a young man who had died from an unknown cause.

Every organ and every tissue was carefully scrutinized by the great doctor. The silence was almost audible, as the doctor's frown grew and grew. Slowly, he repositied the well-examined organs in their proper abode. He began to speak, but he was speaking, not to us, his audience, but to the corpse.

"Come, come, now, young man," he said. "You have no bizness here . . . From zis investigation, we must truly conclude you are shamming us as dead and are able to walk. For truly . . . well . . . zere is nossing ronk wiz you!"

And he kept on frowning while the amphitheatre rocked with laughter. I almost thought I saw a derisive grin on the corpse's face!

Young medicos today learn things which would have made our eyes open wide with amazement. Lister's discoveries, still almost new when I was a student, have opened the way for advances against the old enemy "blood poisoning." And since the time of Semmelweis, obstetric science has moved forward steadily, decreasing the perils of maternity, making it less and less a gamble with Death—a gamble with loaded dice. Early diagnosis of cancer snatches thousands from untimely graves. Smallpox is practically unknown and typhoid fever almost eradicated. The triumph over tuberculosis and yellow fever is spectacular. Many of those victories were still veiled in the future when I went to medical school. And yet I and my fellow students, looking back, know that we got good basic grounding there, the kind of education which enabled some of us to contribute mightily in the battle of science against disease in the coming decades. A doctor, of all men, can never say that his studies are completed. If Rush taught us that, it taught us much.

I was a bookworm, and I burrowed hungrily through the work required of me, so hungrily that I found myself, three months ahead of my scheduled graduation, with all the work completed. Rush used the quarterly electoral system, and I found it possible to forge ahead with speed suited to my appetite. But what could

I do with those extra three months before the school would stir itself to acknowledge that I was a full-fledged medico?

I sought advice from Dean John M. Dodson.

He furrowed his brow.

"Thorek," he said, "the fundamentals of the healing art lie in anatomy. You can do nothing better than spend the remaining three months in the dissecting room."

He picked up a pencil.

"I am assigning you to begin work next week," he added.

Probably a vacation would have been better for me. I was badly run down in health, in spite of my excursions on the Harvey bicycle. But back to the dissecting room I went, literally "sent down for ninety days!" And I have had cause many times in my life to be thankful to Dean Dodson for that extra experience in so vital a field of medical knowledge.

Graduation day at last! And on this occasion, "I was duly and suitably dressed for the part I was to play. I had come a long way from the morning on which, awkward and uncouth, I had entered the doors of the institution of learning which was now ready to send me forth with its blessing.

True, the black robe and mortar board I wore as I walked, like a somnambulist, down the aisle of Mandel Hall that bright June day, were rented. Poverty was still with me, and debts loomed darkly on my horizon. But I was conscious only of exaltation as I picked up that bit of sheepskin on which my Alma Mater acknowledged that I was fit, in her opinion, to practice the great profession of Aesculapius. I had made it, after all! And I had not had to do it, like the hero of the old barroom ballad, in "two yumps!"

The first great goal of my boyhood ambition had been reached. I was a doctor. I could append M.D. to my name. I practised writing my new signatures with flourishes which could only faintly mirror my pride.

MYSTERY OF BIRTH

FULLY conscious of the new dignity symbolized for some not very clear reason by a sheepskin—isn't the sheep considered the dumbest of the dumb animals?—I considered myself perfectly competent to "practise" my profession anywhere. But there was still the matter of that internship, the medical student's last hurdle. They sent me to the Marcy Home at Maxwell Street and Newberry Avenue.

I welcomed that appointment. I had decided to specialize in obstetrics, and I knew that much of the work expected of interns at Marcy consisted of going out on call, into the teeming homes of the neighborhood, to help bring children, and yet more children, into the crowded world. Neighborhood women registered at the home for this service and it helped to meet a crying social need. Whatever indictment might have been brought against the Marcy Home of those days because of its equipment—or lack of it—no one could impugn the honesty of its intentions, the sincerity with which it worked to serve humanity.

Many young doctors of my generation—and indeed of any generation—shared the reverent interest in obstetrics which made the appointment to Marcy seem so fortunate to me. I think that the reverence for the mystery of birth was particularly deep in my case. It was mingled with childhood memories, with mind-pictures of my strong, young, beautiful mother going about our town on her missions of mercy. It was rooted in careful home teaching. And nothing in my medical courses, nothing in my conversations with schoolmates, had dimmed the glory of that mystery. When I went to medical school, remember, the theory of Mendel and the advertisements of contraceptives were not

table-talk or polite conversation as they are today! When I presented myself at the doors of Marcy Home, where I was to live and work for some time, I was full of innocent idealism which regarded the microcosm and its permutations, even the procreative act itself, as being as soaked in sanctity as the very Ark of the Covenant.

Dr. Frederick O. Bowe, "senior" at Marcy, greeted us "juniors" when we arrived to take up our new posts. He spoke to us long and earnestly about our duties, our obligations, and the special rules of the institution. I listened carefully and I thought that I had engraved upon my mind every minute instruction. It did not take me long to discover that my memory had failed to record one item which, in the hours of that night, was to take on an importance far above any other fact which the Doctor had mentioned.

We went to bed early. And, for the most part, so did our neighbors. The silence of the streets was broken only occasionally by the hoofs of patrol-wagon horses as human wretches were borne to the Maxwell Street Police Station. The clop-clop of these horses sounded clearly through our open windows, and through the same windows came an almost overwhelming smell of fish from the market near by.

I had just fallen asleep. In my dream I was drowning in the Danube. Even as I struggled toward wakefulness, I could feel those waters slipping over me. No, not water, I discovered as my eyes cleared of sleep. This flood was red! Not blue like the Danube! I was covered from head to foot with the palpitating, juicy, crimson bodies of *cimex lectularius*! I know that each bed-bug in that hungry horde was of the gigantic variety known as "cone-nose." I looked as though I had been turned, as I slept, into a ripe red raspberry patch, sun-filled! Never in any place where we had lived had there been anything to compare with this invasion.

Sleep was out of the question. I could not bring myself to get back into that bed of torture. I was driven to ask for help. I called my superior and asked to be assigned to other sleeping quarters.

His reply was like cold water in my face.

"I thought you were paying attention to my instructions," he growled. "Did you not hear me say distinctly that there is a jug

of carbolic acid solution at the foot of your bed? Slap it on you and the bedbugs won't bother you. Good night!"

So I processed to carbolize. The new smell helped make sleep more impossible than ever for me. Apparently it had the same effect on my tormentors. Far from being discouraged, they went at their job with even greater zeal. They sucked like leeches.

They had me completely licked. I had to admit it at last. I put aside any thought of slumber for that night. I sat up, reading, waiting for my first call.

I did not have long to wait. The expected summons came, from a miserable one-room tenement home where seven children already cried and squirmed in surroundings dirtier, less sanitary than any stable. The eighth adventurer, who would make a total of ten souls living in that crowded room, had chosen that night for entrance into the world.

The Marcy Home sent three of us to help the newcomer in: a nurse, a "senior," and the fledgling doctor, myself. There were no sheets for the shabby pallet upon which lay my first obstetrical case. So we made shift with newspapers—and even those were hard to come by. The woman was already in labor when we arrived, and we prepared her as best we could. There were sterile gloves, gauze sponges and lysol in our obstetric kits. But somehow that equipment seemed pitifully inadequate to fight the dangers of infection which lurked in that filthy room where mice, rats, roaches, flies, and the inevitable bedbugs and lice infested every crack and cranny.

But the baby came, protesting with the lusty anger of the newborn against the indignity of being born. Probably the little mite would live, like the seven brothers and sisters, I thought, as we let ourselves out of that squalid home into the clean air of the street. But what could life hold for that particle of humanity? What hope of a good life did it have, even if it managed, by some miraculous tenacity, to escape the thousand deaths lying in wait for it in that home, in that neighborhood?

We stopped at a lunch wagon for a cup of hot coffee. It was not yet four o'clock when I wondered, as I opened the door of my room, whether I might not, by some happy chance, find that the *cimex* had been duly carbolized in my absence. I could do with some sleep.

But I wasn't to get any that night. I was no sooner in my room

than the call came for "Dr. Thorek!" Gripping my satchel, I went out into the night again.

This time the birth angel had chosen one of the poorest, shabbiest homes in the Italian ghetto for its visit. The dark-eyed girl who looked up at us from the midst of indescribable filth had never had a child before. She was frightened, and very, very ill. Beside her, her bewildered young husband implored us with his eyes to ease her suffering. He was frightened, too, and hollow-eyed. And we knew very soon that both these young people had reason to fear.

The child presented with an abnormally large head. This was no case for an apprentice. The "chief" must be notified.

At six in the morning, Dr. Joseph B. DeLee, tall, imposing, strong, appeared at the door of that hovel. Dr. DeLee was the founder of the Chicago Lying-In Hospital, which is now affiliated with my alma mater, the University of Chicago. I have seen and worked with him on many occasions, but never in circumstances which better brought out the man's magnetism and inner force. He took charge of the situation. He cast a charm of expectant confidence on us all. Even the frightened father-to-be seemed to sense that he could rely on the help of this strong man.

Under Dr. DeLee's direction, the patient was put to sleep. Version was deftly performed. But the baby's head was disproportionate, and the child was not breathing when it was finally delivered. Dr. DeLee worked over the inert body. The hovel hummed with activity. The doctor tried artificial respiration, contrast baths, aspiration by suction. It seemed useless. We were all of us almost exhausted, Dr. DeLee more tired than any of us. Death, we felt sure, stalked in that dismal room. He had already set his finger on the child. He would soon claim the mother, too. For all our efforts to stop a threatening hemorrhage were of no avail. The classic loveliness of this slip of a mother took on the fragile pallor of death. The father wrung his hands. We worked on.

At last a faint smile crossed the tight face of the "chief." The child had begun to breathe. A moment more and the mother, too, began to revive. The battle was over. The "chief" had won.

Against the background of those months at the Marcy Home is now set a long line of memories. I did not carry out my inten-

tion to specialize in obstetrics. But, so closely woven into the fabric of life is the mystery of birth, that any doctor's, any surgeon's, career must inevitably be touched by it at a thousand points.

It is a far cry from those hovels in which, as a young intern, I helped bring life into the world, to the white-tiled delivery room of a modern hospital where assistant physicians and trained nurses stand ready to do everything in their power to make childbirth easy, almost painless. But the mystery is in both places. It does not change.

And the traits of human nature which, called into evidence by birth's miracle, touch it with humor or with pathos, with comedy or with tragedy—they are the same everywhere.

There is the belligerent father, for instance, taking out on the attending physician the angry helplessness which assails him when he sees the woman he loves in agony. I have met him in tenement and in palace. He is always the same. He puzzles me at times, but he stirs my pity too. He is so fierce—and so frightened.

Fortunately for me and for my colleagues he does not always show his fright and ferocity as did the great hulking Rumanian who, some twenty-five years ago, thundered at me in the reeking room of a sordid tenement when I suggested that his wife's delivery would be safer, easier, in a hospital.

"No hospital!" he roared. "Because I am poor, my wife does not go to the hospital. You stay here and you bring that baby! My babies are born at home. In hospitals they kill women bringing babies!"

I knew we were in for trouble. It would have to be an instrumental delivery at least, perhaps a Caesarean section. But I could not move the man.

I hustled the three staring children off to a neighbor. Then I sent a messenger for Dr. Victor L. Schrager. He could help me if anyone could. He would give the anesthetic I knew would be necessary.

While I waited for him, I looked around the kitchen which would have to be the operating room. Cobwebs, ants, spiders, flies, mice, roaches, grime, scraps of food were everywhere. The chimney of the oil lamp was filled with gnats and June bugs. Some effort had been made to scrub the bare and splintery floor, but the terrible odor of sour soapsuds from its cracks only added

to the general squalor. Dried vegetables and sausage hung from the rafters. It was July and the early morning breeze which came in at the dingy window was hot and listless. Odors of faulty plumbing came from the hall outside. Well, I had to make the best of it.

Stripped down to a shirt and trousers, and devoutly wishing I could shed even those in the unbearable tropic heat, I set a copper kettle on the coal stove, scrubbed the table, washed a pan in which to boil the instruments, and in spite of the terrible heat, built up a raging fire in the rickety stove.

Schrager came. We put the suffering woman on the kitchen table. Schrager began to pour the anesthetic. Slowly she drifted into restless slumber. I had just begun to work, when a sound made me look up.

Against the closed kitchen door stood the husband—about two hundred and fifty pounds of flesh, blood, and irascibility. In one hand he held a long thick old-fashioned iron stove poker. In the other a half-gallon pot filled with boiling coffee.

"All right, you go ahead," he shouted. "But I watch. If anything happen to my woman, I keel you both! I got these"—he brandished his odd weapons—"I got, too, knife and gun . . ."

The stove blazed hotter. Mosquitoes came buzzing in. Schrager and I worked on. When the fruit of our forceps was held up to mortal gaze, it was found to be a fine boy!

The father relaxed. He began to cry, to pray, to laugh. All his other children were girls. Now he had a son. Schrager and I were transformed in a flash from sinister enemies to dearest friends. Wine and whiskey appeared before us. For once in my life I wished that I could appreciate the latter beverage. A little wine, and that diluted, has always been my limit. But I took the wine straight that morning.

The Rumanian giant's cry of joy at the sight of a son rings in other accents wherever children are born. And in that hunger to perpetuate name and dynasty are born other dilemmas for doctors officiating at the mystery of birth.

Unwritten law of the profession is, of course, that if one life only can be saved it should be the mother's. But against this law is often set the secret tenet, held by royalty and by commoner alike, that "a mother is only a woman, but a son is an heir!"

Only once in all my long practice has that tenet been openly invoked, though it has more than once been tacitly suggested as a guide to my action. Once I was ordered, in the plainest of plain terms, that if I could not save the lives of both mother and child, I must let the mother die.

Greed was the motive behind this order. A huge business hung in the balance. It could be held in the family only if it could be passed into the hands of a son and heir. And it had looked as though that son and heir would never come. The wife had awaited pregnancy for nearly eight years. She had a small pelvis and was not fitted to bear children. The family belonged to a creed which does not tolerate divorce, and they were seriously considering securing an annulment when conception took place.

I have never felt sorrier for anyone than I did for the poor creature during those days of her pregnancy. She was pampered and petted, and she knew that, behind the ostentatious solicitude, was no kindness toward her, only eagerness for the child she was to bear. Alone with me she would break down completely.

"Save the child," she would plead. "They will be good to him. They hate me."

Then the mother-in-law would come at me with specious innuendo. Such a great inheritance would come to that child . . . He must live to enjoy it . . . The father-in-law had his turn. And then, one day, the father himself threw camouflage to the winds and blurted out a flat command.

"After all, Doctor," he said, "it is more vital to us all. Even my wife thinks so. We must have an heir. If we can't, she doesn't want to go on living a childless life."

"You are going to have both wife and child," I assured him. But I was by no means as confident as I sounded. If I had not felt that I owed it to the woman to stand by and see that she had every chance, I should have retired from the case at that moment. Or I should have spoken my mind and been dismissed—which would have amounted to the same thing.

That confinement brought my first gray hairs! It had to be a Caesarean, but it was successful. Both mother and child lived. And the child was a boy. The family sent me a magnificent check—almost three times my regular fee. But it did nothing to eradicate my disgust.

The story has a sequel. A year later the mother died of lobar

pneumonia. The child survived only a few years. When he died, it was my privilege to inform those murderous people that the indirect cause of his death was a latent syphilitic inheritance from the father. Destiny has a way of loading the dice.

It was Abraham Colles (1773-1843) Professor of Surgery, of Dublin, Ireland, where he flourished for 32 years, and was a leading surgeon of his day, who wrote in his *Practical Observations on the Venereal Disease* (1837) that a non-syphilitic mother may bear a syphilitic child, and that she may nurse her own child with impunity. This became known as Colles' Law. There is a group known as "Paternists" and also "Germanists" who insist that the mother is regarded as genuinely free from infection, having been merely a passive carrier of the infected child from an infected father. The subject is still controversial. Profeta's Law, for example, states essentially that the converse is true. However, the consensus of opinion seems to lean in the direction of the first contention. In the case described by me, I have good reasons for believing that the father was the carrier of the infection, because the mother was a virgin at the time of conception and the father was a *roué* with a shady past.

Every physician has plenty of material for ironical musings as he deals, year after year, with women desperately trying to have children on the one hand, and with women just as desperately trying not to have children on the other. And here too, the impulses which move the human heart and will are no respecters of economic status.

Medical science has by no means reached the root of the problem of the causes of sterility. Venereal disease and early excesses have long been recognized to be among them. But scientific research today tends to place increasing emphasis on dietary insufficiencies in those cases where sterility does not arise from actual disease. Vitaminists claim that in Vitamin E, the largest known source of which is the wheat embryo, lies the secret of human fertility. Lack of this vitamin, they say, is the cause of much human sterility, and they claim to have proved it, not only on white rats and guinea pigs, but also on human beings. Experiments on human beings have been less frequent in this country than abroad and have been given less publicity. Vogt-

Mueller of Copenhagen claims that he has used Vitamin E on women with great success and suggests that the female responds better than the male to this treatment. In Chicago, a scientist, also working on Vitamin E, hopes to find in it the secret of the predetermination of sex, but he has not yet reached conclusive results.

On one fact scientists the world around seem pretty well agreed—that once the organic power of fertility has been destroyed in the male, it cannot be restored. Vitamin treatments and most of the rejuvenation processes can secure results only when the innate powers are dormant, not entirely dead. Voronoff and the American Frank Lydston who sought rejuvenation by the transplantation of sex glands into human beings found their experiments successful only when some vestige of power remained to be stimulated into temporary activity.

Science will solve some of the problems here which remain shrouded in mists. And when it does, much heartache and frustration will be lifted from the shoulders of men and women who want children and seem unable to have them. But the human mind does not always wait upon science. Once in a while it essays a miracle of its own.

I had a patient once who was rich and childless. There was a hard and bitter reason for her childlessness, which she did not know. She had never been told that her husband had been rendered sterile by gonorrhea in his youth. She was almost insane on the subject of children, brooding morbidly over her "barrenness." Suddenly she announced that she was pregnant. She had every symptom. Her abdomen began to enlarge. She suffered terribly from morning emesis. Her physician confirmed her diagnosis, and the happy woman set about preparing a magnificent layette and an elaborate maternity wardrobe.

She was well along in her "pregnancy" when her physician became ill and turned her case over to me. To my horror, my first examination showed that she was deceived. Her doctor had also been deceived. There was nothing the matter with her but the form of hysteria, by no means as uncommon as the layman thinks, known as pseudocyesis or false pregnancy.

Her tremendous desire had worked a miracle—but a tragic miracle, since it represented perhaps the greatest depth of longing and frustration to which the human heart can sink.

Somehow I think of this unfortunate patient always with far greater sympathy than I do of another woman who stood at the opposite pole in her attitude toward the miracle of birth.

This woman—let's call her Madame X—had been married at eighteen and at nineteen had borne the one child of her life, a lovely girl. She was thirty-seven when she brought this daughter, Rose, to our hospital for the removal of a diseased appendix. Just before the operation, she sought me out with tears in her eyes.

"Dr. Max," she said tremulously, "I am going to ask a great favor of you."

She stammered and seemed embarrassed.

"You see, Doctor," she began again, "as long as you are going to have Rose on the table— Why can't you do just a little more than take out her appendix?"

"Meaning just what?" I asked.

"I know it could be done without any harm to her and she need never know. She will thank me some day. *I just don't want to be a grandmother!* My mother married me off when I was just a child. I had my baby when I was so young . . ."

"What is wrong with Rose?" I asked. "Is she pregnant? Why didn't you tell me before? Let's get into this."

She drew herself up with offended dignity.

"Of course Rose isn't pregnant," she said. "And if she were I would never ask a man of your reputation to help her out of it. What I want you to do is just the opposite . . ."

I was completely mystified now. The mother paused a moment and then came to the point at last.

"I don't want her ever to be pregnant. Why should she go through all that suffering? And why should I be a grandmother before I am forty? Rose is engaged, you know, and she is enough like me to have a baby right away just as soon as she is married.

"All I want you to do," she said finally, "is just to clip those two little tubes so she won't ever have to have babies!"

I wish that someone would tell me with what phrases I might have framed a retort courteous. I do not remember what I said. I only remember the blind rage which seemed to fill my whole being. It was the most criminal request ever made of me. And it took me weeks and months to erase from my mind the slimy-

ness which seemed to cling there, just because I had been subjected to such an outrageous proposition.

Madame X would not insult me by coming to me for help if her daughter were unwillingly pregnant. But hundreds of other women have sought me out in this predicament. Some have sought the obvious solution—and the obviously impossible for a reputable physician—of abortion. Many more have simply turned to me in my doctor's familiar rôle of father confessor to human beings in dire human need.

Sometimes I have been able to help. I am proud to remember that. There are letters in my files, grateful letters, from women persuaded in heart-to-heart talks in my office to accept with courage responsibilities they were reluctant to assume, and finding in the acceptance joy and fulfillment. I cherish those letters more than the medals and awards which have come to me in a long career.

But there have been times when all my resources have not been enough. Those times are harder to think about, but they are all part of a doctor's career—almost every doctor's, I suppose.

There was Miriam. She swept into my stifling West Side office one afternoon when I was literally praying for patients and she almost dazzled me with the rich Oriental loveliness which belongs to well-born Jewesses in their first youth. We were shy with each other. I was still woefully inexperienced and so awed by her magnificence that I know I made it difficult for her to tell me her trouble. That a girl like that could have stepped on a primrose—It was unthinkable. But the story finally came out.

She had been engaged to a young man of whom her father approved. Their pulses ran high. There had been an unguarded moment. She was afraid it had had consequences. Would I investigate? I did.

"You must be married at once," I said, when I had finished the examination.

She burst into wild weeping.

"Impossible! Impossible!" she sobbed. "He has gone away . . . to Paris on a mission for his uncle. Before he left he laughed at my fears. And he said that, even if they were true, it didn't matter. Nothing on earth could make him marry me."

She looked desperately at me.

"I must do something. You must help me."

I tried to calm her. I told her she must carry the child to term, but that she could go out of town for its bearing and that she could arrange for its adoption.

"You do not understand," she said, through her tears. "We are orthodox, most strictly orthodox. My father would kill me. He is a Rabbi."

All that I could do before she left was to get from her a weak promise to do nothing for a few days. I would, I assured her, try to do something to bring the young man to his senses. That was pure bravado and bluff, and she must have known it. For, of course, she had not told me even his name. How these poor girls do protect their betrayers!

"Until next Friday, then," she said, trying hard to smile bravely. Then the door closed behind her.

Before "next Friday" came, they had fished poor Miriam out of Lake Michigan. She had not had the courage to go through with it. I cannot find it in my heart to blame her. I know the iron discipline of homes like hers. I know she was hardly exaggerating when she spoke of her father's wrath.

Miriam's tragedy was individual and personal. But it was also a part of a tragic social problem of our day. I have pondered much about it, getting no very clear answer to my ponderings. What solution can society frame, for instance, to the problems of those women of the slums and wallows of life, where children breed like flies, and often—in spite of advancing science—die also like flies?

Is birth control the answer? Frankly, I do not know. As to its moral aspects, it is, and probably will be until the millennium, a moot question. Personally, I am not too concerned about its practice among the so-called "upper" classes, among some pampered soft individuals who, after all, are pretty poor stuff from which to breed a better race.

But when I sit in conventions where the necessity for teaching family limitation is earnestly propounded by physicians, clerics, economists, social workers, statesmen, my mind goes back to my Marcy Home internship. What use is teaching when the men and women taught must live in squalid dwellings where two dark, dirty toilets in a public hallway serve the common use

of from twenty to forty families? What price birth control information when the very possibility of using that information is denied?

No, we shall have to go much deeper to find the root of the trouble. And if we find it, if in a better society we banish poverty, attain the "freedom from want" for which we fight, will birth control still hold the importance it now holds in the reformer's mind? I doubt it. For the firmest foundation of this nation and any nation of power and vitality is the family. And we know that a healthy man and woman can safely essay a child every second or third year. Perhaps we shall swing back again to the days when children were thought of as a "blessing," when large families were welcomed.

Whatever answers we ultimately find to these and allied problems, one thing I know. Those answers must be free from the hypocrisy which poisons our thinking on these matters. They must be answers equally applicable, equally available, to the woman of the slums and the woman of the luxurious home, to women of all creeds and every economic status. So long as men and women righteously endeavor to impose upon others the rigid restrictions and codes which they themselves are unwilling to live by, just so long will our efforts to work through to equitable practice be hampered by a kind of slimy darkness.

I have found this hypocrisy at work in strange settings, found it willing to sacrifice life—someone else's life—to abstract idols of right and wrong, found it just as unwilling to adhere to the consistent practice which alone could in some measure justify the blindness of the code.

All these incidents, most of these problems, were still far in my future as I served my apprenticeship at Marcy Home. It was a period rich in experience.

And it initiated me not only into the mystery of birth but also into the twin mystery of death. This initiation came during the December afternoon when, walking through the Loop, I heard the call of Fire! and worked with the doctors and volunteers and medical students—my own classmates at Rush among them—to salvage as much life as possible from the holocaust at the Iroquois Theater.

The story of that fire is too well known to repeat here. The

laughing audience, mostly children, gathered for holiday matinee and struck down almost in an instant by terrible flaming Death. The clown, Eddie Foy, transformed into a hero. The fire-curtain that did not work—tragic testimony to man's greed and haste!

I helped the rescuers to drag bodies living and dead from that horrible place. I worked with the doctors beside those white tables in Thompson's restaurant—dining tables a moment ago, now grim operating tables, morgue slabs— There was elation in the experience—a moving hand indicates a spark of life where we thought only death remained; there was despair, as little children we so desperately fought to save died under our ministering hands. There was horror—seared deep into the minds of us all.

My education reached completion there, my dedication to my calling was sealed.

PRACTISING PHYSICIAN

AN army of occupation runs up its colors. A stage star announces his "opening" with his name blazoned in lights. Pawnbroker, barber, tobacconist display—or did in the non-distant past—the three balls of the Medici, the striped pole, the wooden Indian. Dramatic, picturesque ways of saying to the public—"We are ready to serve you!"

A professional man simply "hangs out his shingle." And he does it with a peculiar diffidence. For while his fellows in crafts and arts and other callings attain, at some time or other in their careers, a self-acknowledged rating of proficiency, the professional man will go on through a long lifetime simply "practising."

Whereas the chefs of this world cook, the dressmakers sew, the printers print, the builders build, and the salesmen sell, a doctor merely "practises medicine." If he so far forgets himself as to claim that he "cures," he is recognized at once for the charlatan that he is.

Something profound underlies this distinction which custom and tradition have evolved. Any good medical man must carry with him all his life a deep sense of the incompleteness of his knowledge. He dare not ever claim he "knows." He dare not ever stop his study, his constant pursuit of an elusive forward-winged truth. At the moment when he says to himself, I have learned all I need to know, at that moment he has forfeited his right even to "practise."

All of us who serve under the aegis of Aesculapius know that. And yet I have wondered sometimes why medical education does not more frankly and realistically recognize the special need of "practice" which the fledgling doctor has. We used to recognize

it. We used to require a young doctor to keep on "reading" with an older physician until such time as he felt heir to the practice of the older "locum tenens" or was able to move out, with the help and backing of his mentor, into a berth somewhere else. We have thrown away that plan now. And in doing so perhaps we have lost that nice balance which comes when an older man, who has learned to rely almost too much on experience, works with a young man, whose medical knowledge is wrapped in the very latest theories. Any brief I might hold for the much discussed "group practice," in which interesting experiments are being made in these days, would pivot on the point that in such groups older men and younger men might work together to the benefit of both. Such an arrangement would, to my mind, be the *sine qua non* of this method of practice.

I hung out my shingle. I began to practise. And I have today my share of those memories which bring embarrassed blushes to the cheeks of any older doctor worth his salt.

Fortunate for the downy young medico that Nature is so often his ally, that she will, if she can, soften the consequences of his mistakes, bring cures in spite of his blunders.

During the first week of my licensure "to practise medicine, surgery, and obstetrics," I was called in to see a young woman. As I worked, her mother watched me with something that I could see out of the corner of my eye was very close to suspicion. Suddenly she said:

"Doctor, how long have you been practising?"

I thought of my seven-days'-old license. I tried to parry the question. The mother refused to be sidetracked. She looked sternly at me over her steel-rimmed spectacles, and I found myself blushing like a small boy caught with his hand in the cookie jar. My professional dignity was just about to take wings when my patient saved the day.

"Mother," she said. "I wanted a young doctor. The old fogies don't understand anything. The young men, just out of the universities, know the last word in everything."

My self-respect came surging back. I could not help admiring her acumen. I smiled blandly. I wrote a prescription. I went confidently away from the house. My confidence increased when, two days later, a message came:

"Please do not go to see Mrs. M— any more."

So my prescription had worked. It had effected a cure in less time than even I had dared to expect. I was really a fine doctor and the young woman had done well to place her trust in me.

It was not until some weeks later that I learned the truth. My prescription may have worked, but not in the intended direction. My patient had agreed at last to let her mother call in an "old fogey" and, after some weeks in bed, his antiquated and outmoded treatment had brought her back to health again.

The young medico today runs less risk than I did of such humiliating experiences. Insistence by the American Medical Association that medical education emphasize clinical training has helped to give the new graduate clearer perspective as he goes out to practise. But I am very sure that there are mistakes even on the records of these perfect products of medical education.

Some of his errors a doctor will shake off with a laugh as his living and learning increases. And some—I know it from experience—will cling to him always like restless ghosts, asking him forever—Why didn't you know then what you know now? How did you come to be so stupid? Ben Hecht wrote a story not long ago about an imaginary society of medical men who met for no other purpose than to unburden their minds about the cases in which, through unpardonable wrongness in diagnosis or treatment, they had "done to death" patients they should have saved. A macabre idea. But most of us have seen times when such a confessional would have given us release from hauntings. One's own knowledge and experience accumulate so slowly, no matter how hard one works. And scientific research, moving on leaden feet, has a way of handing us life-saving facts too late to serve us in some of those particular cases where we would have given our own lives to have possessed them.

While I had studied at Rush, I had made friends with a little tailor in the neighborhood, whose kindness to a lonely, half-starved boy is still a bright memory in my heart. He and his good wife, with the simplicity of goodness, made me feel that I had a second home under their roof. Many a morning I had gone to the classroom with nothing under my belt but a crust of bread and some weak coffee, but with the sustaining confidence that, once class was over, I would find a steaming lunch awaiting

me in my friend's home. They would not even have to put on an extra plate for me if I dropped in at meal time. My plate would be waiting there always.

How many times I had dreamed dramatic opportunities for me to return this kindness! And now, in the first year of my medical career the chance had come. I was in a glow of anticipation as I waited for the street car which would take me to their home for my first visit there in the rôle of ministering angel.

True, the situation lacked some of the glamor which I had cast around the dreams in which I had repaid my debt of gratitude. The son of the family, a boy of twenty, was ill. But the source of his illness was only a "pimple." I would have preferred to be able to snatch him from the jaws of some dread, obscure disease.

The "pimple," however, seemed to be making a good deal of disturbance for so small an article. The boy had a high fever and had been in bed several days. The pimple was on his upper lip, and the home remedies tried had only seemed to make it worse. Hot fomentations and compresses had done no good. That was why his family had sent for their own special "Herr Doktor."

I came with my best professional air. I took young Ben's temperature—it was 102° F. His lip was sadly swollen and the pimple undoubtedly contained pus.

No one trained as I had been trained could have looked at that lip without seeing a mental picture of the stalwart Nicholas Senn and hearing his robust voice thundering: "Ubi pus, ibi evacuo!"

I knew exactly what to do. I took off my coat, rolled up my sleeves, unpacked my instruments, boiled them for twenty minutes. The anxious parents watched me with as much veneration as though I had been a visiting archangel or prophet of the Lord. And, as the instruments boiled, I felt myself indeed a messenger of God, granted a magic power to destroy disease, to bring health and happiness.

Sixty seconds, ninety seconds, one hundred, two hundred, three hundred seconds! The operation was over. Little pus drained from the wound, but I was too inexperienced to worry about that. The temperature dropped and I noted that with satisfaction.

And then—the temperature began to rise again. Beads of sweat on the sufferer's brow matched those on my own as for three days and three nights I fought in a vain effort to save his life. I called

in my schoolmate, Leon Bloch, for consultation. We infused salt solution, and we worked assiduously, using everything that medicine of that day had to offer.

So fast has medical knowledge moved since that day when the magic scalpel which I had trusted to help me repay a debt of love turned into a death-dealing poisoned dagger in my hand, that most intelligent laymen today could tell me exactly what went wrong. The poison which had not drained from the incision had been forced into the lymphatics and poisoned the bloodstream. From that moment, the case was almost hopeless.

We were very proud of our superior knowledge in those days of 1904. We had come a long way from the time when even the great Hippocrates prescribed "barley water" for apoplexy and for inflammation of the lungs and brain, and recommended that in treatment of pneumonia or inflammation of the lung, "bleeding from the arm until the patient faints" if the pain pass upward to the clavicle. We smiled at such quaint bits of medical lore as we smiled to read that Diocles believed in "purging the head" with tea of hyssop and sweet marjoram to prevent "inflammations of the eyes, cataracts, strumous affections of the neck, sphacelus of the brain, caries, etc., etc.," or that Galen prescribed as one of his nine great remedies for dysentery

"Of ashes of snails, p. iv

Of galls, p. ii

Of pepper, p. i

Reduce to a fine powder and sprinkle upon the condiments, or give to drink in water or a white savory wine."

What quaint and foolish ideas the ancients had! And we were even scornfully superior to the physicians and surgeons of a nearer past who refused to learn what Lister had to teach.

But we had yet to learn, in that perpetual post-graduate school in which every good doctor is continually enrolled, of such new marvels as 606, insulin, the endocrines, the sulfa drugs. We had yet to learn very much of the value of asepsis, antisepsis and pasteurization, of general hygiene and of operative surgery in general.

And we had yet to learn that bistouries, scalpels, and needles have on occasion been more deadly instruments than the guillotine. We do not now—even the greatest of us—incise with bold

confidence furuncles on the face or the mucous membranes. We treat them mainly without the knife.

But if I could only have known that in time! If I could only go back and save the life of my good friend's son!

My choice of a neighborhood in which to hang up my shingle was dictated chiefly by my heart, which is after all perhaps the best guide to a man who wishes to serve humanity. I had two opportunities immediately upon my graduation from medical school to join forces with established men, to step into ready-made practice with a good future. I chose, instead, to work among the people who had been my neighbors since I came to America. I knew what it meant to be a stranger in a strange land, hearing a strange tongue, eating strange food, bewildered by strange customs. I knew what poverty was. I had a fellow-feeling for these dwellers in the multiple ghettos of Chicago. My place was in their midst.

Chicago today, in its west and southwest neighborhoods especially, is still a loose collection of foreign villages. But these communities now are one hundred per cent American compared with those same units at the beginning of the century. Sons and daughters of the immigrants people them now, and if the old folks still speak their mother tongues—Polish, Lithuanian, Czech—in their homes, they now have stalwart interpreters in their American children to link them with the new world of which they are a part. No such interpreters were there when I began my work. And a doctor who had, through natural aptitude and curiosity and early education, something of the gift of tongues, was a godsend to the polyglot dwellers in Babel. I suppose that my ability to talk with my patients in words that they understood helped more than my university diploma to win me the confidence a doctor must have if he is to do his work successfully.

The word "ghetto" literally means restricted district. And the section of Chicago which I marked for my field of practice was made up of so many ghettos it would be impossible to list them all. There was an Irish ghetto, a Jewish ghetto, a Polish ghetto, a German ghetto, an Hungarian ghetto, an Italian ghetto, a Slav ghetto, a Russian ghetto, a Greek ghetto. And, sandwiched in between these well-defined areas were scraps of every nation in the world. Slant-eyed Chinese thriftily plied every kind of busi-

ness from laundry to opium, from curios to white slavery, offering their neighbors the novelty of chop suey and the excitement of tong wars. There were even a few Igorots and whirling dervishes left behind, for some unexplainable reason, after the World's Columbian Exposition of 1893.

Before I moved from that neighborhood, I had many patients in all these ghettos, patients of every possible nationality it seemed, excepting only the Chinese, who never came in any great numbers into my office on Twelfth Street.

That office, my first, still holds a special place in my heart as I remember it. It was pathetically shabby—I had a heart of rawhide in those days and a purse as lean! But the office was scrupulously and sacredly clean. By devious makeshifts and skillful barter, I acquired a learned-looking, if somewhat splintery, desk. I scrubbed and rubbed and stained and varnished it myself, and was proud of the work of my hands. I had a big armchair which I thought I owed it to my professional dignity to keep for myself. But I was always finding myself offering it to a patient in a somewhat pathetic effort to hold my practice by a little harmless obsequiousness. I learned to be shrewd and careful about such offers, however. The chair was a bit off plumb. I could balance myself with the skill of a slack-wire artist. But I found out that not all callers possessed such skill and I found out, too, that being thrown from a bucking office chair is not conducive to confidence in the heart of a patient. So I weighed my callers with my eye. If the caller were heavy enough to hold the chair level by his own weight, he got the chair. If not, he had to content himself with one of the two "splint bottoms" available.

My books made a fine showing, even if the case in which they stood was another rehabilitated derelict. I was always a book-worm, a book-lover, a book-buyer. Some very precious and very wise-appearing volumes that had come with us from overseas stood on my shelves—books on botany, anatomy, chemistry.

I had a skeleton. Nobody in those days could place any faith in a doctor who did not have one. "Monsieur" was the pride of my life. I was especially proud that he had, not one, but two extra skulls!

I was proud, too, of my instruments. Expensive as they were then—always have been and probably always will be—I had managed to get good ones. I also owned a microscope.

Of the rest of my equipment I was always a little ashamed. The place was shabby—I had to admit that. But I did what I could with soap, water, scrub brushes and elbow grease. And the results were not very bad. The faded rug which covered part of the bare floor was mended, and the floor was endlessly scrubbed. The window, with its threadbare green shade, was washed almost too often, and the red and yellow silken sash curtains hung there gave a cheerful note of color to the room. My surgical table was a castoff, fearfully and wonderfully repaired, but it was immaculate.

I even managed a pot of rose geranium standing on a worn-out wooden bucket, turned upside down and painted green. On one wall I hung a framed steel engraving of Budapest, on another a picture of myself in cap and gown. My sheepskin from Rush was given, of course, the place of highest honor.

Outside the door was a smart brass bell and a sign which read on one side: "Doctor is Out—Please Wait," and on the other: "Doctor is Busy—Please Wait."

But, like all other newly fledged medicos since the world began, it was I who did most of the waiting.

What doctor can ever forget his first patient?

Mine was a thin and breathless wisp of a child, who knocked at my door crying.

"Doctor, Doctor, come quick," she sobbed, and I grabbed my satchel and was putting on my hat as I asked her,

"What's wrong, my child?"

"It's Ma," she sobbed, and I could see that she was shivering with fright, "Pa's beatin' her awful."

Rosie's thin little legs carried her along like the wind through the crowded, smelly streets. There was scarcely enough flesh on her bones to have filled out a sparrow. I was glad, as I hurried after her, that I had little excess flesh to hold me back. We made good time as we curvetted across a cluttered street, through sidewalks filled with loungers from Hellas, County Mayo, the backwash of Berlin, the wharves of "la Bella Napoli," the ghettos of Turin or of Toledo, the purlieus of Limehouse, the plantations of Alabama.

At last Rosie scuttled into a dingy, dirty, fetid cul-de-sac and down a broken set of steps. A Turkish bazaar in cholera time would have ranked no better than a draw for honors in dirt and

odors against that alley. Around the staircase clustered the neighbors, held there by curiosity and kept from too near crowding by fear. A frightened cur howled dismally somewhere near-by. Fragments and phrases from a dozen languages shuddered in the hot autumn noontime.

Down in the darkness into which Rosie had disappeared sounded sickeningly a monotonous "twack, twack!"

Someone called out that "the doctor had come," and the crowd shifted slightly to let me pass. Holding fast to my precious bag, I stumbled into the damp mazes of that cellar. When I had adjusted my eyes to the sudden darkness, I could see by the light of a thin bar of day which filtered through the dirty broken window some seven or eight children huddled in the corner, hardly distinguishable from the splintered wood and piles of rags in which they crouched. In the middle of the floor lay a woman. A huge human beast stood over her. He was mouthing obscenities and he was so drunk that he had to use one outflung arm to hold his balance, while he methodically swung a heavy leather belt, mercilessly beating the poor creature at his feet.

Blood was everywhere. The woman's ragged clothes had been practically beaten from her body. A few minutes more and she would have been flayed alive. She needed me. Rather, she needed me and a squad of police! What possible use to her was a thin little doctor, so long as that three-hundred-pound murderous brute, crazed with blood lust and liquor, stood between her and any kind of medical aid?

I was no match for him. And nothing I had been taught in medical school was any possible use in this, my first "case"! I thought fast. I am not particularly proud of what I did—but I have never been able to think of more adequate action! An old broom lay on the floor. I picked it up, grasped it firmly, and jabbed the beast in the groin. Knowledge of anatomy has uses not specified in the text books! He collapsed with a terrible belch which brought help from the curious gallery on the stairway. Now that I had him helpless, they were no longer afraid. They tied him with his blood-stained belt, with rags on the floor, and with a few borrowed clotheslines, for which, by the way, the temporary donors later asked me to pay!

The obvious next step was to call the police. But even little Rosie knew better than to let me take it. Police were dreaded

worse than a plague of locusts in that neighborhood. We dragged the now helpless brute to the upper alley and left him there to recover. I turned my attention to the woman. She was still alive but in a desperate state. Like all her sisters in that neighborhood at all times, she had been pregnant, and the drubbing she had received had had the inevitable result. I put into Rosie's thin little hand one of the few coins I had left in my pocket and told her to take her little brothers and sisters to a neighbor's house. I sent a man to phone the County Hospital for an ambulance. The worst was over when the ambulance arrived. The poor soul was hurried off to the Cook County Hospital for a brief heavenly rest in a clean, bright place before she returned, as I knew all too well she would, to slavery under the brutal master she had married.

I learned something of her story later. It is all too typical of those ghettos. She and her husband were both Lithuanians, both still in their early thirties. Rosie had been born about twelve years before, in the first year of their marriage. Since then, there had been a child every year—but a couple of them at least had died. The marriage had climaxed a romance sprung of loneliness. Both were strangers in that strange neighborhood, both worked in the "Yards." That had been basis enough for the romance, and everything had gone well at first. The husband was a fine pig-sticker and he made a good wage. The wife worked, as most of her neighbors did, right up until the last minute before Rosie was born—and was back at work again when the baby was nine days old.

That kind of toughness was all right in the old country where women had worked on the farm and in the sunshine. Here it was different. Rosie fell sick. Her mother found herself pregnant again. The father began to cash his wife's pay check as well as his own, at the corner saloon. After he had stood drinks for the bartender and the boys there would sometimes be scarcely a dollar left. He felt himself slipping—knew that he wasn't providing for his family the comfort he wanted them to have—he was all at sea. And he took the way of forgetfulness—he began to drink more, and drink transformed him into a monster.

He felt that his wife was disappointed in him. But there were other women, plenty of them, who gave this handsome gorilla of a man the admiring attention he craved. They were blondined,

painted, pert, and they touched him with the tar brush of their trade. Soon his wife was in the same predicament. An unscrupulous corner druggist supplied the "treatment" for their disease. The next two babies died. The third was blind.

Impaired vitality cut down earning power. The family pay checks dwindled. They had nowhere to turn. For the nuns and priests who toiled day and night as missionaries among their neighbors, they had a high disdain. The Salvation Army they might use at Christmas time—never for any other purpose. Gospel Missions they thought a rare joke. The overworked profession of social worker was then in its infancy, but even if it had been fully developed, I doubt if it could have reached a helping hand into the hovel where such misery dwelt. As wild and shy as forest animals, people like this family were all but unreachable for good or for ill. The strong arm of the law holding punishment for misdeeds and the helping hand of charity were alike helpless.

I never knew exactly what happened to the father after that near-tragedy which had brought me into that home. I suppose that, when he was on his feet again, he was off for safety until things "blew over" through the strange catacombs of the "sheds" which were a feature of that neighborhood and neighborhoods like it. Strange labyrinth of shacks—no one knows exactly how or why they are built—they are used for keeping kraut, for storage, to shelter the cow or the chickens or the pigs. And their greatest use of all is as impenetrable avenues of escape. Once let it be known that the "law" is after a neighbor and the whole network of the sheds is offered for his protection.

As for the rest of the family, something was salvaged, with the help of Mary MacDowell of the University of Chicago Settlement. I came to be very proud of little Rosie. How she studied, worked, saved, hoped, dreamed, and salvaged! She never rose higher in the economic scale herself than a head waitress in the "plant's" lunch room, but she was a shield and buckler to that whole family. Single-handed, she worked to make them decent, respectable citizens. Her one passion through the weary working years was to "keep 'em away from the drink." And she succeeded better than I or anyone would have thought possible.

Rosie was one of the saints I learned to reverence in those ghettos. And Mother Mellaney was another.

Mother Mellaney was the tiniest, neatest little daughter of Old

Erin to be met in a day's journey. She was poor as a churchmouse. She had five big, roistering sons—the highstrung, fighting, black Irish. They all drank like fish. They were all the toast of every girl or woman who could get a flick of an eyelash out of them. They were all generous with the lip and quick on the fight. 'Twas from the Mellaney boys that I—well, I learned about skulls and craniums from them. The old lady hated the “domned poteen” as she called it, with the same fervor as the lads loved it. Night after night, I heard her bird-like tap on my door, her soft Celtic voice calling:

“Dochter, Dochter, dear, is it you? Well, 'tis I, Mrs. Mellaney. This toime, 'tis Timmy— Ye bein' a young man, ye'll understand the flightiness of the young— He's a black eye, Dochter, and a bad crack on the skull. Can ye be comin' along, now, Dochter dear?”

Never did I fail her. Never did I refuse the small pittance she was always “after payin' ” though I knew that it was probably her last cent—and that borrowed. She was so bravely proud. I tried to salve my conscience by waylaying one or all of the five sons on pay day and getting enough out of them, while there was yet time, to keep her alive and the modest home going. It became a game as to whether I got those boys first or the saloons and women got them. They played the game with Irish good nature, never resentful when I won, but never of their own volition turning over the money to their mother.

None of the sons was married. And the old lady was an inveterate matchmaker. The best *Schadchen* in the near-by Jewish quarter was not above lending her an ear at times. She longed for “grandchilder.” Had she had them, they would undoubtedly have had skulls of oak and wills of water. They certainly would, had they taken after their fathers who, Mrs. Mellaney admitted with a gentle smile, were a “bunch of fine, handsome, dirty spalpeens.”

Her hopes for “grandchilder” were never realized. Mother Mellaney buried all her five sons one October. They went like grain before the scythe—all from typhoid. And before the Noel bells had rung, Mother Mellaney had followed them. On her death certificate, I wrote “lobar pneumonia.” I know I should have added, “Contributory cause—a broken heart.”

Maria was another of my early patients, and she nearly gave me apoplexy a dozen times a month. She was swift and quick as

the water of the Bay of Naples. And she had a way with the boys—Heaven help her—and the boys had a way with her.

There was sheer, stark tragedy in her eyes, the day she came to tell me that she was afraid there would be *un bambino* and she knew there was no *mario*. The bambino had to be, of course. Never in Maria's sweet mind was there any other idea. She came to me really to see whether I could not connive with her to soften the news when she broke it at home. She was fearful of what her father would say. She was, of course, praying to the Madonna for help. She knew just what kind of help the gentle Mary could give her. She could send along another youth, some one who would be willing to accept the responsibility of the unknown seducer.

Maria was like all the rest in her refusal to name this wretch. He was "so reecha—so granda—too much for poor Mareea."

I was pretty sure that the bambino would have a welcome once Maria had had a good sound thrashing from Pietro, her padre. The Italians seem to realize that man makes conventions, but that the Almighty Power itself distributes souls. But I had not the remotest idea how to help Maria avoid that preliminary thrashing. I suggested that the priest might help—the family were, I knew, devoutly religious.

Let good Father M— know what she had done! Maria was horrified at the very idea. Never. Never. Why, for four months now she had not had the sacraments . . .

The very simplicity of Maria's view of her problem made it exasperatingly baffling. She was going to have a baby. Therefore she must have a husband. It was as simple as that. And she was quite sure that I could arrange things. But how? Certainly I could not marry her myself. And she was so confident that I would find a way out.

I did find one, goaded by that very confidence. I took a day off, circled around the city. In a saintly cleric, now dead, I found understanding and assistance. He was amused at my predicament, but he was full of sympathy for Maria. Would I bring her to see him? I would. And I did. There was a long hot cable car ride across the city, with Maria proud about going with the doctor and the doctor very embarrassed about going with Maria. The interview was far from difficult. I found the young priest far more adequate to the situation than I had dared to hope. He

knew his Havelock Ellis and perhaps his Krafft-Ebing as well as his prayer book, and best of all, he knew human nature.

He had a perfectly concrete and practical solution to offer. Among his parishioners, he said, was a wealthy young man. His mother was neurotic and the boy had been left too much to servants, especially to his tutor . . . A scandal was brewing. Would Maria . . . ?

Maria would do anything for the bambino!

The affair was arranged with complete honesty and openness. The boy, who had homosexual inclinations, was told exactly how things stood with Maria. He had a good mind and a fair one. He agreed. Maria's family were overwhelmed. Here was a good marriage for their daughter beyond their wildest hopes.

The young couple left for Europe immediately after their wedding and six months later Maria gave birth to a son. A daughter was added to the family a year later and soon after her birth the happy young couple returned to America. No trace of abnormality was left in the proud husband and father. Maria had cured him.

As the years went on, Maria bore eight children. I like to think that seven of them belonged to her lawful husband. With the zest for living which had made her so attractive as a child, Maria threw herself completely into the new world which her strange marriage had opened to her. She invented for her children a fine genealogy of aristocratic ancestors. She forgot her associates and friends back of the yards, including the doctor who was, in a sense, responsible for her fairy-tale good fortune. But I, at least, had no heart to blame her. She was too naïve, too childlike, too sincere.

Rich and rewarding were the years I spent among people like Maria, Mother Mellaney, little Rosie. And they were years, too, when the utmost that I could do, that any doctor, any score of doctors have done, seemed pathetically small, seemed hardly to count at all in the midst of the great human needs around me.

Poverty and want and ignorance and dirt still lurk in the alleys and hovels of Chicago's lower west side. But most of my early patients, could they return today to the neighborhood they called home, would think it paradise compared with the jungle they once lived in.

Those were the days, in the back of the yards area, which Upton Sinclair mercilessly, but on the whole all too truthfully, described in *The Jungle*. The great stockyards, sprawling uncleanly across several city blocks, dominated the area. To it moved the constant stream of animals destined for slaughter, and to it moved also the men and women, dumb and uncomplaining as the beasts, who had no alternative but to earn their meager daily bread in the stench and slime within those walls. Sanitary conditions, both in the yards and in the neighborhood where the workers lived, were frightful. The hideous "Bubbly Creek" was a festering sore, breeding disease and death. Sewage was a farce and drainage hardly attempted.

A shocked American public, reading Sinclair's sensational findings, moved to alleviate some of the worst of the conditions. A cynic might remark that it was thought for the safety of the consumer of the meat prepared with such frightful carelessness rather than for the worker which brought effective reform. Workers themselves were to find their champions in the labor unions—A.F. of L. at first and C.I.O. later—which succeeded, at times amazingly, in lifting wages from ten cents an hour to something more nearly approaching a living wage, and in securing better working conditions. The battle against these unions—one of them was raging when I worked in that neighborhood—has been one of the darkest pages in Chicago's history.

Some lighthouses were beginning to shed their beams in that dismal neighborhood. There was, at the very gates of the stockyards, the University of Chicago Settlement, presided over by the redoubtable Mary MacDowell, whom the stockyards' workers knew as champion and friend. Further north, Hull House, with Jane Addams at its head, was an oasis in a desert of want and dirt. There was the Abraham Lincoln Center, headed by Dr. Jenkin Lloyd Jones. There were a score of synagogues. There were Protestant missions. And, vying with the chimneys of the stockyards to dominate the landscape, there were the spires of almost countless Catholic Churches, representing the hope of reward in heaven to hundreds of thousands of otherwise hopeless souls.

Through the stink of the stews was heard the cry of children. They died like flies in summer from dysentery. Bad water was responsible for that, and bad milk. There wasn't much milk of any kind for those babies, but what there was was so poisonous

that the cry of protest had already reached City Hall. My late friend, Charles J. Whalen, in his term as Health Commissioner, had started the ball rolling which was finally to give Chicago an almost perfect milk and water supply. But in those days the scheme had not yet "taken." In winter, bitter cold and unspeakable crowding in the miserable houses, added to the illness and death. Plagues and epidemics were taken for granted. Cleanliness was impossible. When Alderman John J. Coughlin of "de First" got through the City Council the appropriations for municipal baths which were to win for him the soubriquet "Bath House John," the halo which sanitarians placed about his head all but blinded the eyes of the public to his other contribution to the health conditions of the ward he represented—those "First Ward Balls," annual orgies at the Coliseum which set all "Twenty-second Street" loose to spread venereal disease as a flail spreads chaff!

A doctor had to be jack-of-all trades to work in a neighborhood like that. He had to be his own pharmacist and surgeon and nurse. The Visiting Nurse Association was as yet a fledgling dream, being dreamed in New York's Henry Street. The Registered Nurse was, as she still for the most part is, a white-uniformed elegance for the rich and grand.

I learned there the things the medical books had failed to teach me. I found out that it is of very small importance to a young doctor to be able, at least theoretically, to perform a delicate operation for the removal of the Gasserian ganglion or ramisections, if he finds himself all at sea when confronted by a case of skull fracture or a plain case of incipient delirium tremens, if he is deficient in the technique of removing tonsils, if he has somehow been allowed to skip over those parts of his education which would fit him to deal with measles and scarlet fever and smallpox and the like.

I believed then, as I believe now, that no one should enter a specialty unless he has been in the general practice of medicine for a number of years. In my last visit on the European continent I noticed that there was a feeling in France and in England—and I felt that the feeling was justified—that the tendency to overspecialize was often inimical to the best interests of the profession. For myself, I have never regretted, indeed I have always been profoundly thankful for, the broad basis of experience and

knowledge I was able to lay for my future career as a surgeon in those years of almost unbelievably "general" practice.

How long I might have stayed in this first field of my choice, if I had had only myself to consider, I do not know. There was a fascinating humanness about the work. And certainly there was plenty of work to do. I was almost overwhelmed with success—though that success was measured, as every good doctor would like to measure it, in number of suffering human beings helped, rather than in fees rolling in.

But I was no longer alone in the world. I had others to consider now. And the time came all too soon when it seemed advisable for me to move.

UP THE LADDER

"ONE day a letter came . . ." In those five simple words may hang the fate of a human being, of a nation, of a civilization. To me they were never charged with such momentous meaning than they were in the summer of 1902, when I was partly through my medical training.

From the first moment of my arrival in America, I had, of course, been writing to Fim constantly, pouring out to her all the disappointments and dreams and triumphs which met me in this new world. I had carefully kept that correspondence a secret from my parents. Like Fim's mother and father, they were not too approving of our love for each other. They thought, I know, that we were beginning to forget each other now that so many miles separated us so hopelessly. Perhaps, that was as it should have been.

One day a letter came . . . Postmarked in a picturesque town in the Tatra Mountains, it came to the great city on the lake where more than forty languages were spoken. From a home of wealth and comfort, it came to a home of poverty and faith.

"I am coming to you. I can endure the separation no longer."

I wanted to sing and shout from the housetops when I read those words. But I did not dare to do so. The old fear of my father, which I thought I had left behind in the old country, cropped up strangely in my heart. I choked back my words and kept my secret. Kept it until it could no longer be kept.

At least, I thought I kept that secret. But, looking back, I realize that, when I finally blurted out the news: "Fim is coming!", there was less of astonishment in my parents' faces than of warm and genuine gladness. I had been foolish to think they

would not welcome Fim. They were almost as happy as I when the great day came at last and we three went together to the Union Station to meet her.

I had sent her detailed instructions about how to reach Chicago. I hoped, with anxious hope, that she had followed them to the letter. And as we stood there, waiting for the train to come in, misgivings crossed my mind. What would Fim, with her gentle upbringing and accustomed to comfort, think of our poor home? I dreaded the moment when I must lead her into that door and let her see the poverty which dwelt there. It was so far from the kind of home I had dreamed of when I said goodbye to her in our home town in the Tatra Mountains.

Puffing and chugging, and with bells ringing, the train pulled into the station. This was the moment.

I shall never forget—and I shall never find words to describe—the emotion which flooded over me as I saw her. My Fim! She was beside me now and I should never let her go. She was beside me and no heights were too steep to climb with her hand in mine.

Fim has always surprised me—and still does to this day—by the grace and ease with which she can adjust herself to new circumstances, new situations.

Here she was, in a new country. She was just an immigrant girl . . . No, she wasn't at all! She had leaped lightly over all the transition stage through which immigrants go on the way to becoming Americans. The young lady who stepped from the train—dressed in the most modish of American costumes, speaking English with an ease and fluency which put my efforts to shame—was already more at home in America than I was.

We walked home together. There was time to wonder once more what she would think of that poor flat. She showed neither surprise nor dismay when we finally got there. She made us understand that she thought we had done very well indeed in a strange new country. And because she thought so, our self-respect stiffened. And things impossible before became not only possible but even easy.

I was so happy to have her near me again that it was some time before I thought to question her about the circumstances of her leaving home. I knew that her mother had died not long after our departure.

"But your father," I said. "How did you ever persuade him to let you come?"

And then I learned that he had not been persuaded. He had refused to listen to any such nonsense. He had allowed his daughter to amuse herself with the careful and constant study of the English language. That could do her no harm. But not once had the thought crossed his mind that this daughter of his would ever question his traditional parental authority. She would some day forget the boy in America. There was no hurry about that. And some day he would, as a father should, pick out a husband for her. And everything would be very smooth and everybody very happy.

But this daughter had given a promise. And with quiet tenacity, she kept that promise in mind. Money which might have bought trinkets and finery was carefully and steadily tucked away—Fim has a way with money! And when the means for the journey were in her hand, she had simply started out on the journey. She had traversed Europe and the ocean and one-third of the American continent alone—and that in a day when the very idea of a woman traveling by herself was preposterous. She had kept her promise.

The time was to come when Fim's family and mine were friends again, when her father accepted me as a son, instead of a robber. I am glad that it was so. But I confess that my joy in seeing Fim when she first came to Chicago left me little room for sympathy for the shocked, bewildered, angry father she had left behind.

Fim's name should be emblazoned on every page I write. Without her understanding and encouragement those hurdles of medical education might easily have proved too high for my leaping, the road to professional achievement too steep for my feet to climb. But during my last year at Rush, during my internship at the Marcy Home, during the first days of my practice, she was never far away from me. Part of that time she lived under my mother's roof.

Two years after I began the practice of medicine, we were married. A year later I was a father. New responsibilities that struck spurs into ambition seemed to bring the farthest stars within reach.

Our first home was over Bartelstein's Pool Room on Newberry Avenue and Twelfth Street, not yet renamed for the redoubtable Teddy. Office and living quarters were under the same roof, an arrangement eminently convenient for patients at all hours of the day or night, but leaving little chance for privacy to a young doctor and his family. That office and its tiny reception room were my domain. In the living room, bedroom, and kitchen, Fim ruled. She had been brought up in a home of luxury, but she had an innate talent for homemaking. Our house was clean, bright and cheerful. My patients came to know the doctor's wife as a friend whose smile somehow made the doctor's pills more effective and less bitter to the taste.

There was nothing soft about Fim—except her heart. Through the months of her pregnancy, she carried on gallantly her full self-imposed duties of wife and neighbor. And when her hour came at last, she went through long and difficult labor without anesthetic and with a fortitude not altogether matched by her husband, a doctor—and in those days—aspiring obstetrician though he was! I behaved, I confess, much like all new fathers, as though this baby were the only baby ever to enter this difficult world, as though this dear wife of mine were the only woman ever to suffer the pangs of childbirth.

Dr. Sigmund Krumholz saw Fim through—and with half-humorous understanding, saw me through, too. He had been my instructor in neurology at Rush; he had served as best man at our wedding; he was our trusted friend. And, most important of all, he was a father himself. I learned then how very much that counts.

Fim recovered as millions of other women have done. To our great delight, our son, Philip, thrived.

I had worked hard before Philip's birth. Now I went at building my career with a cold frenzy. To work forty-eight hours at a stretch seemed like nothing to me in those days. I could manage seventy-two without sleep and seemed to be none the worse for it.

Heaven knows I had work enough pounding at my doors already. But I reached out after more. I sensed that, with a family to provide for, even the most humanitarian young doctor must learn to put a dash of mercenary sense into his practice. I must extend my practice beyond the limits of those slums where such

great need and such complete inability to pay the doctor went hand in hand.

I took the social route. I became a "joiner." Lodge after lodge welcomed me to fraternity until I had what seemed to me the world's largest collection of secret grips literally at my fingertips. With fine, free cosmopolitanism, I joined Polish lodges, German lodges, Hungarian lodges, welcomed in all of them as a friend and brother, because, though I did not always share nostalgic memories of a common homeland, I could speak to my brethren each in his own tongue. That bond, was, I am sure, stronger than any ritual.

And it did more than any diploma to build confidence in my prowess as a medical man. Multitudinous families of the middle-class lodge members added themselves to my roster of patients. I worked harder and drove myself more unmercifully than an overworked panel doctor in Prussia or Great Britain. The tempo of my life increased. Faster! Faster!

And I was, therefore, one of the easiest possible marks for the new speed fever which rode into American life driven by the marvelous, if odoriferous, gasoline engine.

I had been driving a good-natured sorrel. He was a reasonably good-looking brute, and the buggy he hauled, while not fine enough for the rich saloon-keeper at the corner, was respectable enough and dignified enough for any general practitioner. The equipage, however, lacked the speed which this general practitioner had come to need. The jogging horse was too slow for the galloping mind of his driver. So I sold him and sold the cart he drew. And I bought for myself a two-cylinder air-cooled Franklin.

My stock in the neighborhood went up immediately. I was by far the most fashionable man anywhere around. That thought sustained me in some difficult times as I went chugging all over the West Side. For I was my own chauffeur and my fine and stylish car gave me almost as much trouble as a bad breech presentation or a complicated fracture.

There was nothing half-way in my attack of automobilitis. Elsie Janis, all arrayed for the Vanderbilt Cup, had no more motor airs than I. My head was covered with a big checked cap, my eyes with huge goggles, my hands with capacious gauntlets, and the rest of my person with a long, shapeless linen duster. A

figure eminently designed for ridicule—and yet, be it said to the everlasting credit of my friends and my wife, that they bore with me patiently during the worst of my malady. Fim did not even laugh, though she has a keen sense of the ridiculous, that day when I forgot to put the lever into “neutral” when I cranked the car. She was all solicitude and sympathy over my miraculous escape from the juggernaut that nearly killed me.

After the first virulence of the motor fever passed, I managed to keep my automobile in its place—an adjunct to my career, not an end and hobby in itself. It got me places quicker. Therefore, I reasoned, I had more time to work. I could add study to my crowded days.

The gynecological clinic of Professor Henry Banga was fashionable at the time, and I spent much time there. It was a marvelous opportunity for any man, young or old, to work with Banga. He was a Swiss and he came from the fine old school of German physicians at a time when German medicine was a thing to conjure with. One of his classmates in Germany had been Erb, the great neurologist. Stalwart and tall, the man reminded one of Buffalo Bill both in his physique and in his magnetism. Like the famous plainsman, he wore a slouch hat and seemed to flood with his vibrant personality every nook and cranny of any room he entered. Scores of women came daily to his clinic. I was his first assistant and later became his associate. It was a rich and valuable experience.

Few doctors know how to take their own medicine, and I was worse than most. I was afraid there would be something taught that I would not be on hand to learn, that someone would get some new sort of illness and another doctor gain experience in treating him. I tried to be everywhere, learn everything.

Something had to crack. I could have told any patient of mine as much if I had been called to sit dispassionately upon such a case. The diagnosis would have required very little of the growing medical knowledge in my cranium.

But I had no time for self-diagnosis. I was far too busy. And when, one day, I felt a chill and found that my temperature had gone up to 100° and 101° F, I was merely irritated. I went on working. And I continued to follow my usual rigorous schedule, which left so little time for rest and sleep, when the thermometer began to record 102° and 103° F. But when the temperature, thus

disregarded, soared to 104° and 105° F, things began to happen over which I no longer had control. I found myself in an ambulance, bound for the Presbyterian Hospital. When I got there, my teachers—Sippy, Billings, Herrick—looked after me, and I had them all worse stumped than they had ever had me on a classroom examination paper!

The first diagnosis was influenza, but developing symptoms seemed to show that diagnosis doubtful. Perhaps typhoid? The laboratory findings failed to give ground for that analysis. The doctors shook their heads. They talked of cerebrospinal meningitis, of other infectious diseases, but never did the proof they sought in clinic and laboratory come to their support. What a painful predicament for professors of medicine to find themselves in—particularly before an erstwhile student!

They had just about given me up. Fim was distracted. There seemed nothing which could be done to save me. And then, on or about the twelfth day of that mysterious illness, my temperature began to drop as suddenly as it had started to mount. Without benefit of diagnosis, I began to get well. No one knows to this day what was the matter with me.

My strongest recollection of that experience is of the black despair that enveloped me as I lay in that hospital bed. The end of all my hopes had come—I knew that as I lay down for the count. From my bed I could see on one side of me my beloved Alma Mater, Rush Medical, and on the other Cook County Hospital, the greatest institution of its kind in the world. All the dreams and memories of the past surged over me as I lay, half-delirious and wholly despairing, in that hospital bed. If only I had taken better care of myself, if only this fever had not laid me low, I told myself with a burst of self-pity and misery, I might have aspired to serve some day at Cook County. Too late now . . .

Just then Fim, who had never been far from my side during all the long days of my illness, came in bringing five-year-old Phil. The little boy prattled along as I watched him sadly. He wanted to know all about everything in the room and outside of it. His questions flowed in a torrent. Fim lifted him up to the window and pointed out Cook County Hospital. He repeated the name as best he could "Coonky Hospitew." The thought

flashed through my mind: "Well, if it's too late for me to serve there, perhaps my son will."

I did not die, of course. And out of those days in the Presbyterian Hospital, come a few recollections which are not dismal, which are in fact touched with humor.

To my friend and associate, Dr. X., I had entrusted my practice during my illness. He gave ample proof of his great friendship then, for that practice was protean, polyglot, and spread over a prodigious area. He added its responsibilities to his own considerable burdens. And he turned over every dollar which came in to Fim.

One day Dr. X. sat beside my bed, preoccupied and strangely silent. Finally he worked the conversation carefully around to a question:

"What do you use," he said, trying to keep his voice casual, "as an antidote for nitric acid?"

It was not until I was well again that I knew what lay behind that query. Then I discovered that X. had had a visit that day from an Hungarian patient of mine who came in twice a week for instillations of silver nitrate to cure an old gonorrhea. X. had made a slight mistake. Instead of dipping the syringe into the vial of silver nitrate, he had dipped it into nitric acid . . . For all X. and I have heard during the past thirty-odd years, the man who leaped from the table with a yell of agony, is still running . . . I am sure that when X. today passes Roosevelt Road and Johnson Street, he still keeps a weather eye cocked for that Hungarian!

Perhaps it was those days in the hospital, the enforced idleness of a long convalescence, which enabled me to take account of stock, to see clearly and definitely, as I could not see in the midst of the rush of my practice, the direction which I wanted to take in my future career. I knew that I wanted one thing only—to specialize in the practice of general surgery. I knew, moreover, that I had always held that as the ideal toward which I strove, ever since the day far back in the Tátra where I had been privileged to extract a large and stubborn rabbinical tooth and had performed a successful operation. That is, the tooth had come out, even if a large section of the rabbinical beard did come along with it.

To undertake the practice of surgery, even if one has the

difficult natural qualifications of hand and mind for it, is by no means a thing "no sooner said than done." Years passed between that illness and the beginning of the dream's fulfillment.

But when, a little later, we moved from the proximity of Bartelstein's Pool Rooms to more pretentious quarters on Douglas Boulevard, overlooking the Park, we knew that we might dare to think about acting to fulfill that ambition.

We had, by that time, a four-cylinder red Haynes car, an English bulldog, and a servant, undeniable evidence of our progress up the ladder of success. I had been able to discharge some of my filial obligations by buying a modest but comfortable home for my father and mother. And, in spite of this ostentation, this extravagance, we had—this is a great secret—a deposit in the West Side Trust and Savings Bank of \$5,000!

I never cease to be mystified about that \$5,000. True, I had worked hard and we had, in spite of cars and bulldogs, lived frugally. But \$5,000! Fim is the one who worked that miracle. She had shown little short of financial genius in choosing the investments which had literally tripled every cent I had ever made.

Easing of financial strain, a little extra money in the bank . . . It began to be possible for us to take the trips to Europe which were so necessary a part of a surgeon's education in those days, though they were to become of less vital importance a few years later when the first World War had left European medicine poor and enriched the resources of the new world. I visited the greatest clinics of the day and soaked up new knowledge as fast as I knew how.

But knowing was, and is, only part of the problem of an aspiring surgeon. I found that, to enter the specialized practice I wanted, two roads—and only two—seemed open.

I could go ahead independently and do my operating in various hospitals and under varying regulations. That seemed to me a most unsatisfactory arrangement.

Or I could attach myself to one particular institution and build up my work there. To find a berth as "assistant" would not be difficult. One of the greatest of the city's hospitals offered me such a post. I knew from observation, from talking with young doctors of my own generation, that such a position was often a blind alley. The assistant could look forward to nothing but a

long career as assistant, and even that career would be jeopardized the moment he dared voice an independent idea, make an independent criticism. Some men might be able to do it. Some men might be satisfied with operating in many and diverse institutions, with sitting on benches in amphitheatres. But I knew that I could not. Even if I had wanted to—and I did not—I knew myself well enough to realize that my incurable candor, which has made me both my warmest friends and my bitterest enemies, would soon succeed in dumping me out of the post.

There were, of course, ways in those days in which a young surgeon could gain a foothold in his profession. I saw men all around me taking those ways. A rich father, able to contribute from \$50,000 to \$150,000 to some particular institution, might grease the wheels for a fortunate son. A wife, carefully selected with an eye on her moneybags, could do as much for her husband.

Well, my father was not rich. I already had my Fim and would not have swapped her for any amount of gold. My case looked pretty hopeless.

No more hopeless, of course, than that of thousands of young surgeons, who come up against the jealousies and littleness in the greatest of all professions. Some day, somehow, we shall overcome this condition; we shall make it possible for young men to enter the gates of the surgical world without buying their way in. Until that time, we shall continue to lose, no one knows how much, of the resources and skills which these young men never may have opportunity to put at the service of humanity.

I was lucky. But I like to think that it was not all a matter of luck. After all, when my chance did come, I had the courage to seize opportunity by the forelock. And that, let me say here, is in my mind one of the first and most important requisites in any man who wants to be a surgeon.

He either fears his fate too much,
Or his deserts are small,
That dares not put it to the touch
To gain or lose it all.

My chance to put "fate to the touch" came disguised as a casual, unimportant meeting.

I had gone out one evening to get some prescriptions filled at

Movitt's Drug Store on Douglas Boulevard. I met a friend there, and as we chatted about the weather and our recent experiences, a third man joined us. I was introduced to Dr. Sol Greenspahn.

Dr. Greenspahn was an alumnus both of the University of Marburg, Germany, and of Rush Medical College. He was about fifteen years my senior in practice and was known as one of the most capable and charitable physicians on the West Side. The size of his practice attested the respect and the affection in which he was held by his neighbors. We had much in common, and we parted, after that brief drug-store chat, firm friends.

An invitation to his home very soon after that gave me great joy. In the leisure of his study, I learned to know the greatness of his ideals and to draw inspiration from his integrity and forthrightness. And I told him, finding him a sympathetic listener, of my hopes and my frustrations.

The second time I visited him I had reason to know him for a man of quick decision and quick action. We were in the midst of an abridged *kaffee-klatsch*, when he suddenly fired a question at me:

"How would \$25,000 do to start a hospital?"

Fim was with me that evening, fortunately for me, for the magnitude of the offer left me breathless and speechless. I turned to her and she was smiling:

"Tell Dr. Greenspahn that we will top that \$25,000 with \$30,000," she said.

I was staggered. I had no idea so much money was available. I could not believe my ears. But Fim insisted that we had it. I knew she must be speaking the truth.

Soon others augmented this sum. Mortgages and loans did the rest.

Another gate had opened in a sheer blank wall. The American Hospital, made of actual stone and mortar, could replace those nebulous castles in the air, so lovely and so useless.

PART III: A DREAM COMES TRUE

11

SURGEON TO STARS AND SATELLITES

THE hospital which Dr. Greenspahn and I dreamed up, in those long talks before we were ready to start actual operations in the rented quarters on the West Side which were our first base, may have been vague as to architectural detail, but it was clear and definite in the shape of the ideals which we purposed to build into its structure.

It was to be a hospital with a human atmosphere, in which men never forgot that healing is a ministry. Dr. Eugene de Savitsch, in his recent book, *In Search of Complications*, writes with wry humor of the deadly efficiency of the great modern hospital and clinic, where the mills of healing grind with the smoothness and sureness of vast paper factories, and with just as little recognition of the troubles and terrors which beset a man when he is sick. We said to each other, Dr. Greenspahn and I, that we would try to build an institution where rigorous application of the finest techniques of science would never be allowed to swamp sensitiveness to individual need. When, more than a quarter of a century later, the gracious president of the Ladies' Auxiliary of the American Hospital, Baroness Violet Beatrice Wenner, wrote, in her annual message: "The patient feels himself a person rather than a case and he is aware that as such he is not lost sight of in the necessity of hospital method," I could feel a glow of pride that, in some measure at least, our purpose has been made reality.

It was to be a hospital in which doctors and surgeons and interns and nurses and all members of the staff checked politics at the door. Both Dr. Greenspahn and I had smarted under the system, all too prevalent then and now, which makes advance-

ment in our great profession often dependent on influence, on knowing the right people, having the right backing, playing the right cards. In our organization, we promised each other, ability and skill would be the only test for the men taken into the hospital family. And merit would be the only measure of advancement. I know that it was this determination in our minds which attracted to us, early in the history of the American Hospital, such noted and devoted Chicago physicians as Dr. Edward C. Seufert, of the University of Illinois, who became vice-president of the hospital organization, and Dr. Frederick Drury Hollenbeck, who, at the time he joined us, was on the ethical relations committee of the Chicago Medical Society, and many others. Have we kept faith through all the years since that day? I know that we have tried.

Ours was to be a hospital, finally, in which patients would be admitted on the basis of their need and not of their ability to pay. Every hospital, then and now, expects to do a certain nicely calculated proportion of "charity" business. To Dr. Greenspahn and me, there was something abhorrent in the usual "charity wards" where needy "cases" were set apart and branded as of less importance than the patients occupying the other beds. I had been desperately poor myself, poor enough to echo in my heart the words which Steinbeck puts into the mouth of one of his characters in *The Grapes of Wrath*: "If a body's ever took charity, it makes a burn that don't come out." To cure a diseased body and leave a mind scarred with such a burn seemed to me then, and seems to me now, to leave unfulfilled the highest mission of the healer. From the very first and up to the present day, the American Hospital has made no distinction between its paying and its non-paying patients. The term "charity" is never used. No intern, resident, nurse, or other member of the hospital staff knows which among the suffering human beings he serves are paying for the right to receive that care.

Ideals have a way of paying high dividends. Dr. Greenspahn and I would certainly have been contented if our efforts to live by the light that was in us had been rewarded merely by that inner feeling of satisfaction which comes from a healthy social conscience. It is odd to think that our open-door policy has resulted in an enrichment of living which would have been possible on no other basis.

Rich and unexpected dividends came out of the time and effort and skill expended in Chicago's back yard. And perhaps the richest and most unexpected of all were my many close associations with theater folk and the men and women whose mission in life is to give a lift and a sparkle to the humdrum days of the rest of us. Strange that the dark alleys off Halsted Street should have led so directly into the brilliantly illuminated portals of Randolph Street. But they did.

Friendships with artists and show people run like a golden thread through the fabric of my life. And that thread began to be woven when, in those early days on Chicago's West Side, I became conscious of the peculiar need, not of the great ones, but of the little ones in the entertainment profession.

The theater has always fascinated me. Perhaps I feel a certain affinity with the reckless, gallant, temperamental people who make up the world of make-believe. Unlikes can be very attractive to each other! And I had chosen, all unconsciously, a vantage point for association with such men and women when I selected the old West Side for my first practice. The rich artistic blood of Europe beat strongly in the veins of hundreds of immigrant dwellers in that neighborhood. Sons and daughters and cousins of early patients of mine have made their mark on stage and screen, though some of them would not like to be reminded of their origins today.

When the billboards blazon the name of Paul Muni, I recall a baby Paul, carried in the arms of parents, who were one-night standers on the Yiddish stage. Father Weisenfreund (that is the real family name) was an excellent comedian, who kept an unsmiling poker-face while his audiences roared with laughter. Paul's mother was a soubrette, whose great dark eyes and black curly hair were handed down to her son. How devoutly I wish those two gallant troupers might share today their son's success. But they are both dead.

Propinquity and predilection played their part in drawing theater folk to me. That might have happened in any case. But I soon discovered a very real service which I might render these people, the service of helping them when they were both sick and broke. And everyone knows that, except for the stars—and often for these as well—the actor swings a dizzy course between

affluence and direst poverty. And illness, with diabolical accuracy, chooses to strike most often when the purse is flattest.

I found that stage folk, in Chicago for a one-night stand, for a fortnight, for a month or so, faced a knotty problem when they met with accidents or fell ill during their Chicago sojourn. They literally had nowhere to turn if they needed hospital care. For the Cook County Hospital admitted only Cook County residents of some eighteen months' standing, and the itinerant players came under the regulations framed—and rightly framed—to bar the county's charity from the eager grasping hands of itinerant vagrants.

The problem was knotty, but the knots were not so hard to untie once we had started the task. With the coöperation of such men as Judge Charles N. Goodnow, Judge John P. McGoorty, Judge Joseph A. Sabath, Aaron J. Jones, Robert Campbell, Frank Dare, and many others of their kind, I soon had the machinery in motion for the development of an organization whose aim and purpose was to raise the funds needed to provide hospital care for actors and show people who needed it. And we began to receive in our hospital more and more ailing Thespians. They were the little ones at first, but they beat a path over which have traveled, in the years since then, some of the greatest of the stars, some of the most successful of the artists of stage and screen and arena.

No group needed the help we were able to offer more than the performers whose daily job was to risk life and limb for the entertainment of the public. We had plenty of these among our patients, acrobats whose trapezes had broken at a critical moment, lion-tamers, whose jungle charges had turned nasty. And what a naïve, delightful, irresponsible bunch of grown-up children they were, carrying into years of maturity the mental quirks they had when they ran away from home and somehow got a job carrying water for the elephants. Success, which enabled them to deck themselves with fine raiment and to load their wives with fourteen-karat diamonds, only accentuated their love of show, their fine careless rapture over the glitter of life. Some of them were—and are today—profoundly grateful for the help which we were able to give them in time of pain and suffering. Others have forgotten . . . How can children remember pain beyond its immediacy?

A strong whiff of the sawdust ring used to sweep through the

hospital doors when they swung open to admit one of these luckless performers. The fractures and lacerations which were the most common cause of such incursions were not different in kind, and sometimes not even in degree, from the after-effects of tavern brawls down back of the yards. But the exotic air of the circus cast its glamor around them, and each "case" became a glimpse behind the scenes of the Big Tent.

Nadja, the elephant tamer, brought something sinister with her when she strode into the hospital corridors in visiting hours. We knew she came to see the slender victim of a trapeze accident, and we knew that the look she leveled at the helpless girl in the hospital bed was hard and avid and calculating. Why did she come? What was she watching for? The secret was out when we saw the expression on her face change as the woman's husband entered the room. The old, old triangle—but in a new setting. We fought desperately hard to save the life of the young acrobat, doubly hard because we felt drawn into the tragic personal struggle—we wanted so very much to thwart Nadja, to prevent her from triumphantly carrying off the male partner of that acrobatic team! We did not like Nadja. Our efforts failed. The little acrobat had dislocated and broken vertebrae in her neck when she fell. We could not save her. But we need not have feared that Nadja would win. She lost, too, as completely and irrevocably as we did. We knew that when we broke the news to the acrobat's husband and saw the light go out of his eyes. We knew then that his life had ended in that moment when, high up in the shadows of the circus tent, he had sensed something wrong with the trappings, had felt his wife's hand slip from his, and seen her plunge down toward the lighted ring below. Perhaps his eyes had wandered toward Nadja while his wife lived. Perhaps his wife had felt him slipping away from her then. But now, she had him securely. Nadja had lost.

When the Showmen's League of America was formed, I was made surgeon for the group. And to the ministry to injured and ill showmen I could now add the sheer delight and relaxation of friendly association with the stars of the outdoor show world and tinsel arena.

King of them all was Buffalo Bill. When I first met him in Chicago during the formative days of the Showmen's League, I felt that I was meeting an old friend. For Colonel Cody,

all unbeknown to himself, was one of my earliest links with America. As I shook hands with him, murmuring the usual forms appropriate to introductions, I was suddenly a boy again, a thrilled and wide-eyed boy of six, peeping through the enclosure in the *Stadtwäldchen* in Budapest where I visited with my parents, to catch a glimpse of the dashing horsemen of Buffalo Bill's Wild West Show. All my thoughts of America in those early years had been colored by that experience. If I could have known then that the day would come when I would shake by the hand that tall rugged hero of the plains, I would have believed in all miracles. If anyone had told me that I would be able one day to render important service to that hero, I would certainly have burst into incredulous laughter.

Buffalo Bill was my patient as well as my friend. He was growing old when I met him and the ravages of time had wrought havoc on his once sturdy physique. I could not undo those ravages; "*restitutio ad integrum*" was, of course, out of the question. But I could, and did, tinker about the aged plumbing to some good effect, achieving an amelioration which gratified me and won me the thankful appreciation of my distinguished patient.

How any lively boy would have envied me the talks with the old Indian fighter when he was in reminiscent mood, eager to talk of his memories. I lived over with him those episodes of his childhood and youth which so clearly pointed toward his later achievements—the encounter with a marauding Indian frightened away by the boy of seven; the rescue of a little sister from a crouching panther, shot by a youthful marksman already deadly accurate in his aim. He told me how he had become "man of the family" at the age of eight when his father had been forced to leave home because of enmity aroused in the community by his uncompromising stand on slavery. One of his best stories had to do with his wild ride to warn that father of an ambush planned against him.

He spoke often of his days as an extra on the overland freighters, when he used to ride the length of the wagon trains as messenger. He had won his title of "The Boy Indian Slayer" when Indians raided one of these trains and his courage and marksmanship saved the lives of the wagon crew, and he had reinforced his right to that title again and again during the expeditions to

carry supplies to General Albert Sidney Johnston and his Mormon-fighting troops.

Only once, Buffalo Bill told me, had he really tried to buckle down to the business of getting an education. His mother had persuaded him to do it, but the classroom was too tame for a hardened frontiersman and one day a fight, in which Bill had drawn a knife against a bigger adversary, gave him the excuse he needed for fleeing from the schoolroom back to the wagon train.

Stories of the Gold Rush days, which brought him a chance to ride the Pony Express at \$125 a month; stories of his service as messenger in the Union forces during the Civil War; stories of his service to the nation as chief of the army scouts fighting the Indians; stories of his experiences as legislator—the inaction of that life bored him—and as actor, along with Wild Bill and Texas Jack, in Ned Buntline's *The Scout of the Plains*, stories of his European tours, when royalty vied with each other to honor the "rough riders of the world" and the great showman—told in the cold type of the printed page of the Scout's biographies—how pale they seem compared with the colorful tales the old veteran told in those last days of his life.

Much has been added to the richness and variety of my professional life through friendships and associations with these rough-and-tumble knights of the sawdust ring, and I cherish happy memories of many of them. Yet I suppose my deepest devotion is reserved for those artists and would-be artists whose contribution to the world's entertainment is made behind the footlights of the so-called "legitimate" stage.

Randolph Street—that short, bright thoroughfare where lights blaze out when darkness blankets the rest of the city as though some celestial spotlight played on this one section of a darkened stage—holds more of glamor for me than any spot in Chicago. It ought not to be true, for a surgeon certainly has ample opportunity to see the citizens of the make-believe world stripped of glamor—and of everything else—and to recognize them for the poor suffering humans that they are at times! But no closeness of contact, no shadow of the universality of suffering, has broken the spell. I love the stage and I love its people.

Neon lights any night in Randolph Street can stir a host of

memories, call up recollections of other names once blazoned there. And those memories and recollections have the same catholicity as the Randolph Street practice which proclaims with equal *éclat* the great tragic actor and the vaudeville clown.

I remember Sarah Bernhardt, regal, firmly stepping (for those were the days when she was possessed of both her symmetrical legs) leaning on the arm of Lou Tellegen, modern Apollo whom the great Rodin once chose as a model. Many of her type—and many also of the widely varying types which make up the theater world—were my patients as the years rolled by. More of them were my good friends. Some were both.

I knew them frightened and miserable in my consulting office. I remember that Lew Dockstader paid me two hundred dollars once in a pair of crisp bills just because my diagnosis proved that he did not have rectal cancer, and thus banished a nightmare fear from his mind.

And I knew them in their hours of relaxation and good fellowship at the old Sherman which was, in those days, their favorite rendezvous. Many who were not Thespians joined in the gatherings there, which I was privileged often to share.

I remember Irving Pond, noted architect and a devotee of the Cliff Dwellers. At seventy-six Pond was as straight as a ramrod and, to keep the trimness of figure which was his pride, he put himself daily through a rigid course of somersaults and handstands. Sometimes he did this "daily dozen" on the eyrie balcony of the Cliff Dwellers Club that overlooks Michigan Boulevard and the broad sweep of Lake Michigan.

There were musicians in the group—Maestro Polacco, exiled from Italy, with the beautiful daughter Graziella (she was Edith Mason's daughter, too); Marinuzzi, artist of the baton; Egon Polak, who gave me a Richard Strauss autographed baton and who died, as any musician would wish to die, in the orchestra pit at Hamburg while he was conducting an opera; Titta Ruffo, baritone supreme; Stracchiari; the famous Rosa Raisa, the talented Rimini, her husband . . .

I have only to step into the half-light of the hotel's lobby and the real flesh-and-blood people become shades, and in their place are never-to-be-forgotten faces. Some, but thank God, not all of which I shall never see again this side of Paradise. I catch snatches

of bygone conversation, laughter caught by the old walls many years ago.

Margery Williams is telling of sending one of the Sherman scrubwomen for cold cream and tissue with which to remove her make-up.

"She brought me a half pint of cream and a roll of toilet paper," she says, and there is laughter all through the room.

I never knew Dixie in those days half a century ago when he was "Adonis" to theater-goers, when even Kyrle Bellew was jealous of his shapely legs. I knew him as "The Devil" playing at the Chicago theater for which George Kingsbury was so long the guiding genius.

Harry Houdini, my lifelong friend, moves in that ghostly company.

There's at least one poet in the company—the late Will Reed Dunroy, poet laureate of Nebraska, who lived most of his life in the shadow of William Jennings Bryan, who had paid for his education and whom he resembled in an almost uncanny fashion. Dunroy wrote some lovely poetry. I always liked best the *Rubāiyāt of Roses*, and, for personal reasons, *Mender of Men*, which he dedicated to me. I could not do much for Will. Alcohol had put its mark upon him before I had a chance, and alcohol is a doughty adversary for the best of physicians. As he was dying, I held his pulse, grieving as I felt its slow fluttering beats, at the waste of such young talent. He looked up at me.

"It's all right, Mender," he whispered, "It's all the bunk. Take all the joy you can get. You take nothing with you. I had mine. I have nothing and I never had anything except things that I liked—and carfare—I was always asking for carfare."

It was my privilege to help pay Will's last carfare.

Ashton Stevens is one of that company, too—graceful, gentle Ashton, whose mild demeanor belies the pungent pen which has made him dean of American critics on matters musical, theatrical, choreographical.

What company of theatrical stars and satellites would be complete without the impresario, the actor manager? Memory holds a special niche of affectionate regard for Henry Miller. What would I not give to see again this actor and maker of actors, whose name stands at the very top of the list of great American producers, far above, in my opinion, that of Belasco who so far

exceeded Miller in dramatizing himself—that buttoned-in-the-back collar, that leonine head with its mane of silver-white hair!—and so far fell short of him in infusing into drama the breath of reality and life. I remember Miller as a wise tyrant with an ungovernable temper.

“I spend half my life insulting people and the other half apologizing to them,” he used to say.

I remember him as the friend of that spiritual shepherd of actors, the Very Reverend Peter J. O’Callahan, Paulist priest at Old St. Mary’s Church at Eighth and Wabash, where the three o’clock morning mass found the faithful of theatrical and newspaper world bowed in solemn, if sleepy, reverence.

And I remember him best as the genius in hammering dramatic talent into dramatic power. He made some of the best actors of our generation—Laura Hope Crews, Nazimova, Ruth Chatterton, Margaret Anglin. And he worked at his art with the strong determination of a sculptor chipping at hard granite.

Once during a rehearsal, so the story goes, he knelt in the theater aisle and prayed aloud: “Oh, God, why did you give me all the brains and all the actors none?” Then he got to his feet, pointed to the unfortunate whose lame acting had provoked the prayer. “I’ll make an actor out of him if I have to break his neck and mine, too,” he said. And he meant it.

Cherished also in my coterie of theatrical folk is that unpredictable and charming pair, Gregory Ratoff and his wife, Eugenie Leontovich. They have been my friends for many years.

For good reasons, Ratoff has been called the “loudest director in motion pictures.” I have never seen him in action on the set—Fim did—but I can well believe that he presents there a somewhat terrifying impersonation of sheer vigor. He wears, I have been told, a checkered yachting cap, a vertigo-producing scarf, a costume which looks to be, and may be for all I know, a deliberate satirization of the popular idea of a Hollywood director’s wardrobe. He thumps his gold-mounted cane on the floor, and yells “Quiet! . . . Quiet!”

I know him better in his rôle of devoted lover and husband of the inexpressibly charming Eugenie. And this rôle he plays with an exaggerated gusto which for him is part of the natural

business of living. The marriage is a happy one, but Gregory sees to it that it never sinks to the level of placidity.

"She does not luff me!" he cries tragically, pounding his fists on the table, as Fim and I and the talented pair sit quietly dining together. Then, as Leontovich lowers her beautiful head, looks at him mischievously out of the corner of her eye, and lets an amused smile play around her lips, his worst fears seem confirmed.

"There, you see, Doctor, you see!" His despairing cry causes neighboring diners to look at us curiously. A moment later, they are in each other's arms in a touching scene of reconciliation, though it is sometimes difficult to see just why the reconciliation was needed.

Again and again, I have played father confessor to Gregory. He has wept on my shoulder because his "Genitschka" has forgotten him. She has not called him from New York to Hollywood as often as he thinks she would have done if she really loved him. I do not know how often he expects such calls, but probably not less than five or six times a week. I am full of sympathy, and I promise to "speak" to "Genitschka." And when I do the best of Leontovich's great dramatic art goes into the response as she throws up her hands and exclaims: "I luff him! I luff him, but he is driving me crazy."

They have a special place in my affections, these two, and a special place in my respect and admiration. For both of them attained great success in their professions in the country of their birth, and both left that country for reasons not unlike those that brought me to America, and both have had the grit and courage and genius to build new careers for themselves in this new land.

Theater folk are not docile patients. They can do amazing things to hospital routine. Frank Tinney was one of the most incorrigible offenders. He brought with him into the hospital the comedy touch which had made him so famed a star in the Ziegfeld Follies. Nurses and attendants still talk of Frank's birthday party held—of all places!—in the morgue, because hospital regulations would have limited the guests and the jollity of a celebration in a hospital room. Hospital regulations said nothing, it may be assumed, about birthday parties in morgues! Nevertheless, the party would not have been possible without considerable

conniving and conspiracy on the part of Frank, his friends, and, I fear, certain members of the hospital staff.

Tinney came to us for an operation on one of his legs. He had suffered for years from osteomyelitis and had undergone a number of operations which had proved most disappointing in their results. Would another operation do any good? I could promise nothing. There was little reason to expect that I would succeed in doing what just as competent surgeons had failed to do. But luck was with me. My chisel and hammer must have eliminated those portions of the infected bone which carried the nidus of the micro-organisms responsible for his trouble. Tinney recovered.

We had a thoroughly nerve-racking time with him during the period of his convalescence. He was impatient to be up and about long before his surgeon felt he should be. And one bitter cold night he bribed an orderly to let him leave the hospital to go and visit a friend. His leg was still in a cast. I discovered his truancy when the clanging bell of an ambulance announced his return. No, he hadn't come to grief because of his disobedience. He had merely used his wits and his bubbling sense of humor to solve his problem when, stepping from his friend's home into the zero air of a Chicago winter night, he had discovered that no taxis were to be found. He had sent his friend to call an ambulance and then he had carefully walked to the spotlight of a street lamp and put on a convincing act. The ambulance arrived to find a man groaning in pain on the sidewalk with a group of solicitous passers-by bending over him. With skill and extreme care he was lifted into the warm interior of the car and sped to the hospital. At the door, the ambulance driver asked whether the office would pay for the trip. He must have been surprised when his suffering passenger suddenly raised himself on one elbow and enquired, "How much is it?"

He was told. And hearing, he burst into boisterous laughter.

"Gosh, boys," he said. "That's less than taxi charges—and you've given me a lot more comfortable ride."

When these lively, original, irrepressible folk of the theater world stepped out of their native environment to consult me in my professional capacity, to put themselves in the domain in which I ruled, they had a way of bringing with them a breath

of freshness which swept through the dull hospital routine, sometimes, it must be confessed, disturbing the order of the place as it passed. They were not always manageable patients.

The unwritten law of the theater that a good actor never misses a performance, and the unwritten—and also written—law of the medical world that a recuperating patient needs rest, were bound to come in conflict. I could admire the spirit behind the theater law. I knew that it was dictated, not only by the troupers' pride, but also by a real consideration for other performers who, in pre-Equity days, were out of pocket when the absence of a star caused cancellation of a performance. The late Lillian Russell used to boast that she never missed a performance in her life. All honor to her for that.

But when Florence Reed, whom I had treated for a slight but annoying growth behind the ear, refused point-blank to consider my advice that she rest for several days, I confess that I was impatient with the gallant spirit of the stage.

"Heavens, no!" Florence said when I pled with her not to risk going on with her part. "The company must go on to Kansas City tomorrow night, and I cannot forsake the company. Nobody must lose a performance on account of me."

That time luck was with me. Even as we argued the matter in what I knew was a losing fight, another important member of the cast came down with appendicitis—an emergency case requiring immediate operation. And Florence could give in to her surgeon without sacrifice of principle.

She was, and is, one of my most valued friends as well as my patient, one of those heaven-blessed women who seem to have, not only beauty, not only talent, but character and intellect as well. The Swiss clock she gave me as a memento of friendship, ticking away with honest forthright beat, reminds me again and again of this dark-eyed, lovely, sensible woman. I hear her say, with a flash of her white teeth:

"I'm not much of an actress—not according to my father's standards. He used to look me in the eye solemnly and say, 'Florence, my child, pouf to tragedy! It is very easy to make people cry. The world is always very near to tears. But to make them laugh—my child, that is art! To make a heart forget its sorrow, a mind become blind to its worries and a body oblivious of its pain—that is art indeed! Until you can make an audience

laugh, you will never be an actress!' He knew how to do it—you know he did! But I—I can make 'em cry, if I'm lucky. But I just don't know how to make them laugh."

Well, much as I admire Roland Reed, I don't agree with him. Nor does anyone who has seen his daughter in *Typhoon* or *Shanghai Gesture* or any one of the many dramas in which her delicacy and force of character interpretation have been an exquisite delight.

Florence Reed is one of the lovely women whose memory lingers like a breath of fragrance in my hospital corridors. And there are others, so many others . . .

I think one of the most appreciative of all my patients was Mme. Felicia Modjeska. She came to me asking that I advise her before she used a prescription given her in Paris by Joseph Babinski, celebrated neurologist, whose name is due to his Polish parents and whose fame is due to the skill with which he tickled the sole of the foot. I was flattered, of course, but I advised her to follow the instructions of Babinski, suggesting as I did so that she get for me the original prescription. I treasured that autograph for a while. Then I decided that it belonged with the medieval mementos in the collection of Dr. Morris Fishbein. So I gave it to the gifted author of *Medical Follies* and the *New Medical Follies*. A prescription can serve as a boomerang to a doctor's reputation.

Most famous of the beauties who have been my patients was the fabulously lovely "Jersey Lily." She had come to Chicago for a much-heralded engagement at the Palace Theatre. Playing there to crowded admiring houses, she had put just a little too much force into the rôle she was playing. Her right arm, thrown out in a sweeping, magnificent gesture, had struck against a heavy piece of scenery. The "Jersey Lily" finished that performance with a broken arm. Before time for her to go on the stage again, she was brought to me. I urged rest and quiet, of course. And I "compromised" by putting the arm in a cast and letting her go back to the show!

I knew much about Lily Langtry, of course, long before that accident brought her to me for treatment. I knew that Millais and Burne-Jones had painted her; that Oscar Wilde had written for her *Lady Windermere's Fan*; that she had started as a simple clergyman's daughter on the Isle of Jersey and had been a sen-

sationally successful actress and the mistress of a king. I knew that she was Lady de Bathe in private life. And I knew that all these facts belonged to a glamorous past, that Lily Langtry was an elderly woman by the calendar.

I was quite unprepared and wholly amazed when I saw her. That calendar must have lied. For careful living and patient exercise had preserved her youth and loveliness. Her exquisite skin, hands, arms, body, were still those of a young woman. She was inexpressibly beautiful. And she was gracious and lovely in personality as well. I was proud that she came to regard Fim and me as friends.

They have given me much, these men and women of the theater, and I have learned to count on the generous spirit of their kind for tangible as well as intangible help in the work I am doing. But I have learned, too, that such gratitude is unpredictable. For men and women accustomed to spend part of each working day in make-believe rôles, the temptation to indulge in play-acting off the stage is often overwhelming. A gesture toward generosity can sometimes be made to serve quite adequately as a substitute for the generous act.

The compensations in knowing, as I have known, these stage people and these other artists, however, far outweigh any small disappointments which their temperaments have caused me. It is the warm human friendship which counts the most. I have a long record of such friendships in my heart.

FULL SPEED AHEAD

OUR West Side hospital home was too small for us. We began to feel cramped and limited almost before we began to feel at home there! It was evident that we must plan, and plan at once, for other quarters. We were ready, we felt, to build our own plant. Our days of experiment were over. We could go ahead with assurance.

But where should we build? Both Dr. Greenspahn and I had long-established practices on the West Side. We were bound to our neighbors there with ties of affection as well as of professional responsibility. But we both felt that we must plan now with an eye to the future and with due consideration of the total picture of the hospital needs of a growing city. What about the rapidly developing North Side? There was need there and opportunity there. We decided to move north and we selected a site not far from the Lake Front, on Irving Park Road, near Broadway.

In moving north, as both Dr. Greenspahn and I realized, we were, in a sense, merely following our own patients. For Chicago, like any other growing American city, was in a constant state of flux within its own limits. And we had watched the tide of home-seekers turn away from the once popular West Side and flow north.

For a European, such movements are surprising at first. Back in the old country I knew that people had a reasonable expectation of being born, growing up, and dying in their ancestral homes. But here in America a strange restlessness seemed to possess the immigrant. He must needs mark each step up the ladder of success by moving bag and baggage into a "better" neighbor-

hood. And the locale of that "better" neighborhood in Chicago was constantly shifting—south first, then west and now north!

All Chicago felt this ebb and flow, but no neighborhood felt it more than the region "back of the yard" in which so many of my early patients lived. The Germans, backbone of early Chicago, were there first, I am told, though they had nearly all gone on to better things when I began to practise there. The Irish were in full and vigorous possession then. I had seen those brawny sons of Erin move out triumphantly and leave their places in slaughterhouse and packingroom to the later arrivals from Europe—to the Czechs, who would eventually strike out into the western suburbs as they too prospered, and to the Poles and Lithuanians who still hold the fort today. Some sort of silent agreement, fully understandable to anyone who has known conditions in that greatest of Chicago's industries, assigned the dirtiest and most disagreeable jobs in all this land of promise as a testing ground to the newest arrivals on our shores. As soon as these newcomers could, in their turn, pass their distasteful jobs to yet newer arrivals, they moved out, with great jubilation and with goods and family piled into whatever moving wagon was at hand.

That moving was, in a sense, the severing of the last tie with the old country, for they came into their new home neighborhoods, not as Irishmen and Poles and Czechs and Hungarians, but as full-grown Americans. The melting-pot process was complete. Some would modify their names to make them easier for the American tongue to cope with them. And they would all fit into the American way of life, with American sons and daughters growing up around them.

Yes, our patients were moving. They were moving into a section of the city once preëmpted by the solid Germans and the Scandinavians who helped build the clothing industry in the city until their inability to conquer sweatshop conditions drove them out of that field. They were moving even farther north into the parts of the city as yet sparsely settled, where there was fresh air for growing children and the blue water of Lake Michigan to add beauty to their lives. We proposed to follow them.

Could we afford a new hospital venture? With days of poverty still so close behind me, it seemed almost incredible that we could. But long columns of careful figures seemed to show that

the way was clear. It would mean, we knew, that we would have to revert, for a time at least, to the economies from which we had been so lately freed. There would be no extra money for opera, no jewels or fineries for Fim, no squandering of dollars on books for me or on the simple luxuries which were already so sweet to us who had done without them so long. Every penny we could spare would have to go into the hospital. Well, it was worth it!

And so the work began. Steam shovels broke into the ground. Foundations were laid. The structure we had seen, hitherto, only in our dreams began to rise before our eyes. And then, suddenly, everything stopped. The workmen laid down their tools and went away. The half-finished building stood there, taunting us with our inexperience, with our lack of foresight. All our careful figuring, so neat and ship-shape on paper, was wrong. We had thought that we had provided for every possible expense. But we had not taken into consideration some facts about Chicago building trades in that troubled period which more hard-headed realists would have reckoned with at the start. We had not counted on strikes, on grafting bosses, on a score of contingencies which would require pouring into our project more money than we thought it would take, more money than we had.

Here was defeat, humiliating, bewildering. To come so close to the realization of a dream and then have it vanish. No, not vanish! The bitterest part of it all was to see, in stone and steel, the wreckage of that dream before our eyes.

I was in despair. I did not know where to turn. Suddenly light broke. There was one man, I remembered, who might come to our aid. He was not, I knew, rich in worldly goods, but he was rich in ideals and contacts and, best of all, he was richer still in the wisdom which might discover the path which would yet turn the tide of our defeat. I went to see Judge Charles N. Goodnow.

I wish I had words in which to frame an adequate tribute to this life-long friend of mine. If there is anyone in the world who has lived the precepts and practices of Abe Lincoln, here is the man. No political influence could ever reach him. He did enter the political arena at one time—his friends pushed him in. But the dirt and scramble of that arena were so contrary to the ideals of Charles Goodnow that he withdrew as soon as he could. He

went back to the practice of law in a community where he is loved and respected and revered.

On that evening, some twenty-five years ago, when I brought my troubles to him, we talked until the early hours of the morning. The world was still wrapped in that blackest darkness which precedes the dawn when I left him. But the sun of hope and courage was already rising in my heart. And in my ears there echoed the Judge's parting words:

"We'll get the money, Max. You have done so much for artists and others placed in your care . . . We'll get the money. You'll pay it back in time with service!"

The group of Chicago citizens which Judge Goodnow gathered about him were moved by the spirit of public service. The American Hospital started with a great debt of gratitude to these men. I hope that they feel today that we have kept the faith, that we have deserved their trust and confidence.

The mortar mixers and allied artisans were soon at work again. The hospital moved to completion. One unit, two units, three units were finished. The dream was reality.

We had moved north, too, with the shifting of our center of interest to the new area. And we found our new neighborhood full of fascinating new things to discover. So young was that neighborhood that we felt almost like pioneers.

While the American Hospital was being built, Fim and I walked out one day to the end of Lake Shore Drive. It was a favorite walk of ours, for it took us away from the hum of the city out into wild country. The end of the Drive, in those days, was the "jumping-off place." The extension of the thoroughfare as Sheridan Road was not even thought of then. Beyond the drive's ending stretched a pebbly shore, where Lake Michigan's steady lapping was gradually eroding the shore line. One lonely fisherman lived in his rough hut on that stretch of beach. Fim and I liked to watch him, with his dog at his heels, as he let down his nets, baited his hooks, plying the simple trade of fisherman so close to the hurly-burly of a great city. Neighbors bought his whitefish and other delicacies of the Lake waters. He had all he needed to be happy and the world passed him by without a glance.

I remember how Fim looked, that particular March afternoon

of which I write. The brisk east wind had whipped her hair around her face and brought a glow of color to her cheeks and a sparkle to her eyes. She was thoughtful and there was a little furrow, born of deep thought, on her brow.

"They'll be extending the Lake Shore Drive some day. It's got to happen! And when it does, Dear, this is going to be valuable property—very valuable. I wonder . . ."

Fim doesn't spend much time "wondering!" That night, under my pillow, I found a deed for the Lake Shore tract. Fim had bought it, she told me, for a song—or almost a song! It was perfectly useless property, no good to anyone but our old fisherman.

We were both rather proud of our shrewdness. We were happy that we were now "landowners" in a part of our city which we believed promised so much. But years passed and nothing happened—except that our fisherman "tenant" grew older and the Lake took still larger bites out of our "property." For once, Fim had been too shrewd! I twitted her about her "investment." She had guessed wrong that time and no mistake! She took my jokes with a quiet smile and said nothing. We hadn't put much into the land anyway. I soon forgot the whole episode.

Our new life on Chicago's North Side would open to us many new experiences. But it would never, thank God, break the ties we had woven with the people of the older neighborhood from which we moved. They still come back to me, those early patients of mine. They have not forgotten. They know that I remember, too.

It seems only yesterday, though this particular visit belongs in those dark depression years, that my friend Bridgie stood in my office, twisting her gnarled old hands in embarrassment at the grandness of the surroundings, so different from the other office in which she used to seek my help.

"'Tis a foine place ye have here, Dochter," she said with the breath of County Mayo in her faltering voice. "A foine place—I like your pictures— They 'mind me of the manor house at home . . ."

It was hard to believe that this gray-haired, stooped old woman was the same Bridgie I had known as a healthy Irish peasant girl when I delivered her of her first baby thirty years before back

of the yards. It was that baby, however, whose plight had brought Bridgie now to my door.

"You brought Mary into the world—you mind, Dochter!"

I nodded.

"I mind well," I said. "She was a beautiful baby."

"Dochter—she's—she's—"

She burst into sobs. And only patience and gentleness could draw from her the story she had traveled so far to pour into my ears.

"They" were going to send Mary away! That was the trouble. Mary had gone "queer!" She had never had much of a chance, poor Mary, no outlet for the emotions and abundance of life which were her Celtic birthright. She had had to work, especially after John, her father, was killed in an accident. She had had to become the breadwinner of the family. There was her mother to provide for; there were four other children to bring up.

And finally, life had been too much for Mary. She had picked up a piece of two-by-four and "beat up the forelady." And she had done it because one of the men in another department had walked home with the unfortunate victim! Jealousy? It didn't seem possible. Mary didn't know the man at all. He was a new hand. But he was a "beautiful boy, with hair like a crow's wing and eyes blue like the sea."

Mary's mother, sobbing in my office, could not understand what seemed so painfully clear to me. Here was the perfect dream lover! And here a starved girl in whom an irresistible tide of life had broken its bounds in destructive force! The picture was clearer still—and far more tragic—when I saw Mary. I attended the investigation with the hope that I could somehow bail her out, put her on the right track again. And I saw her, buxom, full-bosomed, destined by every natural endowment to be the mother of fine sons and daughters. She had been denied her birthright. There had been a sweetheart once, but she had sent him away because of the need of Bridgie and "the childer." And now life was exacting a terrible penalty.

I could do nothing for Mary. It was too late. I had to acquiesce in the decision that she be placed in an institution where she would have care and protection. But I could, and did, help to keep other members of that family from following her.

When Aloysius decided he did not want to be a priest unless

of "that order which permits of two heads on one pillow and two pairs of shoes under the bed," she was heartbroken, but she made no protest. And she met almost with cheerfulness the family crisis which ensued when Deirdre quit school at the eighth grade to make a home for an iceman who could hardly write his name. Aloysius has three fine sons now, and Deirdre two pretty daughters.

Bridgie is only one of many. They keep coming back, these old friends of mine. And I am proud that they do, though they tax to the full the resources of my heart as well as the skill of my hands.

But, to return to our story—to that new, shining and uptodate hospital, now finished, ready for new services. It was ready just in time, we discovered, to play an unexpected part in American life, to serve a kind of patient we had never imagined when our planning brains had attempted to guess at the faces that would look up at us from those new hospital beds.

The troubled young man who stood in my new examining room one day in 1917 was not ill nor in real need of surgical attention. True, it would not have taken a medical expert to see that Nature, in building him, had departed somewhat from her standard pattern for manhood, though it probably would have required some medical knowledge to find the right term to describe the abnormality—*cryptorchidism*, a condition in which one or both testicles remain in the abdomen or groin and do not descend into their proper place.

"It's not as uncommon as you think," I told him. "It isn't going to interfere with your living a normal and happy life. You ought to know that yourself."

"But, Doctor," he said. "They won't take me in the air corps like this. I've been turned down! And life is not going to be worth living for me if I can't join up. Can't anything be done?"

"It means an operation," I said, "a rather exacting operation."

"I don't mind that," he insisted, "but I don't know whether I have money enough to pay for that kind of help."

"It won't cost you anything," I told him. "Come in and we'll see what can be done!"

That young man was one of hundreds who turned to us in those early days of the American Hospital. For all the time it had been building, the cheerful ring of workmen's hammers had had an ominous undertone, the rumble of war drums. The drumbeats were far away at first. America heard them only as distant echoes of one more of those brawls far over a protecting ocean. Safe and secure, we could look with pity and horror at the results of the evil dream of that great megalomaniac, Wilhelm II, but the struggle was not our struggle. We were observers only. And then, inexorably, the roll of the drums had become louder, closer. And suddenly our safety and our isolation were gone.

From the very earliest days of human history, from the days when Abraham prepared to sacrifice his first-born upon the altar of his God—and before those days—men have held sacred the tradition that the blood sacrifice shall be speckless. Recruiting offices and later draft boards followed the traditional pattern. They scrutinized the long lines of eager young patriots in search of perfection. And what a pitiful condition that spotlight of scrutiny revealed!

I was a member of the State Medical Examining Board and one of my duties was that of surgeon in a North Side recruiting station. Day after day, as young men presented themselves to us for evaluation, it seemed to me and to my colleagues that a huge book of pathology had been opened before us. Here were the youth of America, from every walk and station in life, the youth of the country with the greatest advantages in all the world. They should have shown in fine strong bodies the results of the abundant life of which our country was proud. Instead, they revealed a shocking range of disability. Every known disease and many we medical men had thought we only imagined paraded before us in that recruiting office.

Some of the men we examined were obviously and irrevocably "unfit." Only by turning the clock back to their childhood, or to the lives of their forebears, could they be brought into the health and soundness military service requires. But many were barred by comparatively slight defects, perfectly correctable. There were flat feet, hernias, undescended testicles, hammer toes, ingrowing toe nails, bad tonsils and adenoids, all amenable to surgery. There were countless other conditions which skillful treatment could change.

A word of advice was enough in many cases. It either sent the man to his own doctor for help or it reassured him that he had a perfect protection against being called upon to do his patriotic duty. But what about the eager patriots who had no money for medical service? They could go, of course, to Cook County Hospital and get the finest of medical and surgical attention. Pride got in the way there for many of the boys. Go to a "charity" hospital? No thank you. We'd rather go on just as we are!

The tragic waste of manpower shocked me. I thought about it long and hard. And then I turned again to my friend Judge Goodnow. Together we worked out a plan almost unique in those far-away days of the first World War, although the government itself has undertaken much the same job now that the shadow of World War II has fallen upon us.

With the Judge as President, the Liberty War Association for Medical and Surgical Relief came into being. Its purpose, which it carried out with vigor and effectiveness throughout the war, was to help young men secure the medical and surgical services which would make them fit to fight. Its officers included A. J. Hunter as secretary and W. K. McKay as treasurer.

As soon as this group was organized, we put at their disposal the full resources of the American Hospital. It was no unusual thing for us to have, in the days that followed, upwards of a dozen men in our beds, recovering from operations which I performed. Hundreds of men went out from the hospital to serve brilliantly and ably in the army and navy. We had the satisfaction of knowing that we were helping to strengthen our nation in a time of testing. We also had the private satisfaction of knowing that the men we treated were better equipped because of us for peace as well as war.

It was a gift freely given in the name of patriotism. We expected no rewards and no recognition beyond the gratitude—which was generously forthcoming—of the men we served. It was a matter of some surprise, therefore, when a full quarter of a century later the Veterans of Foreign Wars of the United States tendered to me a dinner in my honor and bestowed upon me their Distinguished Citizens' Medal of 1942.

War had brought to America the sound of its dreadful drums. And once more the nation had to learn the tragic lesson that

its young men are not the fine and perfect physical specimens we like to tell ourselves they are.

Of the first two million men called up, forty-one per cent of those under twenty-five and sixty-one per cent of those over twenty-five were "unfit to serve." When will we learn to safeguard our precious youth before the glare of war lights up our neglect? This time the government of the United States is fully aware of the need for salvaging manpower, possibly because there is less margin for waste in this struggle than there was some twenty-five years ago. Every man is needed now and we cannot afford to skip over any who, with surgical or medical aid, can be restored to fitness. Rehabilitation programs, therefore, are much in the public eye. Down in New Jersey, my friend Dr. Fred H. Albee is taking a leading part in the program of that State. And countless others in our profession are doing their bit to help.

It made me very happy to realize that, as the need for new rehabilitation programs came to my country, my own pioneer efforts were recognized and rewarded. I have taken the medal from the Veterans of Foreign Wars and put it proudly among those other awards which have been given to me from time to time by nations and by associations. Those plaques, trophies, insignias, medals, made of precious metals, designed by great craftsmen, awarded for scientific work and other humanitarian endeavors, fill a cabinet in my study. There is the beautiful insignia of the French Legion of Honor; the insignia of the Italian knighthood bestowed on me soon after an address made at the Royal University of Medicine in Rome; the Order of Saint Alexander, of which I was made Commander on the occasion of the fiftieth anniversary of the Royal University of Sofia, Bulgaria; the Gold Medal of the Republic of Venezuela presented to me in 1941; the magnificently embellished insignia of the Surgical Academy of Mexico and that of the National Academy of Sciences . . . There are many others and I should be less than honest if I said that these evidences of recognition from my peers in the world of medicine and surgery did not give me satisfaction and pride.

But I am sure that the V.F.W. and all the rest will not think me lacking in appreciation if I say also that, gratified as I am in the possession of these bits of gold with their rich mountings and ribbons and the flattering inscriptions upon them, my most treasured "award" is not in that medal cabinet at all.

It, too, is gold. It, too, is inscribed. It is a gold pocketknife. The inscription reads:

"In remembrance of a patriotic deed performed making me fit to fight for my country and democracy."

It was sent me by an aviator in World War I, a flyer with a brilliant record in America's fighting forces. He was the young man for whom I performed, at his own insistence, the operation to correct cryptorchidism so many years ago.

NARROW ESCAPES

THE door, slamming against a slender finger, came near changing the course of Phil's career when he was still in the teens. He was carried into the operating room one terrible day with part of one finger hanging by what seemed to be just a few shreds of tissue, and bleeding profusely. He was in great pain, but his chief concern was to keep me from blaming him for the accident.

Any good surgeon will tell you that at that point I should have called a competent colleague and put the boy into his care. The matter was too serious to let the anxieties of a father unsteady a surgeon's hand. I was convinced then—I am still more convinced now—that a surgeon should not operate on members of his own family. I am inclined to approve of the laws which, in certain countries, forbid him to do so. It is a matter of principle with me.

But what are principles when your own boy looks at you as Phil was looking at me? I could no more have turned that small finger over to another man to heal than I could have cut off my own right hand in cold blood. With a great effort I managed to shake off my shuddering reluctance to inflict further pain on my white-lipped son. I forced myself to something approaching the proper attitude of a physician—any physician—to a hurt child—any child.

I ordered a sterile emergency set-up. I arrested the bleeding. Working like an automaton helped steady me. It was good to be doing something. The terminal digit of one of the fingers of the left hand seemed hopelessly detached, but I proceeded to reattach it. I aseptitized the wound, repaired injured tendons, clipped away splinters of bone, resutured the skin. It was over at last, the finger dressed and Phil taken home and put to bed. I had done my best, but I was pessimistically sure that my best was not good

enough. The injured part of that finger would remain useless. It would not, I hoped, be crippled badly enough to handicap the boy in most activities—one can do much with one stiff finger! But it would almost inevitably keep my son from being a surgeon like his father, a mender of men, like his grandfather, like five generations of his forebears. Until that afternoon I had not fully understood how greatly I had counted on Phil's carrying on the almost sacred tradition of the family.

Two weeks of anxiety and suffering followed in which Phil bore his pain like a good soldier and sought my eyes for assurance that his hand was going to be as good as new, an assurance which I tried to give him with my lips but could not feel in my heart. And then the shadows began to lift. The finger healed *per primam*, thank God! healed better than I had dared to hope. With indescribable joy we realized that it would in no way handicap the boy or keep him from his chosen profession.

Should a surgeon operate on members of his own family? That question is good for an argument almost any time, and I have already said that I would—in principle at least—answer it in the negative. But there is another question which is on the very face of it so absurd that you probably could not get any group of doctors seriously to discuss it: Should a surgeon operate on himself? It sounds foolish, doesn't it? As though any man wouldn't have sense enough to realize that he shouldn't—couldn't would be the better word! And yet I have to record that, having flown in the face of principle with good effects in Phil's case, I was also to fly in the face of rudimentary common sense, with equally good results, when my own hand was threatened.

There is an unwritten volume entitled: *Just a Prick*. Such a book should have been written long ago, but today it is so well known it is not necessary to write it. "Just a prick," is a most sinister sound in surgical ears. Jakob Kolletschka, professor of forensic medicine in Vienna, who performed numerous post-mortems in medico-legal cases, was once touched by the tip of an assistant's scalpel. "Just a prick," and another brilliant pathologist succumbed in his prime. His friend, Semmelweis, was then on a brief vacation in Venice, for the death of many mothers in the lying-in-hospital of Vienna had wrecked his health. Upon his return to Vienna, the first thing Semmelweis heard was the fate

of Kolletschka. As he listened to a recital of the symptoms, one of the darkest secrets in medicine unveiled itself before his eyes. He saw the symptoms were identical with those of childbed fever. The mother dying from puerperal sepsis in the act of bringing forth life, perished for the same reason that Kolletschka perished while examining the dead: both were infected, both were struck down by septicemia.

For solving the riddle which for centuries had baffled the masters of medicine—who had piously decided that childbed fever was an Act of God—Semmelweis was humiliated by his chief at the University of Vienna; for daring to demonstrate that childbed fever was a malady carried into the lying-in chamber by the attending physician himself, Semmelweis was driven from Vienna. Ignaz Philipp Semmelweis, a highly sensitive young Hungarian, returned to his native land, and under the guidance of his disinfected hands the obstetric clinics of Budapest were cleansed of puerperal septicemia. The obstetric division of St. Rochus Hospital had long been a State-supported murder-den, and safety entered for the first time with Semmelweis. The man even overcame his marked dislike of writing, and produced the classic text on childbed fever. He was appointed professor of theoretical and practical midwifery at the University of Budapest. Kugelman hailed him as a second Jenner, while Rokitansky, Skoda, Hebra—the triumvirate that made Vienna the medical Mecca of the world—fully recognized his merits. In addition to all this, he was happily married to the young and charming Marie Weidenhofer. It seems that Semmelweis should have been content.

Unfortunately for himself, he could not forget. The mortality tables of childbed fever haunted him. The teachers would not listen to his *Lehre*, maternity hospitals continued to report the most frightful statistics with the calmness of bookkeepers, and Semmelweis brooded over the murder of mothers. He knew this slaughter of mother and child could be stopped if men would only listen, if only the leaders of obstetrics would be willing to try the experiment of rinsing their hands in a solution of chloride of lime, if only they would change the sheets and linen after a case of puerperal fever before admitting the next case. He had abolished maternal mortality from childbed fever in his own clinics, and when he read of famous hospitals from which only

a minority of lying-in women departed alive, he could not control himself.

The German university professors were his chief tormentors, and Semmelweis wrote to them the terrible "Open letters," filled with hopeless bitterness. Pasteur and Lister had not yet spoken, and Semmelweis paid the penalty of being their forerunner. It is unhealthy to brood too long, and the day came when it was necessary to entice Semmelweis back to Vienna—to enter a lunatic asylum. There it was found that during his last gynecological operation he had wounded his finger—just a prick. He might have recovered from his madness, but the tiny wound spelled pyemia. Thus, the man who is now recognized as the savior of motherhood, died from "just a prick" of the disease whose identity with puerperal fever he had established at the cost of his career in Vienna. Many times, as a student, I have stood with bowed head before his monument in Budapest—the most sacred medical shrine in all Hungary—and thought of his life-saving discovery and of his own tragic destiny. Every surgeon who reads these lines can add his own chapter to the unwritten volume entitled: *Just a Prick*.

In the summer of 1913 Dr. K. summoned me to St. — Hospital in a sleepy town in Wisconsin, to perform a goiter operation on one of his patients. He scrubbed with me and acted as my first assistant. Knowing Dr. K. had served as a competent intern and was a splendid man, the regular intern took second place at the operating table. It was not a difficult case. The operation was completed without incident and when the stage of suturing was reached, I changed places with Dr. K., permitting him to close the incision. I felt he wanted to do more than hold retractors. He had been gracious enough in inviting me to his city to operate, despite my youth, and frankly, I was flattered. He could readily have engaged older and more experienced surgeons, who lived in town, or at least nearer to Dr. K. than I did.

While he was introducing the first suture, I suddenly realized that instead of picking up the patient's skin he had picked up the skin of my right hand. The point of the needle penetrated glove and skin. I immediately withdrew, removing the glove and dabbing with iodine the insignificant-appearing wound. Dr. K. and the intern closed the incision in the patient's neck. At luncheon, a little later, Dr. K. apologized profusely for the acci-

dent. "Forget it," I said. "Just a prick." I dismissed the incident wholly from my mind.

I returned to Chicago flattered and proud, working at full speed. The prick was forgotten. Forty-eight hours later, I noticed a little itching on the back of my hand, and in rapid succession the hand became swollen; red streaks ran up my arm. The lymph nodes became sensitive and I knew only too well that I had been infected with a virulent micro-organism. I was put to bed. Well-meaning colleagues shook heads ominously as my temperature steadily climbed upwards. Various therapeutic measures were attempted, but conditions grew rapidly worse. Fim's eyes were red and suffused with tears, though she kept her courage and carried on like a soldier. (The fortitude of Fim in every crisis of our lives has held something of the magnificent in it.) I knew the doctors must have told her of the seriousness of my condition. By the next day my temperature had reached 104° F.

As my temperature raced on to this new height, I must have gone into a delirium.

I stood suddenly in an amphitheatre somewhere . . . I was demonstrating something or another . . . My patient was coming out of the anesthetic on the table . . . He was moving . . . He was sitting erect . . . I heard myself shouting, Give him the ether! Give him the ether! . . . My right hand, something was wrong—I was dropping my instruments . . . How terrible! My patient's life was at stake, my hand refused to work. In my agony I shouted aloud, for as I opened my eyes, Fim was bending over me, her beautiful eyes filled with anxiety . . . She was holding and stroking my left hand . . . "Never mind, dear, never mind," she was saying. "Everything will be all right . . . I will take you to the hospital. We have been so happy together, we shall still be so . . . What is a hand in comparison to my sweetheart's life . . . You shall still be doing great work." She hesitated—"There are many fields besides surgery—your work will go on." She was soothing me with gentle, loving words, and softly caressing me as she spoke: a language known only to a tender, loving woman . . . Now I understand that the sound of drums had been the pounding of my blood as it raced through my blood-vessels, carrying its poisonous load . . . I looked over at my right hand, the fingers swollen, spreading apart grotesquely and fearfully discolored . . . My heart sank within me.

I should have to lose my hand!

I understood now why I had so often heard the word *amputate* in the past few hours . . . My colleagues had discussed it at my bedside, but I had only dimly comprehended its meaning . . . I could live, perhaps without my right hand . . . but before my disturbed vision marched men, women and children, smiling, happy, grateful, people I had restored to health and usefulness . . . and again another army came marching, a long, thin, pitiable procession—they were the sick, the maimed and the suffering; they were in white cots, in wheel chairs, on crutches . . . a motley army, marching to death . . . Their needs challenged me . . . By my bedside stood the grave, strong figure of my beloved and revered teacher, Nicholas Senn . . . Again his voice spoke in that firm, determined spirit I had so loved as a medical student: "Ubi pus ibi evacuo" . . . Suddenly I gained strength . . . I had saved others. I must save myself . . . I had work to do . . . The army marching, lame and sick and suffering; they were looking to me . . . I should not fail them nor my burning desire to reach my goal as a surgeon.

I seemed no longer myself, but as if the power of many healers possessed me . . . I must hurry! I had little time . . . "Take the dressings from my arm," I said to Fim, in as steady a voice as I could muster . . . She looked at me in alarm . . . "Take them off!" I shouted. Without a word, she obeyed me. Fim knew from past experiences, that once my mind was made up, I was adamant . . . The back of my hand was fearfully swollen, hot, puffy and red . . . I palpated carefully with my left index finger, I felt fluctuation . . . Still the noble figure of Nicholas Senn stood by: "Ubi pus ibi evacuo." "Fim, darling," I said, "there is a cocaine solution in that blue bottle on my chemical table. (Novocaine had as yet not been discovered.) Sterilize for me a hypodermic set, a small scalpel, and with them bring plenty of bichloride solution and dressings." Her beautiful eyes darkened with distress . . . "You cannot do that!" she cried. "You cannot operate on yourself with your left hand. Oh! let me call Dr. —. If you insist . . . I beg of you—let another surgeon operate!" I thundered back: "Do you wish me to lose this arm, or even die? Do as I tell you to do—I am rational."

Realizing that argument was both futile and dangerous, Fim obeyed me. With my good left hand I injected the line of pro-

posed incision on the back of my infected right hand. I made two incisions, each measuring two inches in length, running parallel. I then made another of similar length along the most edematous portion of my forearm. I then inserted drains, staggered back into my bed, and asked my nurse to apply hot boric acid compresses along the hand, forearm and arm. This, with one-quarter of a grain of morphia, finished the job. Soon I was asleep.

At two o'clock in the morning I awoke. The beautiful face of Fim looked at me lovingly, and by the dim light I could see she was smiling. I knew things were better. The pain in my arm was still intense, and the fever, as I judged from the seriousness of my nurse as she looked at the thermometer, must still be high.

Gradually, I came out of danger. I made a complete recovery. Today two tell-tale scars on the dorsum of my hand remind me of the time when I determined to operate on myself and thereby saved my hand. I have a hand which has served me well throughout these years. It has ministered to many other hands, and other parts of the human body. I often recall my passing remark to Dr. K.—“Just a prick.”

In Alphonse Daudet's *Tartarin de Tarascon*, that swash-buckling tale which mightily entertained our grandfathers, is heard the valiant cry: “Strokes of the sword, gentlemen, strokes of the sword! Not pin-pricks!” The author was not a surgeon, and did not realize that a pin-prick may be deadlier than the sword.

THOUGHTS ON TURNING FORTY

A MAN'S fortieth birthday is a momentous milestone. Up to that time one's thoughts, ideas, plans and hopes have always some of the unfettered freedom of Pegasus, at liberty to trample the clouds. After that time, one may no longer escape the hard necessity of making dreams pull in difficult double harness with experience. One is no longer a "promising" young surgeon. Promises, and especially those promises a man makes to his young self, are falling due. Now or never they must be carried out.

Reaching this milestone, I took stock of myself. By every test by which most men measure satisfaction in their hearts, I was fortunate.

I had a tremendous practice. Long study, conscientious endeavor, incessant hard work, and my fluency in a number of languages had given me a professional standing which drew to me people of all sorts, from all walks of life. The practice of surgery was still, as it always has been, a high and holy adventure to me. Never for a moment did I regret my choice of calling.

The material rewards for my work had been great. From the first, I had turned over my income to Fim and she had shown real genius in managing first the meager fees of a beginning physician and then the steadily growing income of a man starting to succeed. Through judicious investments, she had doubled, trebled, quadrupled the original sum. We were becoming affluent.

And we were, as I think we almost guessed at the time, on the threshold of even great affluence—the Golden Twenties when I, like thousands of others—bankers, brokers, business men, doctors, lawyers, surgeons—seemed miraculously to acquire the Midas touch.

As the twenties began, I still remembered to twit Fim occasionally with her one failure as an investor—that purchase of the Lake Shore property, now seedier and more unprepossessing than ever. I thought of that bad guess one afternoon when one of the engineers of Lincoln Park came to my office at the hospital to take home his mother, for whom I had performed an operation.

“Aren’t you ever going to extend Lake Shore Drive?” I asked him.

He shot me a quick, sidelong glance.

“Do you want it extended?” he said.

“Of course I do,” I told him. “Don’t I own property up there?”

And then, because his silence seemed to confirm my own suspicions, I added:

“I guess I’d better just cross that off as a bad investment and forget about it!”

He laughed and went on his way, with a shrug of his shoulders.

A few weeks later I knew the reason for the shrug and for the laugh. Scores of workmen were on the scene. They were filling in the Lake Front, getting ready for the new road! Overnight, that worthless property of ours turned into a gold-mine. It was worth a thousand dollars a foot. We had a hundred feet of front and our tract was four hundred feet deep. Fim had been right, as usual!

And Fim went on being right. She divided the land into two two-hundred-foot parcels, one facing east across the Lake, the other fronting on Frontier Avenue. The second of these we held for our own use. Fim’s genius erected there a fifty-apartment building called “The Frontier.” It was valued at close to half a million dollars and it would have kept us affluent throughout our lives—except— Well, it’s better to forget the Frontier now. We lost it in the debacle of October, 1929.

Roy F. France, popular architect, bought the other lot, paying us with a second mortgage, which incidentally behaved as second mortgages were wont to do in those chaotic days when markets and investments went to smash. But before the smash came, we saw the magnificent edifice of Lake Shore Towers rise from the ground sixteen stories above the spot where our old fisherman once lived so peacefully. It was a coöperative apartment building, one of the many being built in those days, and it was perfect in structure and in appointments. When Mr. France pro-

posed an adjustment in the mortgage through transfer to us of ownership in apartments in this building, we accepted with alacrity. And shortly thereafter we took possession of our new home.

Fim's genius has made that dwelling a gracious setting for our lives as well as a place of comfort and convenience. As soon as one steps into the reception room, with its brocaded walls and its mirrors reminiscent of Versailles, one is already far away from the hurly-burly of a great modern city. One can feel the refreshment of a day long past.

Success lay well within my grasp—financial success and the much more precious professional success for which I had worked so long and so hard. I ought to be the happiest of men, I told myself on that fortieth birthday of mine. And I knew in my heart that I was not wholly happy. Neither advancing reputation nor mounting possessions was an antidote to the restlessness which was always with me.

The real root of my trouble was much deeper than a parent's nostalgia at a son's coming to manhood. And the trouble itself was an old one. It was an uneasy realization that the practices in the world of medicine in which I was now a full citizen fell far short of the ideals which practitioners honored with lip-service. It was a growing consciousness that those who should have been working to close the gap between things professed and things done were, for the most part, complacently looking the other way.

The bitterest disappointment of my life, a disappointment recurring again and again—and still recurring even today—has been the discovery and rediscovery that surgery can be, for many surgeons, a business, not a profession. If all of us agree to keep together, these men seem to say, if none of us goes pioneering out in front, setting a pace too hard for the majority to match, we shall all do well and do it easily. Getting ahead in the profession is a matter of politics, they imply. It is not *what* you know but *whom* you know that counts.

Politics is a tough, shrewd battle of wits. Perhaps it has its place in life, but that place is not in the hospitals, the professional schools, the associations in which professional men gather to seek the highest good of their profession. Whenever I have met it in such surroundings—and how many, many times I have so met it—it has seemed to me that I was witnessing the great be-

trayal of all the high ideals which thousands of real surgeons are striving to serve.

That game, played by small men who are jealously fearful that the newcomer with the new idea threatens their security and peace, is responsible for the almost insurmountable barriers placed in the way of scientific progress. It holds back, slows up sometimes to century-long standstill, the free forward march of those who should be concerned only with the alleviation of human misery.

The way of the pioneer is hard. Probably it is right and just that it should be. There is wisdom in the old counsel:

"Be not the first by whom the new is tried,
Nor yet the last to lay the old aside."

Though just how progress would be attained were everyone to follow this almost-golden rule is hard to explain. It is necessary that those proposing innovations assume the burden of proving their claims. A conservative core in any profession or calling is an essential background. Otherwise quackery and fad would run rampant to a far greater extent than they do today—and that is a large enough extent, as every doctor knows.

But there are degrees of caution. And every student of medical history is bound to admit that its pages show far more of stubborn tradition-serving than of judicious willingness to "prove all things." The pages of that history are far too full of records of medical martyrs—men crucified today, crowned tomorrow.

Any physician today is willing to laugh with superior amusement when he reads the prescriptions of his ancestors in the medical calling. He thinks it very quaint that anyone ever should have been so lacking in scientific knowledge as to prescribe that a spider tied in a rag and wound around the arm would prevent ague; that "heliotropin" could, among its other wonders, deter the steps of those who would go "aburgling." But I am very sure that, transplanted back into those dark and ancient days, most of the laughers would have been defending those cherished nostrums against the upstarts daring to throw into the darkness the first rays of scientific medical knowledge.

The progress which medicine has made has been due, one sometimes sadly thinks, to the simple fact that ideas are harder to kill than men. The martyr is destroyed, but his faith lives on,

delayed in coming to fruition by the stupid cruel attitude of those to whom the new is always bad, but coming to fruition nevertheless in some inexorable way.

"Shut the door or some of Lister's germs will come flying in!" was the popular joke of surgeons of Lister's lifetime. But the theory of antisepsis outlived their laughter. Ambroise Paré, whose great genius has enriched surgery, was slandered and persecuted all his life. Robert Liston was censured by the Royal Medical and Chirurgical Society in 1843 for a significant paper "On a Variety of False Aneurism"—nonsense, said his learned colleagues, the man has just made a mistake, he doesn't know the difference between an aneurism and an abscess! Frère Jacques, who originated the lateral method of removing stones from the bladder, was exiled from his beloved Paris in his lifetime and had his name removed from the church registry after he died. Drs. Dunlap and Atlee, pioneers in pelvic surgery in the United States, earned the sobriquets of "murderers" and "butchers."

And yet the most conservative surgeon of today is willing to acknowledge that he profits from the hard-won discoveries of men like these, as he confidently and with a sure hand opens his patient's abdomen, operates on vital organs, performs the miracles of pelvic surgery which are now approved techniques of his profession.

Such a long, tragic list, those martyrs! Hahnemann, forced into exile from Leipzig one hundred years ago because he dared pioneer in the field of homeopathy; Jenner, accused of spreading disease with his disease-fighting vaccination; Simpson, branded a blasphemer because his discovery of chloroform anesthesia might be used to ease the "God-ordained" pangs of childbirth; Semmelweis, rewarded for his epoch-making discovery of the causes of puerperal fever by being hounded to death in an insane asylum; one could go on enumerating these heroes and their tragedies.

But medical martyrdoms which make the pages of history are those followed by the vindication of time. Is time the true, infallible righter of wrongs? Unrecorded on any page of that history must always be those ideas that did not survive, life-giving discoveries once almost brought to light and then forced back into darkness to await rediscovery. That is the worst waste our profession encourages.

Sometimes it seems to me that the medical profession grows more hidebound instead of less, as the light of science brightens up more and more dark corners of ignorance. I think back to the dim and primitive world in which Paracelsus lived. Things must have been different then. True, that learned and eccentric man came to a bad end when the servants of the enraged doctors in Salzburg threw him out of the window and broke his neck. But while he lived, he occupied a professorial chair, and his enemies, even those who thought him a quack and an impostor, even those whose defects and malpractices he audaciously exposed, heard him, argued with him, gave him freedom to state his views and to prove them.

Paracelsus today might not get pitched out of a window. He would be effectively muzzled before he could work his victims up to such a fighting pitch. If they could not plausibly attack his knowledge and his skill, they would resort to slander and brandish that almost mystic weapon—"professional ethics!"

How well that weapon works in modern times finds almost classic proof in the story of Dr. J. B. Murphy. I knew Murphy when he was a not very happy teacher at Rush and I a student there. And I blush with shame for my profession when I remember how some of his greatest achievements, his heroic ministrations to the wounded in the Haymarket riots, his competent service to Theodore Roosevelt, even, ironically, his spirited attack on the practice of fee-splitting, were smirched with the mud slung at him by his fellow surgeons—and slung in the name of "professional ethics"! What a perversion that the code of the surgeon, which ought to be a guiding star to lift the profession higher and higher, can be put to such base uses.

For years Murphy suffered both morally and physically as a result of this mud-slinging; and it is my firm belief that the sclerosis, or hardening of his coronary arteries, was augmented and his death hastened for that very reason. Before his death, however, he was heaped with honors.

I have no quarrel, let me hasten to say, with the men who earnestly strive to keep the high code of the doctor untarnished. And I know that it takes constant vigilance to maintain that code and all it stands for. Doctors are human beings and the mere sojourn for half a dozen years or less in the atmosphere of a medical school and hospital does not root out from their hearts the

weaknesses and cupidities which belong to human beings. If the profession is to hold itself to its high ethical standards, medical men must of necessity watch themselves, watch each other incessantly and patiently. There must be discipline, and rigorous discipline at times.

What I do object to, with all my heart and soul, is having "professional ethics" paraded like an innocent-eyed sacred cow, by men moved in their hearts by nothing more noble than good old-fashioned jealousy. I would much prefer to see it handled, as I once had the privilege of seeing it, with a liberal admixture of what the Irishman calls "bull."

The Terre Haute Medical Society devised that typically American system of managing a needed rebuke with a laugh and a light hand. Once a year this society meets for the sole purpose of "crowning the king of the suckers!" Candidates for this high office are men who, in the minds of the committee planning the crowning, have overstepped the bounds of medical ethics, indulged in braggadocio, unduly criticized fellow practitioners, but men who also have a known capacity to stand a little "ribbing."

Preparations for the meeting are elaborate and secret. Dictaphones, carried by "patients" in the conspiracy, planted in hospital locker rooms, concealed in corners, are used to collect the damning off-guard statements by which the doctor shows his true colors. The evening arrives and the unsuspecting victims, seated on the platform, listen to the records, with blushes—but with determined good humor. To the most flagrant self-revealed offender is tendered the crown, which he is obliged to wear for a year. And with it, be it added, is given also the sweet opportunity for revenge! For the King of Suckers of one year becomes the head of the committee to plan the next year's celebration.

I can attest to the spirit of camaraderie and good fellowship which prevails in that group. I spoke before them once while I was writing a book on *Facial Expression in Health and Disease* and I was watching their faces with particular attention to catch those tell-tale marks of distrust and envy which I have seen so often in medical meetings as well as elsewhere. There were no such marks discernible. And I am sure, too, that the ethics of that group is well above any average standard. It's not necessary to pull a long face in order to live by the light that is in you.

But this encouraging and cheerful meeting was still far in the

future when, turning forty, I brooded over the shortcomings of my beloved profession and wondered how one man, conscious of the presence of such shortcomings, could do anything, anything at all, to overcome them.

As far as I myself was concerned, I had managed to by-pass some of the obstacles which are put in the way of a young doctor. I had discovered, soon after my graduation from Rush, that those obstacles were there, when the men who were graduated with me had seemed to regard me as a rival to be thwarted rather than a colleague to be helped, when older men had seemed to be afraid to share with me their experience and wisdom lest I threaten their places on the ladder of success.

I had taken a direct, effective way of ridding myself of many hampering jealousies. I had joined with other men who shared my conceptions and continued my work.

My aspirations justified my dreams. One's service to humanity, regardless of race, color, creed, is what counts. My colleagues worked with me to follow the motto I unflinchingly followed: Never turn away a patient because he has no money. Our hospital had no endowment with which to cushion our service of that motto; we had only unshakeable faith that generous aid from sensitive men and women would be forthcoming to meet our need. We were giving away hundreds of thousands of dollars' worth of free service each year—and our faith in our fellows was justifying itself.

. . . It was not enough to have found for myself a channel for unmolested service. What could I do for others? What could I do for the younger men? I had talked with many of them. They were meeting the same reluctance of coöperation which I had met. Some established men in the profession seemed unwilling to pass on the fruits of their experience and knowledge. Surgical societies were riddled with political influence. More than once I have advised a young man to take advantage of his first years of practice to join the special professional societies whose doors, oddly enough, will close for him when his reputation begins to increase, when he begins to tread on the toes of his colleagues, to criticize their shortcomings, to try to point out the way toward advancement in his field. But this was negative advice at best. It did not go to the root of the matter. I knew that.

What could I do for the experimenters, the men with crazy

notions which might turn into great discoveries? Was there any way in which I could smooth the way for them so that they would have a chance to make their contribution to human knowledge without wearing a martyr's crown for their pains? If I valued my peace, it would be better to forget that idea! Let it once be known that I was encouraging young crack-pots and I would have the full pack at my heels again.

That fortieth birthday of mine was full of long, long thoughts. And it brought to sharp clarity certain resolutions which I have tried to keep in all the years which have followed.

I would, I told myself, keep the American Hospital a center of help and service for all men, keep it developing, if I could, more and more closely into the pattern which the needs of the common man demanded.

I would work constantly to make available to the young men of my profession every scrap of experience and wisdom years and study brought to me. My courses in surgical techniques at the American Hospital, later my clinics at the Cook County Hospital and my post-graduate teaching at the Cook County Graduate School of Medicine, were expressions primarily of that desire. My books, which I began seriously to write at this time, were prompted by the same motive.

I would keep my own mind open to new ideas and my doors open to those who came bringing such ideas. Perhaps I should waste some time chasing will-o'-the-wisps. Far better to do that than to miss a chance to follow an authentic gleam.

And I would, patiently but hopefully, keep alert watch for the opportunity I knew would come to use my influence and my ability in coöperation with others to change and improve the conditions of which I so sorely disapproved in the associations of medical men the world around.

Ambitious? Certainly. I was very ambitious at forty. I am still more ambitious today. . . .

ADVENTURES IN RESEARCH

OPPORTUNITY to test out the strength of my resolves was not long in coming.

One busy afternoon my rush through hospital corridors was checked by a somewhat seedy stranger. He was thin, tall, gangling, and there was a look of defeat in his pleading eyes, as he said:

"Doctor, I would like an hour of your time."

An hour of my time! And on a day like that when everything seemed to be happening at once!

"Impossible," I said shortly, but I saw real distress in his face.

"It's not money, Doctor. It's your ear. And I am asking, not so much for myself, as for humanity."

Something in the quiet dignity of his voice rang compellingly true.

"Come to see me at my home this evening," I said, "and we will talk."

The interview was long. My visitor was LaPorte, a chemist, and the subject on which he asked my attention was a discovery in connection with aluminum-potassium nitrate, later to be known far and wide as A.P.N.

"You know, Doctor," he said, "that potassium nitrate alone is an irritant when applied to the skin, but that when it is combined with aluminum to form aluminum-potassium nitrate compound it loses its irritant quality. You know, too, that when this A.P.N. compound is applied to healthy skin on a healthy area of the body, it has no effect whatsoever, but that when it is placed on a surface beneath which there exists a pathological condition, a diseased bone, for instance, a reaction is set up which shows clearly that something abnormal is beneath the surface . . ."

I nodded. He went on, speaking with increasing eager earnestness.

"I am convinced—and I think I am proving it with my experiments—that the compound is more than a detective, that it may be used not merely to discover but to cure diseased bone conditions. I believe that it dialyzes through the skin, finds its way to the diseased bone, and sets up an action both salubrious and curative. It is not an antiseptic, on the contrary it augments bacterial growth. By using it and fanning the defensive forces of the body, we can eliminate the diseased focus in the bone."

He was silent for a moment, then went on more urgently:

"This isn't just theory, Doctor. The method has been used and used with good results on many patients in Chicago hospitals. But it needs to be developed further. There must be more research, much more testing and trying, before it reaches the perfection I can see for it. And I have no money for such researches . . ."

"Surely," I said, "you have already reached such a point in your studies that it should be simple for you to interest specialists in your field to help you carry your work to its full fruition."

"Yes, Doctor," he said, with a rueful smile, "I have. And that is the real reason why I am here today."

The story came out then, and I blushed as I heard it, blushed for my colleagues in a great profession. Three men of medicine, well known among my Chicago confrères, had offered LaPorte enthusiastic help with all his researches. If his discovery could be proven effective in the treatment of osteomyelitis, they told him, its possibilities would be limitless. They had filled him full of bright dreams and promises, and then they had taken him to a lawyer to work out the mundane details of the combine which would give A.P.N. to the medical profession.

Very quietly he told me the terms of the proposed contract.

"Preposterous!" I exclaimed. "They would get all the profits from this discovery of yours. You would get only a few whiffs of glory—if you got that!"

"Exactly, Doctor," he said. "I'd get just what the mouse got when he walked into the lion's jaws! But don't you see that I am helpless? I have a wife and child. They must live and so must I. What can I do except take the offer of these men? They won't let me starve, not until I have produced the results they

want anyway. I shall have to come to terms with them, unless . . ."

"I know," I said quickly. "And, thank God, I have the means to help you!"

Within a week, LaPorte was installed in a well-equipped laboratory in our hospital, where every facility he needed was placed at his disposal. Lydia O'Shea, a member of the Nurse's Board of Registration and sister of the noted Sister Mary Rita, able superintendent of Mercy Hospital, was engaged to assist in the clinical application of the compound. I worked with LaPorte for a number of years. I have reported my results in the *Annals of Surgery* (Vol. LXXVII, Jan. 23, No. 1), in the *International Clinics* and in some of the leading medical journals here and abroad, and have demonstrated the application of the procedure here and in far-flung medical centers. Many patients who had been operated on many times for osteomyelitis without results responded to this treatment in a most satisfactory manner.

LaPorte's story moves on, away from his days of medical experiment. He had a fertile mind and an insatiable curiosity which kept him asking questions in every area in which his chemical knowledge might possibly find answers. The cinema industry was growing by leaps and bounds and its possibilities fascinated him. One day he perfected some essential sound device or gadget and promptly thereafter became consultant to one of the largest of the great cinema corporations. I hated to say goodbye to this studious, serious, self-sacrificing man. And the news, which came all too soon, that he had developed tuberculosis and died, gave me the grief of a personal loss.

Out of the first World War no stranger aftermath appeared than the sudden hope, surging through feminine—and sometimes masculine—hearts, that where nature had been niggardly in her gifts of pulchritude, the knife of the surgeon could remedy the lack.

If soldiers whose faces had been torn away by bursting shell on the battlefield could come back into an almost normal life with new faces created by the wizardry of the new science of plastic surgery, why couldn't women whose faces had been ravaged by nothing more explosive than the hand of the years find again the firm clear contours of youth?

If noses and ears and chins and hands could be rebuilt when war presented a tragic necessity, why couldn't offending features which had caused their wearers embarrassment and shame be quietly remodeled nearer to the heart's desire?

Into this new field created by the age-old thirst for beauty and by the new half-knowledge of medical and surgical miracles, rushed hundreds of quacks and charlatans. I have seen the record of their dreadful work in scarred faces and bodies, in irrevocable ugliness substituted for slightly faded beauty.

Where quacks and charlatans rush in, it is the part of wisdom for any man who values the spotless integrity of his reputation to remain aloof. And yet, does not that very aloofness play directly into the hands of the impostors? I believe, as every reputable surgeon believes, that the practice of plastic surgery should be drastically restricted by law to the ranks of qualified surgeons, and I can think of no punishment terrible enough to mete out to the practitioners who use inadequate skill and calloused consciences with a single eye to the golden rewards. But how are these criminals to be rooted out unless the man of real skill and knowledge is willing himself to enter the arena and drive them out?

For the quest for beauty is not to be denied by a disapproving frown from the dwellers on medical Olympus. It is age-old and, no matter how the stern Puritans of each succeeding generation preach that beauty of soul is far more to be desired than beauty of body, it will go on being a compelling drive in human hearts. And why not? I have always inclined to the religious creed which postulates that "the body is the temple of the Holy Ghost and must be kept pure and holy." To which I would add, "beautiful and wholesome and healthy." The right to be beautiful! Not attainable, alas, by every son and daughter of Old Adam, no matter how loftily the Constitution assures us that we are "created free and equal." But the right to seek symmetry, or shall I say presentability—who can deny that?

Museums of archaeological relics, prehistoric tombs, bear witness to the human yearning toward that perfection with which ancient mythology endowed its deities. Old Chaldea knew the dyepot and the curling iron. Homer wrote of 'tiring women, of unguents, pomades, scents, and essences.

Until our day the beauty-mongers of the world were content,

for the most part, to tinker with cosmetic aids externally applied. And the almost mystically compounded remedy for faults and blemishes holds its own today. We have ceased to advertise such products as that "Wuin-Essence of Pearles," which was a favorite cosmetic in Tudor times, or the elixir "richly prepared with Venice Treacle, the greatest preservative that art or nature can suggest," or the "Sublimated May Dew" which was such a specialty of that notorious beauty quack of London, "Doctor" Stephen Draper, who in 1686 announced "'Tis undeniable that Nature has so Illustrated some Women with Beauty that they cannot be beholden by Art, yet Nature without Art is frail as we see in plants and flowers which perish for want of Artificial means or fade by unskilled hands, so it is with Beauty." The beauty business keeps pace with the times. It is the Vitamins which have swept into popularity of late, a good development probably, though the school of beauty culture which recommends the use of vitamins internally—in carrots for example—rather than externally in face cream loses out often because it lacks the element of mystery and incantation which beauty-worshippers have learned to expect. They expect mystery and they also expect expense, measuring today, as they measured in times long long ago, the value of their cosmetics by their cost; forgetting now, as always, to look with careful eye on the ingredients which make up the prescription. The gay old boys of Tudor days were quick to advertise that their nostrums were "made without Mercury." Sometimes they were! The danger was recognized then, however. And yet today many a modern "beauty aid" has been weighed and *not* found wanting in its load of poisonous antimony.

The decade following the war added the surgeon's knife to the stock in trade of the "beauticians." No one who knew the miracles that knife had wrought in military hospitals could deny that here was a tool which, in truly skilled hands, could, indeed, accomplish much. I knew that so used it could, nevertheless, turn a double-edged blade to injure the man who used it. And yet there seemed no alternative for me but to work, to the limit of my ability, to perfect the sound techniques which I knew to be the profession's best weapon against the charlatan.

With facial plastics I have had comparatively little to do. The reconstructive surgery which I began to develop in the 1920's and which I have continued to study and practise ever since has

been chiefly devoted to the remodeling of portions of the human body which have developed abnormally. I have worked with especial interest and devotion to restore to normal condition and natural proportions bodies of women. Corpulence—that arch-enemy of womankind—can work such deformity and ugliness where nature intended beauty! The woman who finds, as many do, that this enemy has her in his power, that, in spite of every effort of hers, her body is becoming distorted, grotesque, unsightly because of accumulating adipose masses, suffers both physically and psychically. If she is a sensitive business woman, or an actress, or a model, or a singer—or anyone who must face the public frequently—her plight is especially desperate. She can hardly help developing an inferiority complex, a shrinking from social contacts, and a deep mental depression. And the surgeon who can help her out of such difficulties renders both a personal and social service.

Let me say at once that surgery is by no means advisable in every form of obesity. Generalized adiposity resulting from endocrine disturbances is a matter for the internist. Surgery is not, in general, indicated until medical, dietetic, and all other measures have proved ineffective. Strictly localized fat deposits are the ones which most often call for surgical removal, deposits in the breast, abdomen, arms, for instance. And even when surgery seems the only remedy for conditions like these it should be undertaken *only* by a surgeon with accurate anatomic and physiologic knowledge, special surgical skill, and also—and the importance of this cannot be overemphasized—a peculiar surgical and esthetic sense, so that the result of his work will be a correct modeling of the form which will be in esthetic harmony with a correctly proportioned body. This work is, in truth, a very high type of sculpture—surgical sculpture—and the surgeon who undertakes it must possess the artistic sense of a sculptor besides being a thoroughly trained surgeon.

Nearly twenty years elapsed between my first operations on female breasts and other parts of the female body and the publication of my book *Plastic Surgery of the Breast and the Abdominal Wall* in 1942. Into that book I tried to put the fruits of my researches and my experiences of two decades, and to point out both the possibilities and the dangers in this field.

My colleagues at Cook County Hospital asked me to take

Blanche's case. She was, when I first saw her, a beautiful young woman of about twenty years of age. That is, she would have been beautiful if some disturbance of the pituitary gland—that little gland situated at the base of the skull, which has so much to do with the regulation of metabolism—had not resulted in abnormal fat deposits. She weighed *over four hundred pounds!* The condition was not new. She had weighed a good hundred pounds when she was six, and every form of medical treatment, every possible dietary régime, and every conceivable kind of therapy had been tried without any amelioration of her affliction. She was in despair. Her physicians asked me whether I would attempt to do with the knife what they had not been able to do by other means.

The task was stupendous. It could be done, I believed, but it would mean not one operation, but several. It would mean a series of ordeals which must try the courage and stamina of anyone. Blanche was transferred to my care and I had a long and very frank talk with her. I found her a brave and intelligent girl. She faced the situation squarely and she never faltered or grew discouraged as we moved along the long difficult road toward her rehabilitation.

That was over a year ago. Today Blanche weighs about half what she weighed then. She knows that she need never fear that the hated burden will return to her, for fat cells do not accumulate in mature scar tissue. While convalescing, she was helping other patients in the hospital, studying laboratory technique, preparing herself for a useful, busy, happy life.

"She, being a gouty old queen," writes Galen of one of his patients, "did mash six pounds of Rosemary to a powder, and instead of repenting of her sins, bathed in it until she became so young and sprightly she began to look for a husband!"

Closely allied with the quest for beauty is the quest for youth. And that quest, too, flamed into new intensity and hope when, in the 1920's, fashionable dinner parties and cracker barrel confabs, as well as sedate gatherings of the medical élite, were alive with the whisper—"Monkey Glands!"

Rejuvenation! The Fountain of Youth, in search of which explorers had died and scientists eaten the bread of disappoint-

ment, had been discovered. Voronoff, reputable scientist in the College de France, said so.

Rejuvenation! The word was like a spark dropped in a barrel of benzine. The explosion was heard the world around.

Fakirs and charlatans were quick to smell the unlimited gold which the sudden popularity of Voronoff had put within reach of their grasping fingers. They had not the remotest idea of the real work Voronoff was doing. They had neither the time nor the brains to find out. All they knew was that hundreds and thousands of people were ready to pay fabulous sums to anyone who would quickly bring the scientist's work out of the laboratory into the market so that they could buy back lost youth without, as old Galen said, "repenting of their sins."

That the old, the worn-out, the sick, the miserable, the impotent, the weak, the incompetent, could be made whole, be made young, be made strong, be made new—be actually reborn—by the implantation of a testicle or an ovary! The news spread like a fire fanned by the wind. Flickers of hope were fanned, by irresponsible promises, into a roaring conflagration.

Science, still seeking proof and more proof, paused aghast. In this popular frenzy, the extreme delicacy of the operation involved, the still unanswered questions with which scientists were wrestling, were lost sight of completely. Men who were earnestly and conscientiously trying to extend the limits of human knowledge wrung their hands in horror as they saw their half-completed discoveries debauched and put to the basest uses.

For, of course, Voronoff had never made the claims which an excited generation of youth-seekers credited to him. And, of course, Voronoff himself was only one in a long line of scientists who had made their contributions to truly great discoveries in the realm in which he worked. My own work in this field deserves, and shall have, a chapter to itself, for it developed beyond the limits of an "adventure in research" and became one of the absorbing interests of my life over a period of many years. It has been gratifying to me, as to all other serious scientists working in this realm, to watch the "monkey gland" furore give way to newer preoccupations in the public mind, so that the forward march of real science in this important field is once more unimpeded. I think that it is possible now for even the most un-

scientific mind to understand that gonadal implantation is not a mere soda-fountain affair, to be dished out at every street corner.

Part of the fascination of research work in any profession comes from the alluring bypaths which appear as one follows a line of inquiry not too well trampled by the general throng. Sometimes, with strength of mind and resolution, one looks for a minute down the quiet leafy lane and then plows on. And sometimes one does, indeed, turn aside toward whatever the new path promises. I have never made up my mind which is the wiser course. But I do know that one of the most fascinating of the bypaths I ever trod branched off the road of my studies and experiments in gland transplantation and function.

A letter from Steinach of Vienna was the prelude. He wrote me concerning a young Hungarian friend of his, Theodore Koppányi, Doctor of Philosophy, engaged in an odd enterprise of tampering with nature.

"Koppányi," Steinach wrote, "has been most successful in transplanting the eyes of fish, of rats and of rabbits. He has no opportunities to continue these tasks in Vienna. Frankly, my friend, will you help him?"

There could be only one answer to such a request.

"Send him along," I wrote back. And in a short time the young would-be wizard was on his way to America and to our laboratories.

I awaited his arrival with eagerness and curiosity and perhaps just a dash of misgiving. In spite of Steinach's praise of him, how could I be sure that he would not turn out to be a crank obsessed with an impossible fancy?

I was both surprised and pleased when I saw him—a youthful, healthy boy, with an unsophisticated air and a foreign haircut and dress which made him an odd figure in the bustling streets of Chicago. And my surprise and appreciation grew as I talked with him, found that he was fully conversant with the widely scattered yet highly important literature on tissue transplantation. We talked the same language, and talk we did for hours and days and weeks! It was a joy to learn, among other things, that he was familiar with the inspired work of Kammerer, who had visited me in Chicago and who, even at that time, showed the

restlessness and pessimism which later caused him to break under political persecution in his own country and to commit suicide in Russia where he found refuge.

I installed Koppányi in a well-fitted laboratory. A research worker must have no mundane worries, I told myself, and I did my best so to arrange matters for my new protégé. He was grateful. I had made it easier for him to work in Chicago than it had ever been in Vienna, he used to tell me.

The picture of Koppányi which comes back in memory is still vivid. He was an odd fellow to look at. His big-lensed, broad-rimmed spectacles, the perennial huge black cigar in his mouth, seemed properties better fitted to movie comedy than to a scientific laboratory, even if that laboratory was the scene of such seemingly comical labors as that patient, unceasing process of taking the eyes out of one fish and putting them into another.

I worked with him much of the time. He and I became the favorite benefactors of every fish-vendor within reach. They beamed when they saw us coming. For we bought fish of all kinds and colors—and asked for more. We bought white rats, too—the standard *Norvegicus albus* universally used in laboratory experiments—and guinea pigs, rabbits, lizards and frogs. We developed quite a menagerie before we got through.

We worked together and, when work was done, there were those grand long talks when we both relapsed into our common mother-tongue and threshed out the whys and wherefores of the universe at large and our experiments in particular in fluent and satisfying Hungarian.

Koppányi was as interested in my experiments as I in his. I remember well his excitement the day he came to tell me that Professors Carlson, Lillie, and Maximoff were coming to inspect gross specimens and microscopic slides on my gland transplant researches. That was a great day for both of us. The distinguished guests spent three hours in careful examination and appraisal of my specimens of auto-transplantation, homotransplantation, and heterotransplantation of gonads of both sexes. They were particularly interested in the histologic structure of a transplantation of human ovary into a *Macacus rhesus* monkey and vice versa. They questioned me about the clinical manifestations following these experiments. I have reported these experimental studies in *Endocrinology* and other scientific journals.

Gradually Koppányi found his American legs. When I considered that he was sufficiently acclimated to his new surroundings, I sent him to the University of Chicago to meet Professor Anton Carlson, who received him cordially, and who later was instrumental in securing for him the position of Professor of Physiology at the University of Syracuse. Incidentally, I heard from Koppányi only indirectly after he left me to take that position. I have often wanted to know the final conclusions which he reached in the matter of eye transplantation, and I have still more wanted to know that life was treating him well. No news is good news, they say, but in this case I have my misgivings.

Could the eyes which Koppányi transplanted with such patience and zeal really see? I was always doubtful about that. And yet when I visited Vienna years later the head of the Department of Histology at the University there showed me microscopic sections showing optic nerve regeneration in eyes which Koppányi had transplanted while he was still in Vienna.

When I think of Koppányi, I think also of another young assistant of mine in those days, Boris Berkman. How much alike those two boys were! The same keen blue eyes behind thick lenses, the same full sensuous lips, the same concentration of purpose, the same catholic curiosity. Berkman helped me with my experiments and went off on his own excursions of discovery whenever the spirit moved him. He is much in the public eye as this book is written, but it is no medical discovery, no discovery relating to gland transplantation, which has put him there. Boris Berkman is the man who discovered that milkweed is good for many other things as well as the entertainment of small children who like to blow it around. The basic idea was to use this plant for control of soil erosion as this plant has a prolific and deep-reaching root system and can be grown under the most unfavorable climatic and soil conditions. At the same time he was able to prove that by utilizing all the by-products that can be derived from pods, stock and leaves, the milkweed plant is one of the most valuable industrial plants producing rubber, semi-drying oils; a very valuable textile fibre may be obtained from the stalk; and finally the milkweed floss that was found to be superior in buoyancy to Java Kapok. He has been trying for ten years to convince the world that the silky fluff in the milkweed pods is six times as buoyant as cork, warmer and lighter than wool. No one listened until the

fall of Java cut off America's supply of Kapok. Then the U. S. Navy asked Berkman for a supply of two hundred thousand pounds of the floss to be used in life jackets at sea and in the lining of high-flying airmen's suits. And the lowly milkweed promises to be one of America's important crops, especially up in northern Michigan where farmers are planting thousands of acres of it.

Short twenty-four-hour days! How could any man arrange them so that he could do the things he wanted to do in operating room, in laboratory, in study? I found I could cut such non-essentials as sleep and leave myself perhaps twenty hours a day for work. But what a short day twenty hours is when your brain teems with ideas and your hands itch with eagerness for work.

REJUVENATION OR REACTIVATION

THE brevity of life is the dark saga of the human heart. The folklore of every nation reflects the craving for the prolongation of youth, a protoplasmic hunger for its renewal. On the back of the Surgical Papyrus of Thebes—called the Edwin Smith Papyrus, after the American who discovered it—there still survives the “Incantation of Transforming an Old Man into a Youth of Twenty.” Thus, in the first important document in the evolution of surgery, unveiling the Egypt of 4500 years ago, we find this early people yearning for rejuvenescence. Every generation, growing old in its turn, echoes the words of the Psalmist: “As for man, his days are as grass: as a flower of the field, so he flourisheth. For the wind passeth over it, and it is gone; and the place thereof shall know it no more.”

The legends of all races reveal a ceaseless effort to recapture lost youth. In the endless forests, primitive man saw the perennial rejuvenation of nature: hence the prevalence of tree-worship, with sexual ceremonies in sacred groves. The serpent which renews its skin became the symbol of the Greek god of medicine, but the renovating motif in snake myths was known long before the days of Aesculapius. Stele and temple, papyrus and parchment, alike attest the struggle of the children of Mother Earth against old age—the inevitable conqueror who invariably arrives too soon.

Pools, whose waters restore youth and promote longevity, presided over by fertility deities, abound in fable and tradition. Old and barren women faithfully and hopefully bathing in these waters form part of the milieu of anthropology. Such waters have never been found, but never has the human race ceased to seek

them. Many have gone in quest of these waters, and at least one of the adventurers is familiar to every schoolchild—the Spanish knight, Juan Ponce de Leon, who fought valiantly against the Moors in Granada and accompanied Columbus on one of his voyages to America. During the few years of Ponce de Leon's administration of Puerto Rico, he amassed riches in land, gold and slaves, but his fortune mocked him as he looked into the mirror. He breathed heavily as he walked across his estates, envying every agile slave who bowed to the earth before him. The governor realized that he had grown old, and willingly would have exchanged his possessions for the poverty and power of twenty years.

Too eagerly he absorbed the tales of the Carib Indians: "On the Island of Bimini there is a fountain whose waters restore youth to the aged. It matters not how old you are, as soon as you drink from this wonderful spring you will again become twenty." Ponce de Leon obtained a royal grant, countersigned by the bishop of Valencia, to conquer the Island of Bimini. (The king, who was past fifty and had recently remarried, undoubtedly planned to have large quantities of the restorative waters shipped to Spain.) Ponce de Leon sailed for the Island of Bimini, and discovered the land which he named Florida. After various overtures to the Indians he was conducted to the sacred fountain. The priest who accompanied the Spaniards lifted his hand in blessing, while a native chieftain extended an earthen cup with the water. Ponce de Leon received the cup and raised it to his lips with trembling fingers. The Spaniards drank of the water; they pushed their hands in the water; they bathed their faces in the water. With religious conviction they gazed at their leader, awaiting the promised miracle. From the bronzed, grizzled and weather-beaten features of Ponce de Leon and his followers, not one wrinkle disappeared. The historic comedy ends in tragedy.

In a field where credulity flourishes, pretenders enter by a hundred gates to reap the abundant harvest. And since the failure of the sexual function is the cruelest reminder of the arrival of old age, it is here that the impostors have concentrated. For centuries, the vendors of love philters, virility nostrums, infallible pills, balsamic essences, royal powders, sovereign cordials, Baume de Vie, Elixir Renovans, Golden Elixir, and the Secret Arcanum, promised to any aging female with ducats to spare, the com-

plexion of Hebe, and offered to decrepit and impotent males the passion and virility of Juventas. The Syrop Vitae of Anthony Bellou, the Elixir Vitae of Salvator Winter, the Wonderful Elixir of Tom Saffold, the Glorious Spagyrick of Jone Case, and the Great Restorer of Ben Willmore were chiefly notable for the manner in which they restored the finances of their sponsors.

Human gullibility is limitless. The faith which could believe that monasteries all over Europe possessed the True Cross, or the bones of the same saint, accepted the assertion of Don Lopus, the Illustrious Spanish Doctor, that the very powder which kept the skin of Venus smooth, the powder which the goddess had transferred to the beautiful Helen, this powder which had unfortunately been lost at the sack of Troy, had happily been recovered in modern times by a studious Antiquary out of the Ruins of Asia, who sent a moiety of it to France for the ladies of the court; but that the larger portion, extracted to a quintessence, remained with Don Lopus; and that the power of this ancient powder had not declined one iota, for whenever it touched the young it preserved their youth perpetually, and whenever it touched the old it restored the complexion and feelings of youth.

While widespread quackery continued on its devious way, the dawn of experimental rejuvenation brought new hope to mankind. From the laboratory of Claude Bernard came the term and concept of *secrétion interne*—a key which opened an unseen door in biology. Claude Bernard's heir, Charles Edouard Brown-Séquard, followed the master into the realm of endocrinology when he experimentally produced Addison's disease by excision of the suprarenal capsules; by his treatment of acromegaly with animal extracts; by his contention that the gonads and kidneys possess an internal secretion; and by his pronouncement, "The internal secretions whether by direct favorable influence, or whether through the hindrances of deleterious processes, seem to be of great utility in maintaining the organism in its normal state."

The age of sixty-three is described as the grand climacterium of the male—a grandiloquent phrase, but it falls mockingly on the ears of those who have reached the age of sixty-three. At the age of sixty-three, Brown-Séquard received an honorary degree from the University of Cambridge, and upon that occasion a much older man (the eminent American surgeon, Samuel David

Gross) wrote in his autobiography that he was sorry to find Brown-Séquard looked much older than is usual with one of his age. Nine years later, at seventy-two, Brown-Séquard, irritable, impotent, suffering from gastro-intestinal troubles and plagued by urinary disturbances, appeared to have reached the end of his journey. His career was obviously over, and it did not seem possible for new laurels to weigh down that honored but wrinkled brow.

June 1, 1889, however, had not yet come, and that was Brown-Séquard's greatest day—the day in which an old man gave a new thrill to science. Addressing his colleagues on the date that has become historic, Brown-Séquard looked twenty years younger than the Brown-Séquard they had known. He reported that by testicular injections he had rejuvenated himself: his irritability, impotence, gastric and vesical infirmities had disappeared, and by means of the dynamometer and the ergograph he demonstrated his increased strength and energy. He rolled the clock of time backward for two decades, and mentally, physically, sexually, Brown-Séquard at seventy-two resembled the Brown-Séquard of fifty-two.

When his reports appeared in the Archives of Physiology, which Brown-Séquard edited in collaboration with Vulpian and Charcot, there arose an uproar of incredulity and wrath which has not yet entirely subsided. His alleged results were ascribed to his "senile-erotic imagination," and many physicians were either amused or incensed at what they considered the obscene folly of a scientist in his dotage. The pharmaceutical houses were less critical, and within three months of Brown-Séquard's announcement, testicular extract was on the market. Five years later Brown-Séquard was dead. It is true we cannot duplicate his spectacular experiment, but the importance of his work is now generally recognized. In the early years of the twentieth century, when Sajous made the first attempt to base a system of medicine upon the internal secretions, he appropriately dedicated his two stout volumes to the memory of Brown-Séquard. Even more conservative endocrinologists look upon June 1, 1889, as the definite birthday of the science of the internal secretions, regarding it as the day in which Brown-Séquard laid the cornerstone of organotherapy.

Cables and dispatches from Paris during the year 1920 set the

whole world agog with the news that a surgeon working at the Collège de France had made the discovery for which all mankind waited. The Collège de France was a name to awake medical memories. This was the institution reluctantly founded in the Renaissance by the glamorous Francis I (1530), as the result of repeated prodding by the French scholar, Guillaume Budé, remembered for his treatise on ancient coins and measures. It was originally known as the *Collège des trois langues*, since the first chairs established were those of Hebrew, Greek and Latin. The professors were recompensed directly by the king, the students paid no fees, and this school of free learning was regarded as an antidote to the formal scholasticism of the Sorbonne. After Francis added departments of mathematics, philosophy and medicine to the chairs of the three tongues, the first occupant of the chair of medicine was the Florentine, Guido Guidi, known as Vidus Vidius, whose name survives in the vidian nerve and artery and canal.

After Guido Guidi was recalled by Cosimo I to his native Italy—where his work on surgery was printed in the home of his friend, Benvenuto Cellini—celebrated native sons held the medical chair at the Collège de France: among them, in more modern times, was Laennec, the diminutive victim of a narrow chest. As every medical student now knows, before Laennec stepped down from his chair, he had enlarged the frontiers of medicine, for this pathetic and glorious man was the discoverer of the stethoscope, with which he was the first to hear the language of the pathology of the chest. The Collège de France continued to write brilliant chapters in medical annals. It was an important day for science when Magendie, then the foremost physiologist of France, shouted across the room, in his rough way, to a youth absorbed in dissection: "I say, you there, I take you as my *preparateur* at the Collège de France." Claude Bernard was the young man at whom this compliment was directed. Claude Bernard was of the Collège de France, Brown-Séquard was of the Collège de France, and now Serge Voronoff was of the Collège de France. The endocrinologic torch which Claude Bernard had lit, and passed on to Brown-Séquard, was now carried by Serge Voronoff. There could not be more appropriate auspices than the Collège de France for the announcement of a new epoch in rejuvenation.

According to the papers in 1919, Voronoff had announced that the transplantation of the gonads or testes of an ape to a human male would induce rejuvenescence. Voronoff was then on the verge of his sixties. A man of tall and imposing figure, he was distinctive in appearance, and truly a fit disciple, even to the outward eye, to carry on the traditions of the Collège de France. Voronoff is of Russian extraction, but thoroughly French. He has had wonderful training. His contributions to surgical literature have been numerous, his personality is engaging and his sincerity of purpose indubitable. Subsequently, he married Evelyn Bostwick of New York City, an American woman of distinguished ancestry, and of considerable wealth and prestige. She translated his work from French to English, and in her way was as helpful to him as Marie-Anne-Pierette Paulze had been to Lavoisier, or Marie Sklodowski to Pierre Curie. Mme. Voronoff was small of stature, with a wealth of Titian hair and fine, chiseled features. She looked like an adoring child beside the gargantuan stature of Voronoff, who was well over six feet tall.

The publication of Voronoff's claims in the American press was immediately followed by an avalanche of queries: Who is this Voronoff? What has he found out? Is he a recognized scientist? Is he a publicity hound? Can his claims be verified by an impartial committee? Does he accept patients? The questions have not yet ceased, for it so happens that Voronoff's doctrine proved to be one of the most profitable theories that ever fell into the spacious laps of quacks, while at the same time it acted as a most potent stimulant in the advance of endocrinology. It cannot be denied that Voronoff's announcement was itself a hormone, arousing an intensified study of the internal secretions.

Hardly had Voronoff's announcement been made public before a harsh tocsin of dissent was heard from a Chicago physician: G(eorge) Frank Lydston. He asserted he had done everything that Voronoff had done, and had done it better and earlier (see his articles on gland implantation in the *Bulletin of the Chicago Medical Society*, and in the *New York Medical Journal*, during 1914; and later in the *Journal of the American Medical Association*). Lydston, who was born in Tuolumne, California, was graduated, the year before my birth, from Bellevue Hospital Medical College of New York. He was one of the picturesque medical characters of Chicago, during and after his service as

professor of genito-urinary surgery and venereal diseases in the medical department of the University of Illinois. Aside from technical monographs on his specialty, he wrote such books as the *Diseases of Society*, *Panama and the Sierras*, *Over the Hookah*, and *Poker Jim, Gentleman*. These books are no longer read and I am afraid that the name of this interesting man is unknown to the present generation, except for the quotations in Havelock Ellis.

Lydston's dispute with Voronoff on the question of priority waxed loud and long. Lydston never did anything in a half-hearted manner. Some colleagues blamed his persistence on his Indian blood. The dispute has never been settled, and cannot be determined with precision, any more than we can state definitely the discoverer of ether. Oliver Wendell Holmes finally awarded the decision "To e(i)ther," but we cannot settle the priority as to rejuvenation so wittily.

I recall vividly that shortly after the Voronoff announcement, I found myself in the same elevator with Lydston.

"Frank," I asked as we left the lift, "have you been reading about Voronoff and what the papers call his rejuvenation work?"

Then he asked me a question: "Have you got a spare moment, Max?"

"Always for you," I replied.

"Come on up to my office."

We entered his office and without any explanation, as soon as we were behind locked doors, he began to disrobe. I was annoyed and puzzled. Suddenly, he turned around, as nude as a classic statue of Apollo. He remarked cynically:

"Take a look."

A physician learns not to be surprised, but on this occasion I was overwhelmed with amazement. I thought I saw Lydston had three testicles. Was I dreaming, was I the victim of a delusion? I still remember how I rubbed my eyes.

"I've had this idea years ago, but I was not ready to give out my findings. But I did publish material on the subject six years ago—it's in print. Of course I wanted more data. Like John Hunter, I tried the idea out on myself first of all. Yes, you see three testicles. Where did I get the third? From a healthy young man who was executed. No, it hasn't given me any criminal tendencies,

but it has increased my mental powers and improved my general health and libido.

After that first interview with Lydston, I often heard him explain that his discovery opened up limitless possibilities for mankind. His enthusiasm knew no bounds. Blessings would come with the transplanted gonads. His eagerness was so flaming as to amount to zealotry, for in gland transplantation he visioned the rejuvenation of the physical and mental faculties of the human race. I will never forget that day in his office, when he first spoke to me of his work in gland implantation. I had gone up to his office for a moment; after he had exhibited himself and re-dressed, he kept me spellbound for more than three hours. Fascinated by Lydston's studies, and curious about Voronoff, as soon as I left my colleague I stopped at a cable office and sent this message to our confrère in France: "Please forward all available literature on your transplantation work." Voronoff at the time was visiting in Rome, where the cable followed him. The answer came promptly: "Will mail literature at once. Voronoff."

The public and professional press continued to be flooded with the Voronoff sensation. I read every published word avidly. Also I haunted Lydston. In about a fortnight, the literature and reports arrived from Voronoff. They were all written in French. Unfortunately in those days, *la langue de la politesse* was not one of my assets. I had to look about for a translator. I was distressed, for while there is a plethora of translators, few are adequate. I could not expect to find another William Archer who would achieve for Voronoff what the English translator had accomplished for Ibsen. However, I was getting along pretty well, albeit grumbling plenty over the ways and the wiles of translators, when somewhat less than a week after my treasure had come from France, an accident happened almost directly across the street from our hospital. One of the victims was brought in for treatment. A frail man of middle age and neutral personality, he had two badly fractured legs. In addition to this misfortune, he was totally blind. He had plenty of courage, though, as I was soon to discover.

"What is your business?" I asked during the examination of his fractures.

He answered: "I am a teacher of languages."

I pricked up my ears. "What languages?"

"Italian, Spanish, French," he replied.

"What method do you use?" I queried.

"Conversation. And I am very successful."

There it was! Fate had brought the answer to my need. From thence on, daily, I sat for hours by his bedside. I mended his fractures, with, as Ambroise Paré used to say, "the help of the good God"—while with a skill that was magical, Mr. Geller taught French to his surgeon. By the time his legs were sufficiently mended for him to be up and about on crutches, I was able to dispense with a translator, for I was reading and writing French, sufficient for my purposes. Never have I known such a teacher. He had been compensated for his blindness by a most powerful mentality.

In the meantime, of all the institutions angling for Voronoff, Columbia University captured the prize of the season. Voronoff had agreed to speak there on his work in gland transplantation. By this time, he and I had developed one of those cordial friendships-by-correspondence. I was as anxious to learn all there was to know about his idea as he was eager to disseminate it. When he docked in the harbor of the Empire City, I wired him, asking him to come to Chicago and to speak before the Clinical Society of our hospital. He wired back that he had no intention of speaking elsewhere than New York, but if I would go to New York and dine with him, he would follow the mandate of *noblesse oblige*, and literally speaking, return my call.

In high spirits, Fim and I set off for Manhattan. We were entertained royally by the Voronoffs, in a manner that royalty could not have surpassed. During their stay in New York they were occupying the family home of Mme. Voronoff, a spacious and elegant mansion on Fifth Avenue, known as the "Bostwick Home." No one who met Mme. Voronoff ever forgot her. As I have already intimated, she was petite and pretty, witty, charming, and the exponent of all that is best everywhere. In the laboratory, she was her husband's never-failing companion; in her home, she was the marvelous chatelaine presiding over her husband's dinner table as he feted us.

We did not, of course, talk "shop" with our meat, but we did talk research, and later in the library, as we sipped our coffee, our gracious host discoursed at length about his work. Voronoff possesses a flair for phrase and a terseness stemming from his

noble honesty and great knowledge; these qualities make him a splendid lecturer. His personal magnetism is great. It was no wonder Mme. Voronoff idolized him as she did. What woman would not have done the same for a man so inspiring, so sincere, so willing to respond to overtures of friendship or for information?

Voronoff kept his promise to me. He came to Chicago to speak at the American Hospital and to demonstrate his technique, assisted by Mme. Voronoff. What a day that was for us—for all the profession in Chicago! Every inch of the amphitheater in our hospital was crowded. Notables were scattered everywhere throughout the audience. Voronoff spoke in French. Dr. Aimé Paul Heineck acted as interpreter, translating at the end of every few sentences. True, we had no monkeys for demonstration purposes, but my resourceful secretary, Ellie Comiskey, had two dogs surgically prepared. Upon these two animals, Voronoff, assisted by his wife, demonstrated his technique in our hospital on that memorable day in June. Voronoff's appearance in Chicago was a tremendous success.

For me that wonderful day in 1921 held but one blot that could not be erased by argument or persuasion. I refer to the attitude of my dear friend, Lydston. He refused any and all overtures to attend, even those of Voronoff himself. The day before the demonstration, Voronoff asked me eagerly about Lydston. Would the distinguished colleague Lydston be there? I implored Frank to come. I was not the only one. A score of our mutual friends also urged him to attend. But he was adamant. With his great diplomacy and innate affability, Voronoff wrote to Lydston and begged the honor of his presence in our amphitheater on that afternoon. Voronoff, who was really under no obligation to Lydston, nevertheless sent him this appeal which few could have resisted:

MY DEAR COLLEAGUE:

Your fine work is well known to me as are your excellent observations concerning the homotransplantation of human gonads. The difficulty in obtaining human gonads is great in any country but it is positively prohibited in France because French law refuses to sanction the removal of any part or parts of the body, even in death. The highly proximate co-relationship between the higher anthropoids and human beings has caused me

to do all my experimental work in this direction. May I expect the pleasure and honor of your attendance at this demonstration?

Yours,

VORONOFF.

Even this did not avail. Lydston did not come—perhaps realizing that his absence would attract more attention than his presence. He was the sulking Achilles of Chicago surgery. He was too embittered to do the right thing. Lydston, extremely patriotic and intensely proud, felt that the accolade, which belonged to him was being placed on foreign shoulders. Personally, both Lydston and Voronoff were the very soul of honor; in the realm of scientific ethics, both were above suspicion. But Frank was jealous, and it perverted his perspective; moreover, he was surrounded by scheming advisers who gave him the worst possible counsel. Many leading physicians of Chicago wanted Lydston to attend, and he knew it. Yet he chose to ignore his friends and to insult the visiting scientist by staying away from the meeting where he would have been greeted with admiration and applause. To his dying day, Lydston never forgave Voronoff. Viewed in proper perspective, the most violent jealousies seem so senseless—in less than three years after Voronoff's visit to Chicago, Lydston was dead.

Of course, there is nothing surprising in Lydston's attitude. Many similar examples occur in the history of medicine. When James Marion Sims arrived in Paris, and announced with a Southern accent and a charming smile—he could not speak a word of French—that he was the conqueror of the dreaded vesico-vaginal fistula, the French also smiled. In the first place, the American best known in Europe was P. T. Barnum, and Sims's friendship with the famous showman seemed to explain matters; in the second place, the French knew that no one could cure vesico-vaginal fistula, and least of all, an obscure American doctor who should be going to school under French masters; in the third place, the French knew that the only one who knew anything about vesico-vaginal fistula was Jobert de Lamballe, who had failed seventeen times on the same woman and could never tell when he would be successful. Sims had to operate in hotels instead of hospitals, but after he definitely effected perfect cures in case after case that had been pronounced hopeless, the French profession became curious, then appreciative, and finally began

to cheer our doctor from Alabama. All the leaders of French surgery came to see Sims—all except Jobert de Lamballe. The one man who should have been the first to come, never came at all. Such is human nature, and understanding it, you can understand my friend Lydston.

I was so interested, allured and stimulated by the reports and demonstrations of Lydston and Voronoff, that I felt I had to do some experimenting. I planned a little experimental station on the roof of the hospital for my own work. I was determined to find out, at first hand, what really happened. I needed information that I evolved for myself. After overcoming various obstacles—the American Hospital is within the city limits of Chicago, which made matters more difficult—my laboratory-on-the-roof was in readiness. It was, in fact, a miniature and well-kept, if not a royal, zoölogical garden. My roof dwellers included the staples of all laboratories—white rats and guinea pigs, rabbits and dogs. But, of course, they were only the preamble. The laboratory grew in size and my tenants increased. There came rhesus monkeys, baboons, and then two chimpanzees. I neglected ‘practical surgery,’ devoting most of my time to my quadrupeds.

Inspired by the trail-blazing of Lydston and Voronoff, I engaged a corps of assistants at substantial salaries and began, because of the commissary of my experimentees, to build up the fortunes of dealers in bananas, carrots, turnips, potatoes, oranges, coconuts, hay, cereals, cabbage, lettuce, and even the neighborhood butchers increased their incomes. My investment grew until thousands of dollars had gone to the apes because I had decided upon an authoritative investigation. I passed my days and nights with the animals.

While all this was happening in the laboratory-on-the-roof, the news avenues of the globe began to ring with another rejuvenation discovery. At the University of Vienna, a professor of physiology, Eugen Steinach, had uncovered still another technique. His method was simplicity itself. In the Voronoff operation it is necessary to implant the gonads of anthropoid apes in the human body; but the Steinach operation consists of dividing the seminal duct; it can be performed in a few minutes, without hospitalization, under local anesthesia. Glowing reports of this work began to be disseminated. I wrote to Voronoff, inquiring if he had ever heard of Steinach. He replied “Yes,” and added, with a generosity

that was characteristic of him, complimentary remarks about the Viennese physiologist.

Thereupon I wrote to Steinach. In the following year, still experimenting with the Voronoff method, I visited Vienna and went to see Steinach. In the Physiologic Institute, Steinach showed me his rats, and I saw how he made old rats young again. The specimens he showed me were convincing. My enthusiasm was certainly aroused. Later, Fim and I were entertained at the home of the Steinachs. Frau Steinach, who spoke excellent English, was a most cultured and charming woman. In addition to his profound knowledge, Steinach too did not lack the appeal of versatility. He loved horses, and insisted that we spend an afternoon at the races. The famous man attracted almost as much attention as the horses. He was of Jovian appearance, with a luxuriant beard of superb Titian hue that fell to the middle of his vest. He had been greatly publicized and adoring crowds pointed him out and gazed at him—he looked as if he might be the man who had solved the Sphinx's riddle of rejuvenation.

I promised to carry on Steinach's experiments and to report the results. I was helped in this resolution when Fräulein Kermauner came to America, and for several years worked with me as an assistant. Fräulein Kermauner was a sister of the noted Professor Fritz Kermauner, the head of the gynecological department of the University of Vienna. I knew him well, because we had several years of intensive and interesting exchange of views. Thus I followed one trail after the other toward the Great Secret. Was the ancient mystery of rejuvenation to be penetrated by the twentieth century? I knew that the quest of rejuvenation had long been a jack-o'-lantern, leading other investigators astray. Time proved that I was to be no exception. I squandered more money than I could afford; and worked with a zeal which gave me no chance for relaxation and little time for sleep. The net result of it all was the publication of my book on *The Human Testis*, a recognition of the limitations of both the Voronoff and Steinach methods, and a genuine physical breakdown.

Oddly enough, I felt fully repaid. I gained something through those years of experimentation which could have come to me in no other way. When one sails out of the safe harbor of established knowledge, one must expect to encounter unknown hazards. My laboratory-on-the-roof led me to adventures in strange lands, and

I have never regretted the price I paid. Moreover, my work became known. In 1922 I received an invitation to speak of my researches before the Society of Surgeons in Paris (October 12, 1923) and at the University of Rome (October 19th of the same year).

American medicine is so much younger than European medicine that although we have overtaken our elders and surpassed them in many respects, an American physician still feels honored when he is invited to address a European audience. When my book was published, the city of Chicago was less than a century old, and I, a representative of its medicine, was crossing the ocean to address the doctors of ancient Rome. I stood in the historic amphitheater, which was filled with dignitaries from historic institutions of learning who had come to hear me in response to invitations from the University of Rome, signed by Professors E. Perroncito, R. Alessandri, A. Bignami and A. Dionisi. Professor Ascoli, a fine and upstanding scientist, was responsible for the fact that Mussolini sent a representative to hear my address. Of course, that was considered an honor, but the laurels fade when we remember how much unnecessary misery Benito Mussolini, the despoiler of Italy, has brought to the nation which was once linked to civilization and art and science.

At the Paris conference, to my great delight, Voronoff was present. I had my moment of panic when I realized that the élite of French science had gathered to see and to hear the results of my three years of research. Voronoff himself most graciously accepted my conclusions. The auditors, consisting largely of men experienced in this field, were liberal in their praise of a foreign confrère. I left the meeting with gratitude and humility. I had been judged by my peers, and I experienced the joy of work well done. Voronoff showed us his experiments. According to his exhibits, he was able to renew the youth and prolong the life cycle of certain animals by sex gland transplantation from their own species. The enormous expense of his laboratory was borne entirely by himself.

Voronoff was not the man to permit us to depart without a souvenir. As Fim, Phil and I were in the Gare St. Lazare, just a few minutes before train time, Voronoff and his genial brother, Alexander (Sasha), dashed into the concourse, bringing us a keepsake—his well-castrated chimpanzee, Roger. My wife looked

aghast, and certainly deserves credit for controlling herself on this unique occasion. Roger was a largesse of love alone, for being deglanded he was not worth a bagatelle in any laboratory. He could only love and be loved, for he was utterly useless in rejuvenation work. Voronoff felt he was demonstrating his affection for me by presenting this cherished creature to me.

Roger was no end of trouble on the boat. Of course, at first he was broken-hearted at leaving the Voronoffs, and he let everyone within hearing know his sorrow in true chimpanzee fashion. Eventually he became the white-haired boy of the ship, for whether we are Darwinians or not, there is something about the Simian tribe which appeals to human beings. For a considerable time Roger was a pampered pet at our hospital, but later I presented him to Lincoln Park. He never forgot me, and I used to go to see him at least once a month.

Then it so happened that for several years I was not able to visit the Zoo. I forgot Roger. But one Sunday afternoon, as Fim and I were strolling through the park, she thought of Roger and suggested we visit him. It was feeding time when we approached, and he was very busy. Surrounded by many admirers, he was lifting to his mouth some very lovely carrots. "I bet he remembers me," I remarked to Fim. Standing back of the multitude, I called "Roger!" He pricked up his ears. Again I called "Roger!" At my second call, he dropped his carrots and started pacing the cage. He knew me, he remembered my voice. I made my way through the crowd to the chimpanzee, and when he caught sight of me his joy was so touching it was piteous. He caressed and kissed my hand. He loved me as long as he lived. Roger was old when he died, and I mourned his death. True affection is too rare in this world to be discounted even if it lives only in the heart of an ape.

My laboratory, or as some of my friends insisted on calling it, the "Irving Park Zoo," began to get on my nerves and on the nerves of everyone around me. Having served its purpose, it became a general nuisance. It was like the illiterate wife who helps the miner make his pile, by washing and cooking and being generally indispensable; but once the lode is struck, she becomes out of place in millionaire's row. I had a soft spot in my heart for all the inhabitants of the laboratory. They were agile as the wind; their subtlety was incredible. Voronoff, wiser than I, had established his laboratory on the outskirts of Paris, not in the city

itself. The monkeys made a great deal of trouble for me. The climax came in their descent one clear sunny Sunday morning, in force and in ribald fashion, upon the Church of Our Lady of the Lake, only a few blocks distant from the hospital. The Reverend Father Denison, pastor there for many years, was our friend as well as our neighbor. Though of no particular religion, I have far too much respect for all religions to be so sacrilegious as to place on record the actions of those monkeys. It suffices to say that a Rabelais or a Voltaire or a Swift would have leaped upon that incident, and added another chapter to the classics of satire. As far as I was concerned, it was the end.

My animals had taught me much. I lectured on the subject before medical assemblies here and abroad, and published numerous articles on the results of my researches. Various memories emerge—some pleasant, others unpleasant. On one occasion, while addressing a large medical gathering in Chicago, I noticed in the audience William Thomas Belfield, my erstwhile professor of urology at Rush Medical College. After the lecture, as he cordially shook my hand, he remarked: "And all this research without an endowment?"—and he looked at me as if proud of his former pupil. The following day he sent me a heart-warming letter. This is one of my pleasant memories.

I repeated Steinach's work, operating according to his technique. I published my results. I was obliged to point out that generally speaking, the case stood not for positive rejuvenation or complete restoration, but against it. I sent Steinach a copy of the journal containing my article. He was an eminent man of science, and I felt he would realize that I could not have written contrary to my findings. I know that Steinach read the article, for he has never had anything to do with me since. I regret his attitude, but I could not do otherwise. I sought the truth and lost Steinach. This is one of my unpleasant memories.

As over two decades have passed since rejuvenation became front-page news, the time has come for an evaluation of the subject. I know how impossible it is to change medical vocabulary, yet I insist the word "rejuvenation" should never be used except within quotation marks. I suggested the word *reactivation*, as preferable to rejuvenation or rejuvenescence. Voronoff was prompt to accept this change in nomenclature. Steinach, after much argument, later adopted it with reluctance. Reactivation

is certainly more accurate than rejuvenation, since there can be no actual restoration of nature, but rather a reactivation of function, or a partial synthetic reanimation of performance.

I cannot emphasize too often that I am definitely opposed to the term "rejuvenation." It is misleading, and certainly tends to create an incorrect biologic picture in eager but uncritical minds. It is a matter of considerable gratification to me that among those who agree with me that the term rejuvenation should be replaced by reactivation, are such outstanding workers in this field as Dr. Knud Sand of the University of Copenhagen; Professor Alexander Lipschütz, formerly of the University of Dorpat, and now head of the department of physiology at the University of Concepcion, Chile; Professor Pézard of Paris; Professor Bolognesi of Italy; and several others of distinction.

The work of Claude Bernard, Brown-Séquard and Voronoff demonstrated that the fountain of youth does not exist in any fabled Island of Bimini, but is to be found in our own internal secretions. In indicated and selected cases of gland transplantation, the malaise of age may disappear, to be replaced by a feeling of well-being, long forgotten; sometimes a more luxuriant growth of hair, a better texturing of the skin, a renewed interest in sex, and a new enthusiasm for life, may be the gratifying results. But even the best cases are more transient than permanent, and when the fountain of youth within us runs dry, not all that the manufacturers sell, and nothing that the surgeon can plant, will bring back the magic waters.

Gland transplantation, escaping from scientific control, became the charlatan's Eden, and more of a hasheesh binge for their victims than was even the easy road to Mohammed's paradise. Little did the Collège de France realize what golden vistas it was opening up for quackery. With apologies to Mme. Roland, I may exclaim: O Cash, what crimes are committed in thy name! It is cruel to seek rejuvenescence with the idea that vigor borrowed from another's ovary or testicle will fertilize the barren and make puissant the impotent. This belief made science the ally of crime. The shocking stories of young males, potent but poor, who offered to part with one of their testicles for money, were followed by even more terrible tales of youths who were kidnaped and castrated in order to rejuvenate an aging and impotent man of wealth. Time does not seem to check the sway of

the gonadal quack. After all the warnings that have been issued, after all the exposures that have been printed, the mountebank still claims he possesses the power to rejuvenate the old, and the deluded modern Ponce de Leons still answer his advertisements.

I must not leave the subject of gland transplantation until I have registered an emphatic protest against these blasphemous, pornographic and obscene prostitutes of the science of medicine and the healing art who implant in human beings the gonads from any other source except from the higher anthropoids. A gonad from any other source is a debasing example of degrading malpractice. The blindly believing, the ever trustful and the always credulous, will accept anything in the field of gland transplantation. For example, the ram or goat is far lower in scale than man, yet his competencies in certain directions are supposed to be fabulous. Hence the charlatan vends the gonads of ram and goat as a cure for human impotence. The thing is absurd, sacrilegious, unscientific.

It is time that I sum up the subject. The generation which was at its mother's breast when my treatise, *The Human Testis* (Philadelphia, J. B. Lippincott Co., 1924), was published, is now nineteen years of age. Much in the realm of the endocrines has been learned since the publication of the book, yet the conclusions which I then expressed in italics, are valid today. I quote from my volume (page 444):

I emphatically object to the term "rejuvenation." It is misleading, particularly to the laity who gain from such terminology the impression that by certain procedures the old can be made young. This is erroneous. No organ, or set of organs can be returned, by any method known thus far, to a juvenile state when pathologic changes have made inroads on the structures and rendered them senile, in the accepted form of the term. I would suggest the substitution of the term "Therapeutic Gonadal Implantation" in place of the promiscuously used term "rejuvenation." The field of usefulness for such implantation is varied and includes many conditions. Improvement in certain well-defined pathologic states can be anticipated in properly selected cases following the use of proper material and the employment of proper technic.

A LION AGAINST ITSELF

"ERA of Wonderful Nonsense!" To men of the medical world the Golden Twenties contained more nonsense than wonder. It was as though the great American public had invaded a vast storehouse piled high with half-baked doughy scientific misinformation and were gorging themselves with consequent indigestion and sour stomachs. Not only did the hungry horde seize upon nostrums of all sorts and "face lifting" with such avidity as to discredit much sound research in important fields. They discovered SEX—writing all in bold-face capitals the mysteries which generations of Puritans had hush-hushed into the tiniest of lower-case underemphasis. They discovered Freud, receiving from the monumental thought of a great pioneer only a single fact, welcome to a pleasure-mad post-war generation as rain to parched earth, that all moral restraints were evil and must be thrown to the four winds as quickly and as completely as eager youth could throw them. And they "discovered" and reflected their discovery in a spate of novels, plays, and general polite conversation, that vice, old as civilization, which we call homosexuality.

Not since Oscar Wilde had scandalized Victorian decency had sexual aberration loomed so large in the public mind. And where the pallid aesthete's sins had been told in whispers, carefully guarded from youthful ears, now the whole world, young and old, seemed bent on shouting from the housetops, with pornographic glee, all the sordid information they could get from garbled science, and from feverish experiment.

The storm that swept the land did some good, no doubt, in sweeping cobwebs out of dark corners and freshening the air in

which the fundamental facts of sex were discussed. That it had a bad effect on a whole generation of American youth, no medical man who saw its mark on the minds and bodies of young men and women could deny. It is regrettable that, now the tempest has somewhat abated, it has left behind it no residue of real understanding of the matters talked about so glibly when the storm was on. Science has moved forward in the twenty years since that day, but science in that realm has, for the present, lost the public ear. Considering how faulty was the hearing in that eager ear when it was cocked so attentively, perhaps that is just as well for science.

Homosexuality has been a social problem for as many centuries as men have lived in social relationships—and that is a good many centuries. Almost invariably it has been viewed with horror and contempt, branded in the Christian Scriptures and the Jewish Talmud and other great moral codes as an abomination second only to the mingling of man with beast, or to the crimson stain of incest.

But the civilization to which we belong is founded on the Judaeo-Christian morality. We have always handled this problem as we have handled so many of our major social problems. We have resolutely looked the other way and denied its existence as long as we could, and we have acted with heavy-handed justice to punish it when it could not be ignored. We have experienced that secret tingle of forbidden pleasure in peering into lives made strange, exotic, fascinating by its influence—the life of Charles Baudelaire, for instance, great poet and celebrant of exoticism, whose *Fleurs du Mal* have been likened to flowers growing out of a dung-hill. And we have refused to know that the dung-hills, without the flowers, are to be found in all great cities—Paris, Rome, Leningrad, London, San Francisco, New York, St. Louis, Chicago, Calcutta, Cairo, Athens . . . How many people of my own city, Chicago, for instance, would believe me if I were to tell them of tap rooms, inns, restaurants, in the crowded heart of the city, where only male homosexuals may be admitted, only a stone's throw from "The Drive"?

We have ignored and we have punished. But it has remained for our own generation to discover—possibly it is only rediscovery of knowledge once possessed and lost with the burning of the library at Alexandria—that we have not one problem, but two, to

deal with, and that our stern punitive measures fit neither problem very well and are, in relation to one of them, on a par with the old, discredited method of curing lunacy by flogging. And there are economic forces—the fear of responsibilities where normal sex relations and consequent children can bring.

Complicated and difficult are the social implications in facts like these. Engulfed in war today, balked by economic barriers in time of peace, young people seem less and less able to take the direct, normal route of early marriage to satisfy dynamic needs that will not be denied. When we strive, with high-minded zeal, to stamp out prostitution, we are, it is to be feared, only increasing the problem, damming up one more channel through which the flood can move. Far better, it seems to me, is it to regulate, police, inspect the centers of prostitution which we cannot really destroy, to use them to “fight fire with fire.” I should be inclined to forgive any woman who looked back with a certain envy to the priestesses of classic times who could so neatly combine physical satisfaction with religious duty. But those times are gone. And I simply do not see any solution which would get around those added checks upon a woman’s freedom—the fear of disgrace, the fear of maternity—as well as the one fear she does share with her brother—fear of disease.

Does the answer lie in some new concept of “morality,” in some amnesty, as it were, between religion and government, which would allow youth to do as it pleases without crime or economic distress? I do not know. But I do know that it is a problem which should be faced and faced squarely and honestly by men and women concerned with the building of a better world. And I am skeptical, to say the least, of any assertion that the whole answer lies in “sublimation” (especially as that term is understood by the laity), or in the good old-fashioned virtue of “self-control.”

That good old-fashioned virtue would, however, have been of inestimable value in the 1920’s of which I am writing, and it was tragically unfortunate that it fell into such complete disrepute among the post-war generation. For the young people who needlessly resorted to unorthodox practices in those days were moved less often by pressures of circumstance than they were by a wilful determination to get all the excitement out of life that could be wrung from it.

One contributing factor in the situation was international exchange. For with the French franc down and the dollar up, all roads led straight to the Left Bank and all the Freedom which dwelt there. Sometimes I wonder how that old Latin Quarter had room for all the young Americans who flocked there, bent on living-their-own-lives, come hell or high water. It was hell which came for some, and others turned their faces homeward only when the high water of depression had bedraggled their ankles, while of course many thousands passed through the whole experience unscathed.

Magnus Hirschfeld, noted Berlin sexologist, visiting me in Chicago, summed up the Paris hegira all too well. Hirschfeld was one of the most able men who ever delved into the "*verboten*" realm of sexual aberration. He was of German birth and the *Institut für Sexualwissenschaften* which he created in Berlin was deeded to his native country. That country deserved no such honor at his hands. For the Nazi barbarians have burned his works and driven him into exile.

Hirschfeld had studied the Paris scene with patient persistence, and he well knew the crew of erotomaniacs and off-sexed individuals who thronged that city. He said to me:

"Unfortunately, the idea prevails among many young folk that, in order to achieve anything in the realms of imagination, it is necessary first to bathe in the sewers of the world. They must go to Paris and get an *atelier* or some poor dump on the nefarious Left Bank!

"There is something almost allegorical," he added, "in the fact that, while Paris is actually founded on sewers, with these tremendous and famous mains literally the veins and arteries of the glamorous *ville*, it continues to reign as queen of fascination."

He told me how much he regretted that so many young people of so many nations thought a Paris apprenticeship necessary if they wanted to be artists, writers, or musicians.

"For every one who succeeds," he said, "we have at least a thousand, I would almost say ten thousand, who fail."

And then he went on to talk of Baudelaire and of Baudelaire's friend Théophile Gautier, who had defended the poet and justified his use of narcotic poisons on the ground that he used them merely for the sake of "physiological experiment."

Professor Hirschfeld said emphatically, "You and I are still

hearing that same phrase from the lips of weaklings. And you and I both know the habit of such weaklings, to find all sorts of palliative explanations and alibis for their indulgence in practices which they are ashamed to recognize as acts of free will."

Havelock Ellis, by the way, expressed much the same views as Hirschfeld in his correspondence with me.

The story was repeated again and again in those years—the boy or girl, discovering the divine spark of genius which in so many cases was nothing more than the fire of youth, went off to Paris, full of badly digested Freud and Ellis, convinced that liberty to the point of license was the necessary right of an artist soul. From drunkenness to narcotics, from simple transgression of the moral law to plain prostitution was a natural development . . .

That was twenty years ago. Why bring it up now?

Because its recollection makes a strange chapter in my memories of life as I have seen it. But because, also, there is no guarantee that I can see that history is not on the brink of repeating itself. We shall move—soon, let us hope—into another post-war era. Shall we know how to check destructive impulses then better than we once did?

Or shall we see again a headstrong generation of youth resorting to the old fantastic logic:

Because Poe was a drunkard and could never pay his bills; because de Maupassant did all that the decalogue says a man should not do and died in an asylum from the results of syphilis; because Gautier ate hashish and de Quincey opium; because Nietzsche was insane and Tolstoy lived in a dirt-floored hut; because the Marquis de Sade had a nasty vice named after him; because Zola and Flaubert and Balzac were "men of experience"; because D'Annunzio, having worn out all emotions, became the world's greatest cad; because Bernhardt supported to the end of her days a dynasty of "illegitimates"; because Verlaine was a paroxysmal dipsomaniac as well as a congenital syphilitic; because . . . and because . . . and because . . .

Therefore, if we want to write, paint, sing, compose music or play it, act, model in clay, cast in bronze or chisel in marble, or build palaces or cathedrals or homes, we must begin by assimilating all the vices we can as quickly and indiscriminately as possible . . .

The First International Congress of Sexual Research, which met in Berlin in 1926, was as much concerned with sex aberrations, as was the great American public. The scientists who met there, however, were far less occupied with the individual who turns to this practice through curiosity or press of circumstances than they were with the one who starts life under a handicap which capricious nature has saddled upon him.

Recognition that such abnormality is sometimes congenital was a step forward, and during the past two decades the most significant contributions of science in this troubled field have focused on this phase of the problem.

Sum and substance of the findings regarding the basis of congenital abnormal tendencies is briefly this:

(1) The true type of this entity is an abnormal and anomalous development or expression of that biologic concept which, for want of a better word, we term "sex"; or, perhaps,

(2) An abnormal, anormal, and anomalous development of the psychological center due possibly to endocrinic malfunctioning, and

(3) Doubt should be cast upon those theories that this condition results from early environmental influences rather than a result of sex gland or gonadal dystrophy, or perhaps merely dystony.

And, if that sounds too scientific, let's try to follow the reasoning and experimenting back of these conclusions.

While it is generally accepted that sex is determined at the moment of conception, it must be pointed out that this position has at least elements of the theoretical in it since we have no means of verifying it by direct observation. Embryologists state that the human ovum is undifferentiated as to sex. It may become male or female depending upon cell factors in the sperm which fertilizes it. If those making for maleness are dominant in the chromosome constitution, then the embryo will develop as a male and the female factors will become recessive or latent, though they will not be entirely suppressed. If the factors making for femaleness are dominant, the process is reversed. As development proceeds, the embryonic interstitial cells of the testicle develop in the male and in the female those of the ovary. In the male, the ovary becomes the recessive gland which remains dormant; in the female, the testicle.

In the normal course of events, the psychic and physical sexual attributes follow their respective sex-dominant glandular interstitial cell development. What is called "sex," or sex feeling, or emotion, is not determined necessarily from the anatomic character of the primary sex characteristics, but rather upon the impulses derived from the psycho-sexual center. Internal secretions of the interstitial cells of the so-called "puberty glands" are known to affect the development of the secondary sex characteristics and of the psychic attributes of the sexes.

Sometimes things go wrong. Sometimes the physical and psychical attributes develop in contrary directions. They are routed wrong, and the result is an individual in whom mind and body are at odds. He may have the body of a man and the psychic outlook of a woman. Or she may have the body of a woman and the psychic outlook of a man. Such individuals are true homosexuals—who, unless science can devise a means to help them, are chained to their peculiarity for which they are not to be censured or persecuted.

Steinach's is one name which stands out in the field of this research. Over some fine Mocha in his home in Vienna he enthusiastically stressed to Fim and me that his investigations showed clearly that it was the dominance of the secretions of the interstitial cells of the testicle or of the ovary which determined both secondary sex-characteristics and sex-psychism.

He demonstrated that from an embryonic and bisexual puberty gland (which is what he called the interstitial cells of Leydig in the male and the lutein cells of the ovary in the female) the puberty cells of either sex type may at first predominate. The predominating cells will produce the corresponding secondary anatomic sex characteristics.

But Steinach proved also that during the process of development the predomination may shift and the sexual psychism of the individual change accordingly, although the shift occurs too late to do more than modify the anatomic development of secondary sex characteristics. Some modification, he thought, usually took place and he cited the fact that, of two hundred male homosexuals examined by Weil, ninety-five per cent displayed some particular secondary sex character of their opposites.

But *why* does it happen? What mechanism causes a switching of domination from male type puberty cells to those of female

type, or vice versa, and results in peculiar individuals who cannot help being what they are? Medical science has not yet answered those all-important questions.

In that First International Congress of Sexual Research, far more progress appeared to have been made in the study of hermaphroditism than in the seemingly simpler study of homosexuality. The two abnormalities are often confused, but they are entirely different. Their tangencies are numerous; their parallelisms none.

An hermaphrodite, of course, is an individual who has or who appears to have both male and female characters of secondary sex characteristics. Steinach, Knud Sand, and others have demonstrated conclusively that it is possible to produce hermaphroditism of the true type. It can be done by castrating an individual and by grafting or implanting upon him (or her) a sex gland of the opposite type; or it may result from the suppression of the sex type gland and exaltation or dominance of what had been the recessive puberty sex cells.

At the Berlin Congress, Berner of Oslo showed how hens could be masculinized into roosters through the effects of ovarian tumors. Sellheim of Leipzig reported the case of a woman of forty-five, in whom ovarian degeneration had brought about masculinization. Her once pretty and feminine face had developed a full-grown beard. And an ovarian graft restored her to normality.

Voronoff, from his Physiological Station of the Collège de France, said that, while graftings of testicular fragments or whole testicles were achieved with benefit in male goats and rams, such grafting upon ewes seemed to cause "a perversion of the maternal instinct, and a change in their psychic state, in their affective sentiments."

Steinach and Lichtenstern believed that they could cure homosexual tendencies by removal of the gonad or sex gland of the affected individual and transplantation of the sex gland of a normal individual of the same sex. They claimed that when such operations were performed upon male homosexuals female traits disappeared and there was a recidivity of male traits. Similar changes took place in the realm of sex impulses. The transition, they said, was permanent.

But other surgeons, whether because of difference in technique or material I cannot hazard an opinion, have failed to obtain en-

couraging results in similar cases. I once myself attempted a heterogeneous testicular transplantation for homosexuality. The operation was entirely unsuccessful. Perhaps my failure came because I did not castrate the individual as a preparatory measure. I do not know.

Until such time as cures are understood and reasonably certain, however, it must be the endeavor of any society which calls itself humane to understand that the congenital homosexual is to be humanely treated. My views are those expressed in Continental Europe by Bloch, by Jung, by Moll, by Krafft-Ebing and many others who have done so much to arouse public opinion and to relegate to oblivion punitive enactments directed against individuals who cannot control their condition.

Have these paragraphs made hard going? I have purposely not tried to curb too much my use of the technical terms of my profession. It would be a very good thing, I feel, if the general public should once appreciate the fact that the simplification and popularizing of scientific truth which it so loves is very often menacingly close to a distortion of the truth.

A lion against itself! I can think of no better metaphor with which to suggest the self-destructive fury of the mightiest of all human impulses when turned from its creative normal functioning to rage and tear and lacerate. Into the dark den where the struggle goes on, psychologists and men of medical science have thrown much light in the years which have elapsed since I began my professional career. They have helped to illuminate a terrible scene where the doctor hitherto had worked with only instinct and compassion to guide him. For the struggle itself is not new.

Many years ago I had a pathetic patient. Clara was vaguely young. She was fragile, pallid, and her eyes were encircled by that peculiar suborbital discoloration so frequently seen in subnormal individuals, chronically ill. Clara's illness, she told me, had been a series of strange infections. First, it had attacked her uterus and an operation had been necessary to remove that organ. The fingers of her left hand next—and the hand had been amputated. But to no avail, for a few months later the scar had again showed the dreadful signs of infection and further amputation was necessary.

Something about Clara aroused my suspicions at the start. I had had occasion to know that there are individuals who will, incredible as it may seem, go to amazing lengths to bring themselves under the surgeon's knife. Morphine addicts are the most insistent, and often the hardest to detect, among these fakirs, whose hysterical desire can create convincing symptoms. I have seen the poor wretches present themselves to surgeons, disclosing abdomens scarred sadly and without reason, begging for yet one more operation so that they may receive doses of their beloved morphine.

I looked sharply at Clara. No, the all-too-familiar signs were not there. She did not, I felt confident, use that drug. Then what . . . ?

She had reached the end of her story.

"Doctor," she said, "I know that the infection has returned. It is spreading again. I know the symptoms. I must have relief. You must help me."

She was right about the infection. The stump of the upper arm was in bad shape. Yet the ringing in the back of my head persisted. Something was not right about this case. I put the woman under observation. There was certainly no "faking" of that infection! In a few days we performed a disarticulation at the shoulder. The patient recovered uneventfully. She left the hospital and I drew a breath of relief to see her go.

She was back again a month later. This time it was pains in the collar bone and shoulder blade. I examined her again, the old misgivings besetting me. Suddenly, beneath the left clavicle I noticed some angry red marks. They did not look like the cachet of infection to me; they looked like pin scratches. Did they mean anything? A clue, perhaps, to something my intuition had sensed?

I thought of my long-time friend Krumholz out at Northwestern University, authority on mental and nervous diseases. Perhaps he could unriddle this riddle—or assure me that that knocking in my brain was just imagination. I turned Clara over to him for observation and awaited his report.

He took some time to get to the root of the matter, but one evening, radiant with triumph, he knocked at my door.

"Max," he said. "We've solved it at last! The poor girl has been suffering from hypersensualism with autosadistic tendencies. She had used long hatpins to inflict injury on herself in order to

induce an orgasm. When the uterus was gone, her frenzied desire persisted until she discovered that piercing her fingers gave her analogous sensations. The rest all follows—infection, amputation; then more prickings and more infection and more amputation!

"We've straightened her out now, I hope," he concluded, "so that we won't have to go on sawing her to pieces inch by inch. But what a pity—what a crying shame—that we could not have known all this in time to save her all that she has gone through!"

The incident did more than strengthen my faith in the worth of that much-disputed science of psychoanalysis. It proved to me again that, in the world of medicine and surgery, there is always essential interdependence. The rise of psychiatric specialists does not relieve the surgeon of his need to develop that alert acumen, that sixth sense which guides his discrimination between the spurious and the real.

Another glimpse into a dark abyss comes back to mind often when I look at a beautiful painting which hangs in my dining room. It is signed "C. Julien" and it once belonged to Alfonso XIII, the last of the Spanish Kings.

The voluptuous pink and yellow roses in their creamy vase, rendered with all the skill of a master's hand, remind me of beautiful women, women like Lily Langtry, and Kitty Gordon, and Felicia Modjeska, and Florence Reed. And above all of the Princess de Chimay.

That is odd, in a way, for while I have known the others as dear friends, I never once saw the glamorous princess, wealthy, aristocratic, proud, and lovely. But I knew Rigó—Rigó Jansci—Prince Rigó, he called himself—through whom the princess was brought to poverty and to destruction.

He gave me that painting. He was my patient, and once I visited him in the pigsty he called his home. As I was about to leave, I saw, sticking up from a heap of broken bottles and discarded crockery, a lovely splash of color on a wrinkled canvas.

"What's this?" I asked, and I tugged until I had brought to light a painting whose loveliness shone incongruously in that place of squalor. There was a hole where a heel had broken the fabric. The surface was dirty—but it was still lovely.

"Oh, that?" said Rigó, as I held it up to the light. "Alfonso

gave it to me because he loved my '*halgató and csárdás*.' Take it along if you like it. I don't want it!"

And so the masterpiece which the sovereign had given to the gypsy passed from the gypsy's hands to those of the surgeon.

Rigó was a gypsy all right. There was no pretense or masquerading there. He had all the strange fire of Romany genius and that uncanny skill with the bow that is the birthright of the strange and ancient race. Chicago knew him when he played at the College Inn. In Manhattan, Harry Houdini and I and other friends would go to hear him at "Little Hungary." He was a night-club celebrity from coast to coast. He earned fortunes with his fiddle and he squandered those fortunes with as little comprehension of money as though he had been a South Sea Islander trading precious pearls for ten-cent-store glass beads.

He lived in a litter of cheese rinds, sour milk, rancid butter, greasy leftovers, stale pipes. Around him in the débris were priceless silks, the ornate uniforms he loved to wear, rich jewels, paintings. All together, rubbish and treasure, they formed one unappetizing mess. Only his magnificent Amati violin, given him by his princess, was cared for with scrupulous affection.

From such a man, one would have thought that any sensitive woman would have recoiled in disgust. And yet he had wrecked two well-born and wealthy women in his life—perhaps many more! The first was the Princess de Chimay, once Clara Ward of Detroit. She had left her husband, bearer of one of the proudest titles in France, to fly with her Rigó. And she had lost health and fortune before she separated from her strange hero. When the divorce was granted, to the amazed horror of everyone, Rigó married the princess's niece, a girl of seventeen, thirty years his junior.

How could those two women of culture and refinement have fallen victims to this repulsive gypsy with his porcine manners? Did he fascinate them as a snake is said to fascinate birds it intends to devour?

In his room the day he gave me the Julien, curiosity drove me at last to ask the question that had been in my mind since I had first met this peculiar man. He was looking particularly like an obscene ruin that day. I looked at his diseased body, his face pitted with smallpox scars, the tattooing on his forearm . . . the

voluptuous figure of the lovely Clara. I gathered up my courage . . . I pointed to the tattooed image.

"My dear Rigó," I asked, "what do you suppose she ever saw in you?"

The gypsy looked at me with an eye strong with perversity.

"Do you know what, my dear Doctor—Clara was crazy about me because *I smelled so good to her!*"

And he wasn't joking. He knew from experience what students of psychopathia sexualis know from careful research—that olfactory appeal enters into many cases of abnormal sexology. Rigó and Clara figure in textbooks on the subject of smell love! When its permutations and complexities yield their secrets to research, another explanation of seemingly crass appetites will stand revealed.

NO BED OF ROSES

WHEN S. S. McClure, so the story goes, was just starting on his career, a worried bookkeeper came to him one day.

"S.S.," he said, "we're in the red and we're getting deeper and deeper in every day. We're already in debt one hundred thousand dollars . . ."

The young publisher beamed. There was a happy, far-away look in his blue eyes as he said in an awed whisper:

"Wonderful! Wonderful! Just think. Only a couple of years ago I was a poor farm boy. Now I owe one hundred thousand dollars!"

I should, I suppose, have felt the same thrill of success that morning when, opening an innocent envelope marked "Personal," I looked upon a demand for my money or my life. I knew, of course, that the chieftains of the blackmail had long since given over their sixteenth-century practice of "protecting" Scotch Highland farmers from other robbers and that they now offered that "protection" only to those known to be men of wealth. Here was recognition of success, such as I had never dreamed, back there in my boyhood days in Hungary, would ever come to me. I ought to have been flattered. But the only emotion which stirred in my heart was just plain unadulterated fear.

My hands were clammy as I studied that letter. Twelve thousand dollars—that was what the writer, or writers, wanted. It was to be put in the traditional cigar box and deposited by night behind the bulletin board on the third floor of the Pantheon Building. I knew the spot. The diagram furnished me was crude, but it was painfully clear. There was to be no monkey business,

the note warned. My wires were tapped. Let me once try to notify the police and I would find out how a machine gun worked.

Fim, to whom, as usual, I turned with my trouble, met the dark threat with calm and resolution.

"What shall I do?" I asked. "Shall I pay? How can I do anything else?"

"Certainly we will not pay," she said. "We won't put one penny in that cigar box!"

It was brave counsel, but it did not set my fears at rest. And those fears mounted when our neighbor, Judge Harry Olson, who had been chief justice of the Municipal Court of Chicago, failed to back up Fim's judgment.

"Better pay tribute than gamble with your life, Doctor," he said. "Chicago is bled white by professional blackmailers. It's terrible, but it's true. You are a very valuable citizen."

Judge Olson ought to know, I reasoned. But Fim remained adamant. She was the guardian of the exchequer. And she continued to say: "Not one penny."

She insisted that we get further advice. States Attorney Crowe was out of the city, but George E. Gorman, his principal associate, should be available. Gorman was my long-time friend. When I tried to reach this friend, however, all the luck of my life seemed to have deserted me.

The last of those three days of grace allowed me by my tormentors for choice between my money and my life was already about to dawn when I finally reached Gorman. If the threat about tapped wires had any truth in it, my friend in black armor must have heard much to interest him in those days, for I hung on to the telephone as a drowning man clings to a lifeline.

Gorman was far from the city when I heard his voice at last, but he was full of sympathetic concern at once. He could meet us, he said, in three or four hours, at the La Salle Hotel.

Fim and I arrived there about two o'clock in the morning. All the luxury and gaiety of the place had vanished. It was very still, the silence broken only by the swish of soapsuds as scrubwomen cleaned the marble floors, or by the quick step of a bellboy bringing in from some near-by all-night restaurant a sandwich for some belatedly hungry mouth. In the deserted dining room, Gorman met us, listened attentively to our tale.

"You can do one of two things," he said at last. "You can take

the cigar box, fill it with fake money, and put it where you have been told to put it. We will have our best men there to try to catch your annoyers. Or you can just ignore the whole thing. If you do that, you'd better get a revolver permit and carry a gun for a while.

"This thing that has happened to you," he went on, "is something which happens every day. I can't tell you what is behind that extortion letter you received, nor whether the writer means business. But I do know that there are in this city syndicates which send out such letters as feelers. Those who respond to them find themselves tangled in a net from which they never get free. Those who ignore them are quietly dropped from the prospect list. Your letter *may* be one of those feelers!"

Fim spoke up quickly.

"We'll take the second course you advise, Mr. Gorman," she said. "Thank you for your courageous and sensible counsel."

That's all there is to the story. Charley, my trusted chauffeur whose heart is as white as his skin is black, played bodyguard to me for some time after that evening. When I had all but forgotten the episode, he still insisted on walking behind me with his finger on the trigger of an automatic. He would have known how to use it, too, had occasion arisen. Which is more than I would have known, for I am a wretched marksman and a revolver in my hands would have put me in greater peril than anyone who attacked me. But the occasion did not arise. I had had my glimpse into the underworld of Chicago which was, in those days, building a reputation, as unenviable as it was world-wide, for my home city. Thanks to Fim and her unfaltering courage, it had been only a fleeting glimpse.

A surgeon's life, particularly if he is a successful surgeon, is no bed of roses. To the risks which he must meet along with any other man who rises to conspicuous position, are added the risks which belong particularly to him—"occupational hazards," we might almost call them.

There are hazards of the operating room such as I have already described in an earlier chapter. And there are, too, those hazards which arise, one may suppose, because the shining steel of his scalpel may so easily be related in the subconsciousness of a twisted mind with death and not with healing. I can think of no

other reason why doctors and surgeons, carrying on their mission of healing, so often fall victims to half-crazed persons who believe they have been wronged.

Chicago has not yet forgotten its shock of horror when it learned that Dr. Peacock, answering, as any good physician must answer, a call for his services one night in 1936, had been done to death by a bunch of hoodlums. Senator Giordano once told me that the great Professor Pozzi of Paris was killed by the husband of one of his patients, enraged over an entirely fancied wrong. And I myself once lost a close friend under circumstances of pitiful tragedy.

Dr. Winthrop's tragedy began when a man appeared in his office and stated that he wanted to be circumcised. The request was not unusual and Dr. Winthrop performed the simple operation. The patient made an uneventful recovery, paid his fee, and went away.

A few days later he was back again. The "aesthetic results" of the operation did not satisfy him. Dr. Winthrop was puzzled. He sent the patient away again, telling him to come back in a few days. The man apparently could not wait. He went to St. Luke's Hospital and there persuaded Dr. Halsted to reoperate. Halsted, a most excellent surgeon, recognized that, while a second operation was unnecessary physically, it was necessary for psychic reasons, though he was far from recognizing the seriousness of the psychic state which led to the strange request.

Easy enough now to analyze the man's trouble. He was a psychopath whose *idée fixe* centered in an exaggerated vanity which applied to only one part of his anatomy. Perhaps there was a diffident woman at the back of this psychosis. That was never explained, even in the trial which led to the man's incarceration in a psychopathic hospital. But the psychosis was there and it expressed itself in a growing sense of injury toward the two men who had tried to help him.

Dr. Halsted probably owes his life to the fact that he was not at St. Luke's when his erstwhile patient called upon him there a few weeks after the operation. But Winthrop, on whom his second call was paid, was in his office.

It was over in a split second. The visitor pulled out his revolver without a word or gesture of warning, and Winthrop fell, wounded in the abdomen.

He was rushed to St. Lukes and, ironically enough, it was Dr. Halsted who fought that losing fight for his life. The bullet had severed his left ureter followed by peritonitis. There was no hope for him.

I saw him the night he was dying.

"Inquire at times for my wife and boy," he said. And then, with an attempt at a faint smile, "Max, steer clear of neurotics!"

It is obvious that I have "steered clear of neurotics," at least to the extent that none, so far, has murdered me. But I can match stories of close shaves with many of my confrères.

A simple operation for appendicitis brought me into the greatest jeopardy of my career. The woman on whom I operated had a strange case history. She was married, but she had never been a mother, nor had she ever menstruated. When we operated we found the reason. She had been born, it appeared, without uterus or Fallopian tubes, and with only one ovary. Just another of Nature's queer pranks, of the same sort which produces cleft palates, harelips, web toes and other freakish conditions which cause innocent human beings so much suffering. It was such a queer prank, in fact, that I let Dr. Zan D. Kloppe make a drawing of the condition and I published picture and case description in the *Annales de Gynécologie et d'Obstétrique* in Paris.

That was the best contribution—from my own point of view—which I ever made to a scientific journal, for it, perhaps, saved my life.

One hot July day, about a year after my patient had made an uneventful recovery from the appendicitis operation, my secretary brought me word that, among the patients waiting to see me, was a man who seemed to be exceedingly nervous. He had been, she said, raising general Cain all over the place for most of the afternoon. I told her to send him in.

I knew I was in for it the minute he entered the office. He faced me with blazing eyes, trembling lips, and a look of black hatred. He shook one clenched fist at me. And as he drew the other from behind his back I found myself looking straight down the barrel of a shining revolver!

"You— You—" my visitor was yelling, and I omit the foul expletives which pounded upon my ears. "You took out my wife's womb! I'll take more than that out of you!" . . .

Action came quicker than thought. Before I had had time to sense my danger I had made a sideways leap and grasped the wrist that held the weapon. As I did so, a flash of inspiration burst into my brain.

"Wait a minute, wait, wait," I gasped, holding on to that wrist for dear life. "What is your wife's name?"

He spluttered and he swore. But he told me.

"All right," I said. "Then shut up and listen!"

I pushed him into a chair, gripping his wrist with such forethought for sensitive nerves that the gun fell into his lap where I could grab it and quickly put it beyond the reach of his twitching fingers.

Then I picked up the magazine which only that morning, by some blessed prevision of my guardian angel, I must suppose, had come to my desk.

"You can read, can't you?" I said, thrusting the Medical Journal under his eyes and wondering, as I did so, whether I could talk fast enough and convincingly enough to make his respect for the printed word carry over into the realm of a language which I knew was unfamiliar to him. The article, of course, was written in French.

Fortunately, his wife's name was there—the given name in full and the first letter of her surname, as is customary in such reports. The abbreviation—"Margaret R——"—caught his eye. As I pointed out to him my own name at the head of the article and in the opening sentence the name of the physician who had referred his wife to me, I could see his doubts lift and his trust in my good faith return. I was able to give him a very free layman's translation of the substance of the article.

I saw the frenzy leave the man's eyes. I saw his tense muscles relax. I saw a look of hopeless sadness settle on his countenance.

"Why did God have to play such a trick on her?" he said. "Think of having such a cripple for a wife."

I did not let him go until I had drawn from him the whole story of what had driven him to play the murderous maniac in my office. I owed the worst five minutes of my life, it seemed, to a brother medical man.

"When my wife came home from the hospital," the now drooping and penitent husband told me, "Dr. P. looked her over. He

said that there was no doubt that, when you took out her appendix, you took out her womb too. I guess he was wrong!"

The stammered apologies which Dr. P. made, volubly enough, when I stated to him quite vigorously my ideas about his complete lack of fraternal fairness, may have put into his mind a caution which has bridled his tongue since that day. But those apologies would have been of no use whatever to me if good luck and quick thinking and agility had not combined to bring my story to a happy ending.

Dangers to life and limb are not the only things which bring an early touch of silver to a surgeon's head. There are the threats to reputation, the priceless possession which any good doctor values above his life. No one outside the medical profession can realize how often a doctor feels himself carefully threading a precarious way among such quicksands and pitfalls that a single misstep will mean an end to all his future usefulness. No one knows how many times he is called on to decide in an instant how to deal with a dilemma both of whose horns are sharp as death.

When, however, along with all my confrères, I utter the surgeon's prayer for divine protection against the snares and pitfalls which beset our path, I keep an especially fervent "Good Lord, deliver me!" for the peculiar tribulations which quackery can bring into the life and practice of the most sincere and skillful surgeon or physician.

A young taxi-driver, mistaking the reason back of my request that he get me to our hospital as soon as he could, once warned me against letting "that fellow Thorek" operate on me.

"He's OK, of course! I don't mean he isn't. He's as good as they come. But you don't need an operation, Buddy. My aunt was sicker than you are. They told her they'd have to operate. She was worried for sure! Then someone put her on to Dr. —'s pills. She's fine again and the pills didn't cost her more than a couple of bucks. You can get them at any drugstore . . ."

I have often wished that I could have seen that young man's face when he looked at the visiting card which I folded in the fare for that trip!

To the patient suffering from gall stones, I can say, as any good surgeon can, "I believe you should have an operation. I believe the operation will be successful and that it will relieve your suf-

ferings." But that patient can go from my office to the corner drugstore and, for a small fraction of the cost of such an operation, buy a "cure" which is "guaranteed" to be successful.

I have had such patients come back to me in triumph to point out how very wrong I had been.

"I took the medicine just as directed, Doctor, and sure enough the stones 'passed.' So I don't need an operation at all. I'm well again."

I am lucky when they do come back, for then I can, with some faint hope of success, explain the trick by which the result has been obtained. I can tell them what every physician knows, that massive doses of some bland oil together with doses of salts will result in the passing of soapy concretions in greenish lumps. Gall stones manufactured to order! And the real trouble, of course, untouched.

But patients who have made such cheerful discoveries do not always come back—not for some time. And in the interval precious time has been lost. In some diseases, of which cancer is the most obvious, the loss of that time immeasurably increases the surgeon's risk of failure.

Much has been done in my lifetime to curb and control the activities of quacks and nostrum-mongers. But much remains to be done. The public, as more than one wise man has observed, likes to be fooled, likes especially to be fooled into believing that the easy way is the best way out of the trials and tribulations which beset human life. Laws carefully framed and rigidly enforced can do something. Patient education can do even more. But I fear that, until the end of time, the quack and his works will be a sharp thorn in the reputable practitioner's bed of roses.

Convinced as I am of the close interrelationship between mind and body, I am nevertheless forced to admit that I class as quacks a good many of the practitioners of various cults of faith healing. At least I am sure that there are quacks among them. I found that out one day when an urgent call came from a woman I knew to be in the front rank of the healers of her particular cult.

No prudent fly ever walked in more gingerly fashion to accept the spider's hospitality than I did as I made my way to keep that appointment. "Theirs not to reason why," I told myself. Doctors go when patients call.

I didn't feel like a fly when I got inside the imposing home

where my new patient lived and started the long labyrinthine progress over polished floors deep in Oriental rugs which would lead me to her inner sanctum. I felt rather like a new Haroun al Raschid. Rich paintings and draperies of satin hung on the walls. The air was heavy with the sweet smell of flowers and the cloying scent of incense. I felt sorry for those flowers. I knew they must be craving a breath of fresh air as much as I was.

At last I stood at the bedside. In a nest of fine linen and silk and much embroidery and splather of colors—pale pink and pale blue against snowy pillows rich with lace—lay a woman. She might have been a pretty woman once. But she was forty at least and her face was pale and pinched, her eyes hollow, her smile haggard. A glance at the outlines of the figure under the covers revealed a tremendously enlarged abdomen.

We looked at each other in silence for a moment. Then she spoke.

"Sit down near me, Doctor," she said. "This is a matter of life and death and—and—honor! You know my profession. But I must have help. For a year and a half I have lain here flat on my back . . . I am grasping at you, as a drowning man grasps at a straw."

A remarkably well fed "straw," I thought, as I looked at myself in the mirror! I was impatient with the theatricals. I wanted to get home. There would be good music there . . . and Fim . . . My mind wandered away from the long recital of woe.

The husky weird voice took on a new tone—real at last, and desperately anxious.

"Doctor, tell me the truth! Is there any chance for me to live?"

I made a quick examination. The large abdominal tumor showed none of the earmarks of malignancy.

"Of course you can get well," I told her. "But you must have a surgical operation."

Relief and hope flashed into her face. But hesitation was there also.

"I should have to take an assumed name . . ."

"So far as I am concerned, you are Catherine of Russia or Madame de Pompadour," I assured her.

The next day the hospital received a Madame X, and two days later I removed from her a non-malignant, but a truly tremendous ovarian cystoma.

My suspicions of the lady had not been entirely laid to rest. I intended to take no chances of having my surgical skill used to perform a "miracle of healing." I could imagine a very nice testimonial beginning "For eighteen months, I lay on my back . . ."

A photographer took careful pictures, profile and full face, of the insensible patient, both before and after the operation. And the gigantic tumor was weighed as well as recorded on photographic plate. We were ready for any tricks.

About a week later, when Madame X was recovering nicely, I dropped a set of those precious photographs on her bed. She looked at them in silence and then, smiling faintly, she said:

"I don't know that I blame you, Doctor."

In my innocence I thought that, having been forced to recognize the complete inadequacy of the faith she professed, the lady might have difficulty in returning to the business which had been so profitable to her in the past. But I was quite wrong.

On each anniversary of that operation, my consultation room is massed with flowers. I see Madame X from time to time. She still lives luxuriously and thousands of duped sufferers must contribute to that luxury. When I try to remonstrate with her in the name of conscience, her answer to me, now, as years ago, is simple.

"Why not?"

Why not, indeed! Because the harm she does reaches even beyond the ranks of her own pitiable clientèle. It hampers and thwarts the progress of our conquest of disease, protecting under a heavy cloak such social enemies as cancer, tuberculosis, venereal disease, poliomyelitis, and many other contagious and infectious diseases against the direct attack which medicine and surgery might bring about their extinction.

Life will be simpler certainly in that Utopia of which the surgeon dreams, where violent, greedy, jealous men, and maniacs, and quacks and charlatans have no place. Will it be as interesting, as perennially exciting? I wonder.

DOLCE FAR NIENTE

LET anyone deny it who will, wealth does bring certain freedoms. Freedom to venture down those alluring by-paths which may lead to discovery—or may lead to nothing. Freedom to work hard without the nagging thought of bills to be paid and obligations to be met. Freedom—and this for me has been of great importance—to move at will here and there in a world full of things to see, to enjoy, and to learn.

If there are shackles which go with wealth, I never felt them. I saw to that. With patience, and I am sure with the enjoyment which comes from a sense of adequacy, she assumed all those burdens which draw such pitiful groans from the well-to-do. She watched the markets; managed the investments, figured the gains and losses, and left me in the fullest possible enjoyment of a new, intoxicating liberty.

We began to travel in those days and the journeys we took then and have taken since then have added richness to our lives which no turn in the market, no reverses of fortune could ever take away.

First goal of those travels for me was, quite naturally, knowledge and association with my confrères across oceans and beyond mountains. When the first World War ended and it was possible once more for American doctors to visit the clinics and hospitals of Europe, we flocked there in great numbers, eager to return to our old habit of sitting at the feet of the great ones of the Old World. It was only gradually that we began to realize, with disappointed nostalgia mixed with a certain pride, that the war had written *Finis* to a chapter of medical history. War had impoverished European medicine as it had impoverished every other

phase of European life. The days when an American surgeon needed a post-graduate course in Europe before he was truly equipped for his work were coming to an end, if they had not already ended. The capital of the medical and surgical world was moving westward across the Atlantic. Its establishment in the New World would soon be quickened by the arrival on our shores of destitute distinguished émigrés for whom a changing Old World no longer had room.

But those were developments of two decades. When I made my first post-war trip to Europe in 1920, I had all the inner glow of a pilgrim setting his face toward Mecca. And the friendships and associations which grew out of this trip and others which followed have made me better able to live in this world as well as to practise surgery in it.

Many illustrious names recur to my mind as I think of those journeys—names of men famous in the world of medicine whom I came to be privileged to call “friend.” Paris recalls DeMartel, Victor Pauchet, Pierre Duval, Raymond Grégoire. The mention of Rome brings to mind the clinics of Bastianelli, Alessandri, Pestalozza . . . Vienna, von Eiselsberg, Hochenegg, Lorenz, Weibel . . . No list would be long enough to name them all. No words of mine could ever tell how much each one of them has given me in encouragement and inspiration.

I never quite get over a pleased surprise at the accessibility of giants like these men. The truly great, in my profession as in any other walk of life, are easily approached. Only the shoddy, the near great, flail their power and position around them like a barbed whip to keep off intruders. One of the best demonstrations I ever had of this truth came in the summer of 1923.

I had gone to Europe to deliver addresses before *La Société des Chirurgiens de Paris* and the Royal University of Rome. Between these two engagements, I proposed to visit Vienna, and I especially wanted to see, in that city, the famous Austrian surgeon, von Eiselsberg. I had no way, it seemed, of securing the introduction which would gain me a hearing with von Eiselsberg, but when I spoke to Dr. Dartigues, then president of the Paris Society of Surgeons, about my difficulties, he laughingly said:

“Suppose you take along a copy of my book, with my compliments and regards to von Eiselsberg. That ought to break the ice for you.”

With the book under my arm and Phil at my side, I presented myself accordingly at the First Surgical Clinic of *Allgemeines Krankenhaus* early one summer morning and sat down to wait for a summons into the great man's presence.

We had plenty of time to observe the famous institution, at least from the outside, while we waited. With us on the waiting room benches sat workmen in blouses and sabots, reeking of cheese and sausage, and fine ladies in silks and laces. Patients on crutches, patients with bandaged heads or arms—these seemed the lesser sufferers among the many pathetic war *mutilés*, the scores of men and women with tremendous goiters and other ugly deformities. Over all hung the indescribable, inescapable atmosphere which belongs to the hospital wherever it is, and that sense of precision and discipline, also traditional, which is carried to special heights in the countries where military rules are part of the national background.

We waited, nothing happened. Every man who came through the waiting room was carefully measured and appraised by our eyes. Was this von Eiselsberg? Or this? No, that man was too thin, that man too short, to fit our picture of our hero. And then we were sure that we had found him . . .

A door had swung open and there stood a tall man who carried himself like a soldier and wore mustachios waxed and flaring enough to have made the last Wilhelm jealous. He was immaculately clad. Every thread of his white hospital coat glistened so whitely as to make one believe that it had been laundered separately from its fellow threads in that dazzling fabric.

"Oh, Dad!" Phil whispered ecstatically, "Geheimrat!"

I was sure that he was right. I leaped to my feet, made my way through the crowd that surrounded the towering figure.

"*Ich wünsche Herrn Geheimrat von Eiselsberg zu sprechen,*" I said.

The majestic personage looked me up and down. There was ice in his voice which I felt in the marrow of my bones as he said just three words:

"*Setzen Sie sich!*"

It was a rebuff that hurt. And Phil and I sat listlessly for another half hour, another hour. What was the use of waiting longer? We were just about to give up and go back to our hotel,

when suddenly a familiar face appeared in the doorway and a familiar voice greeted me:

"Why, Dr. Thorek, by all that's holy, what are you doing here?"

It was Dr. Graham, rotund, jovial American from Indiana, who had been one of my students in operative surgery in Chicago. He had decided that he could live in Vienna more cheaply than in America and get good experience at the same time. So here he was working under von Eiselsberg.

I congratulated him on his good fortune to be associated with so great a man. "I don't seem to be able even to speak to him for a moment," I said ruefully.

Graham laughed.

"If you want to see him, why don't you?" he said.

"Why don't I? Heavens, man, he's kept me waiting for hours!"

"Nonsense," said Graham. "Come with me."

As Phil and I followed Graham we passed the shining white coat halfway down the corridor. It made low obeisance to our guide.

"Who is that?" I asked.

"Just Fritz, one of the orderlies."

He pushed open a door as he spoke and a small man, with gray-pointed frowsy beard and patched coat, looked up from his desk and then came quickly across the office with hand outstretched. There was friendliness and welcome in the keen eyes. This was von Eiselsberg. We must have talked more than an hour, but if the professor was conscious that hospital routine was suffering because he gave so generously of his time and thought to a strange colleague who had just happened in, he showed it by not one flicker of an eyelash.

Fritz held my coat for me as I bade von Eiselsberg adieu, and he clicked his heels smartly when I reached into my pocket for that handful of Viennese coins which seemed such wealth to him.

But sometimes my journeys had other goals. And then things did not always work out as I expected. There was that summer, for instance, when I essayed a brief excursion in quest of my youth. And found, not my youth at all, but one of the most bitterly disappointing experiences of my life.

Diogenes Laertius, of whom we know nothing except that he devoted his life to writing the lives of eminent philosophers,

relates that when Aristotle was asked, "What is a friend?" he replied, "A single soul dwelling in two bodies." It is easier for a European youth than for an American to understand this definition, for in the old country adolescent friendship is more sentimental and unrestrained than it is here. Jean-Christophe had such a friend in Otto, as described in Romain Rolland's *Jean-Christophe*, which I used to consider the greatest novel of the twentieth century, though perhaps that distinction belongs to William Somerset Maugham's *Of Human Bondage*.

During my youthful years, I too had my Otto—a bosom companion, by the name of Herman R. We seemed indeed to be one soul in two young bodies. We were inseparable. We shared everything, from the rare find of the first wild strawberries in the woods, to a new book by an author of whom we had never heard before. We were much closer to each other than to any of our relatives. When we set sail for America, Herman R. and I went through an emotional leave-taking that actually saved the day for the other members of our families. We made such infernal fools of ourselves that we really were very comical. We clung to each other. We swore we would write at regular intervals, we vowed we would meet at a certain place at a certain time, we exchanged talismans, and with clasped hands we entered into an unbreakable pact.

At the outset, we managed a rapid interchange of letters very well. As time marched on, we did as thousands of others have done before us—we permitted the friendship to lapse because of the immediate demands of daily life. I was far too busy with my career, and I presume he was equally busy. However, next to my beloved Fim, my friend was the link that bound me inextricably to the *Heimland*. When I became what the world considers successful, I used to wonder about him and often I promised myself that if ever I went back to my native country, I would seek out my friend. Again and again in my dreams I pictured our reunion, the delight with which he and I would relive our boyhood days. So many things that we intended to do had remained undone: but the years passed, and I did not revisit Hungary, and did not see my friend.

One summer I was in Vienna with an unexpectedly free afternoon on my hands: an appointment with a group of scientists had been postponed, Fim left me to visit her father. I walked

around. I saw Raphael Donner's far-famed Fountain—it was indeed beautiful, but it was dry, and this waterless fountain was typical of Vienna in a post-war summer—the structure was there, the life was gone. Vienna was an invaded city, inviting the invaders to despoil her. Her currency had become waste paper; one American dollar purchased over fifty thousand Austrian crowns.

Cultured Viennese of good families were driven to the sidewalks to implore the passing foreigners for a slice of bread. Eminent scholars died from lack of food. Professor Finger estimated that three-fourths of the women of Vienna were for sale. Men of all nations swarmed to the fallen city; white men, yellow men, black men and brown, they came to the daughters of Vienna. The children were indescribable; barefoot, ragged, unfed, all day they remained in the streets, and some of them remained there all night. They could not smile and did not know how to play, for in the backwash of war the instincts of childhood are lost. Little boys and girls, their parchment-like faces resembled Egyptian mummies rather than our American children. They existed in the awful shadow of hunger, and their kindest friend was death.

It was a peculiar afternoon. Whimsical clouds and dusty streets varied with blazing sunshine and a general restlessness of wind, weather and mankind. As I wandered about, I saw an old-fashioned *fiacre*, with a cabman and a horse that seemed to call: "Take us!" There was a certain dignity about the old man as he sat on the box; there was an air about his faded but much-brushed top hat of the type peculiar to Vienna; his cape, dingy and threadbare, was as brave in its way as his raw-boned horse. When I am at home, I like to go about in old clothes, but when I travel I am well-dressed. To the experienced gaze of the old coachman and the horse, I was legitimate prey—an affluent, post-war foreigner hunting for something to do on an afternoon in Vienna. I might be wanting anything, from *schnapps* to sirens, and as they watched me amble along the street they began to follow. The man—and it seemed to me his shaggy nag also—kept sending me an appealing glance. After several minutes I surrendered, and hailed the old man, who with a delightful Viennese drawl, asked: "Where to, Your Highness?" To his surprise, I replied in his native tongue: "Oh, any place—I just want to ride around the city and remember a few things."

The old man clucked to himself with his fragmentary teeth,

and then he clucked to the remains of his horse. Thus the three of us started on a slow clop-clop over the streets of Vienna. Sad, post-war Wien. I mused and wandered in fancy over the zig-zag routes we took, remembering this hope, recalling that face, living again this or that adventure. We reached the Prater . . .

Often the horse would stop, and the old man would turn around to me asking: "Where to now, Your Excellency?" And I would say: "Oh, just keep on going. Drive me anywhere!" Before sunset we were in the business district of the city again . . .

During this aimless jogging, my wandering eye was suddenly caught by a sign, as if I had been struck by a bolt of lightning, which read:

HERMAN R.—DRYGOODS—WHOLESALE ONLY

Could this be *my* Herman? My heart literally leaped. Into my dreaming came the pictures of boyhood. As I entered the store, I could plainly see that it was unusually prosperous for the Vienna of that period. Halfway down the large establishment was a man who was unmistakably my Damon of younger days. What would he say, now that before him stood the Pythias of his youth? Angular, with the countenance of his childhood scarcely furrowed, but every inch the prosperous man of Big Business as Vienna then knew it, there was my Herman.

In that instant, the years disappeared. I was in Vienna, reunited at last with the dearest friend of my childhood. Across an unseen bridge of emotion, with pulses high, I walked deeper into the store, to meet my comrade. I knew what was going to happen. He would exclaim his astonished joy at my unannounced arrival, he would throw his arms around my neck and weep, and I too would not be able to restrain the tears that fall when the human heart overflows. How much we would have to say to each other, he and I, how we would talk the whole night through, how we would have more questions and discussions for the following day, and for the days after that! Of course, he would close his store to spend all his time with me, and I would protest at that, but of course he could not think of business while I was in Vienna.

I stood face to face with him, and at that moment there was something about the man which kept me from rushing forward. Instead, I asked:

"Excuse me, are you Mr. Herman R.?"

He scrutinized me searchingly. There was no gleam of recognition. All the wind died out of my sails. I was terribly hurt, yet still persisting, still hoping, I continued:

"If I am not mistaken, Mr. R.! I knew you many years ago. Do you remember Max Thorek?"

My friend of the past answered me: "I went to school with him, but have not seen him in twenty years and more. Why?"

"Why?" I repeated, foolishly. "Why, Herman, I—I am Max."

The smile he gave me was fleeting, but his gaze was long and searching. I shrank into myself. His look informed me it would be all right for me to depart at any time. He confirmed it by asking the question which explained his behavior: "How are you getting on?"

Then the imp of mischief which dwells in each of us, took possession of me, and made me answer: "Just now I happen to be in straitened circumstances."

Fearing I was about to ask for a loan, he replied quickly: "Well, Max, I do hope things clear up for you. I must go now. As you see, I am very busy, and my secretary has just told me I must attend an important meeting. I'm sorry. You should have remained in your own country. Forgive me, won't you? I must go. Do come again soon . . ."

Wounded and bitter, I went to the most expensive florist in Vienna. I ordered a vulgarly lavish bouquet of the most beautiful and expensive roses in his shop, wrapped up in the most blatantly gaudy manner even his expert hands could devise. I sent the bouquet to the wife of the friend of my youth. I enclosed my card, which gave the recipients an idea of my status. I wrote across it: "With greetings and best wishes, in appreciation of a very significant reunion with his boyhood friend." I wrote my address, which was that of the leading hotel in Vienna.

One hour passed since the sending of the roses. I was dressing for dinner, and had not finished telling Fim of my adventure—I had not had time to hear any of hers—when word was sent up that we had visitors. The whole clan R. was down in the lobby of the Hotel Bristol, requesting admittance to our suite. Such is the power of the façade of prosperity. At times, to hide the fact that I am not wearing a shirt, I put on an extravagantly rich-looking red smoking jacket. Thus arrayed, I had all the R. family come up, receiving them in the salon. Fim, as usual, was elegance

personified. My visitors were too dumbfounded for speech. It was Herman's time to stammer, and his apologies were so painful to me, who had to hear them, that I can well imagine what he went through in giving them voice.

I relate this incident as solace for mortal losses that at the time seem unbearable. All that friendship of which I had been so proud, all that devotion upon which I had counted, had been merely an ephemeral figment existing merely in the imagination, and that only in mine!

My own "Reunion in Vienna" with Herman gave another facet to my philosophy of life, no matter what it did to my self-conceit and to my heart. For consolation, I read again, Plutarch's treatise, *Of the Tranquillity of the Mind*.

Just as unexpected, though they had none of the sting of the encounter with my one-time friend, were the experiences which came to me when I tried to use travel to "get away from it all."

From time to time in those busy years, Fim, a friend, a colleague, would say:

"Max, you are working too hard. You must relax. Why not take an ocean trip—get away from it all—*rest!*"

And from time to time, though not nearly as often as the advice was given, I docilely allowed myself to be packed on board ship, vacation bound.

There was, for instance, that summer when Fim managed to carry me off to Venice. I had every intention when I arrived in that lovely city to be a good patient. I would lie on the sands at the Lido. I would not even think of operating rooms, patients, medical books.

The first day was glorious. I lay there, sniffing the savor of sweet salt air, watching the blue sky and the matching waters of the Adriatic, the gleaming sands, the motley crowd of fellow human beings of all ages, creeds, ranks, and colors—and all in holiday mood. I smiled benignly as I noticed those cabins where lovers of all ages and intentions held hands or stole a vagrant kiss.

"Why haven't I done this before?" I asked myself, stretched out on the sand beneath my red and green umbrella. "Why have I deprived myself for all these years of this kind of glorious relaxation? I shall stay here a long, long time. Maybe I won't go back at all . . . If I do go back, I'll know enough not to work so

hard any more. It is senseless to work so hard. Let the younger men take some of the work. Why didn't I find out before how good it is to rest?"

And I yawned and dozed off and felt the sun soaking into my skin.

The second day began in the same mood. But, as I stretched myself between naps, I noticed suddenly that, sitting beside me on the sand, was my old friend Professor Eduardo Perroncito! This was a crowning vacation pleasure.

Perroncito was one of the greatest parasitologists of our times. He was the discoverer of the cause of the obscure disease from which the miners digging the St. Goddard tunnel died in great numbers. Honors from all nations had been showered upon him in recognition of this discovery and of his other achievements. He was an old man, nearly ninety, that day when I discovered him on the Lido sands. And there was no one in the world whom I would rather have seen sitting there.

"How wonderful to see you here, my dear Dr. Max," was his greeting. "How wonderful that finally you slipped yourself out of harness! Come, let us walk. Let us talk—but never a single word about medicine!"

Fim beamed on him.

"Well, at least we've got him here," she said. "And I think you should keep him here, Professor Perroncito."

"And so I shall, my dear Mrs. Thorek," he assured her, "so I shall!"

The conversation sounded so spontaneous that I never suspected that Fim and the professor had concocted a conspiracy. Fim knew me too well to trust me to keep that mood of lovely lassitude which had marked my first day on the sands. She had delegated Professor Perroncito to act as my guardian should I try, by work, thought, or action, to escape from my beautiful prison.

My guard, looking like Tolstoy's double, was on the job by breakfast time the next morning. We spent the day together, enjoying sea, sand, sun, and humanity, talking of everything in the world except medicine and suffering. The next day passed also in lovely idleness. And then the fourth day came.

We were watching the boats plying between the Lido and Venice. In the distance *La Piazza San Marco* and the church of St. Mark glittered in the sunshine.

"Not far away from the church," I said, "is *Il Ospedale Civile* where operates my friend Giordano."

"Ah—Giordano," said Perroncito, his voice vibrant with pride, and his status as warden completely forgotten for the moment. "Giordano was my pupil! How proud I am of the heights he has attained! He is a great leader of men and a great surgeon."

He stopped himself suddenly.

"It's time we went back to the hotel for lunch," he said, with the air of one giving notice that a subject is definitely closed.

But the harm had been done. And, all unconsciously, Phil's young wife, Rosa, completed the job as we sat lunching on the hotel terrace. She had just taken the boat trip between the Lido and Venice.

"It takes only twenty minutes," she exclaimed, "and it is wonderful!"

I couldn't sleep that night. I kept thinking about a little crippled girl I had seen playing on the beach that day. I had looked at her casually, noted that her condition seemed possibly remedial, and I had vaguely hoped that someone would do something about it. It wasn't anything I had anything to do with, of course. I was on vacation.

"What sort of surgeon are you?" I asked myself, sitting bolt upright in bed. "You have two legs, two hands, two eyes, and a back. Yet you lie all day in the sun, talking about styles and motifs and taking pictures in a world where crippled children, children and men and women with pot-bellies, goiters, lame legs, crooked spines, need your labors. Yes, you lie and loll in the sand! But don't forget that just across that strip of blue water your friend Giordano keeps on operating!"

It took some careful tip-toeing the next morning to escape my guardians while they slept. I caught the first boat for Venice and by seven o'clock I was in Giordano's operating room. Three hours later I bethought myself to telephone Fim. She had a search party out after me. Perroncito was at its head.

But by dinner time, while she administered a wifely exhortation both vigorous and to the point, she had resigned herself to defeat.

"I believe Houdini taught my husband how to get out of jail," she said as she poured Chianti into Perroncito's glass.

She must have realized as she watched me that my excursion

to Venice had not hurt me. I felt, and I am sure I looked, more alive in all my body than I had felt for weeks. There was no more talk of "rest" and "relaxation." Every day of our Lido sojourn I spent in Giordano's operating room, and Phil went with me to join that group of students from all over Europe gathered there to learn what the great man had to teach.

The summer could have been a restful vacation. Perhaps it would have done me good. But I am not sorry that it turned out to be something quite different. It was a rare opportunity to work with Giordano. And it was a privilege to know him in the many-faceted life which he led.

No, it has never been easy for me to put aside my work and loaf and invite my soul. Always there seems so much to be done—such a short lifetime in which to do it! But even when I have been willing to "relax," following doctor's orders or my own inclination, luck has seemed to be against me. I am quite willing, for instance, to idle away the days of an ocean crossing. Businessmen can do it—or could until the diabolical telephone followed them into this last sanctuary on earth. Lawyers, I suppose, don't find clients popping up at them from behind deck chairs. Teachers, unless they come along for the express purpose of edifying some group of earnest travelers, are generally left alone. But a doctor is fair prey anywhere. It has sometimes seemed to me that I have only to step on a ship and "emergency" is mysteriously in the air.

"Emergency" was on the lips of the ship's surgeon on the *Aquitania* when he routed me out of quiet slumber one night in the early 1920's when I was snatching a brief relaxation period before a professional tour of the Continent.

"Tom Cole, our bandmaster and headwaiter, is ill, Doctor," he said. "It's acute appendicitis. Will you help us in this emergency?"

Of course I would help. And I confess that, as I accompanied Dr. Jones through the dim corridors of the sleeping ship, I was rather thrilled at the thought of being able to operate in the luxurious surgery of the "Queen of the Sea." The *Aquitania* was, in those days, what the *Queen Mary* and the *Normandie* were to become to a later generation of travelers. She was the last word in luxury and elegance. Everything had been done to provide

entertainment and comfort for her passengers. Down in her refrigerators were delicacies from a hundred countries, everything that palate could desire to nourish the inner man or bring him to the point of good old-fashioned bellyache. And I had every reason to suppose that the services which would be rendered in case of such a bellyache would be equally adequate.

One look at the operating room into which Dr. Jones led me showed me that I was quite mistaken. A chiropodist could not have comfortably worked to relieve a corn in that miserable, ill-equipped place. And here I was just about to perform a serious operation in it. I looked at poor Tom Cole and thought how close to eternity the poor fellow was!

The ship was brought to and lay with throttled engines as I set to work. Dr. Rossiter, Dr. Jones's assistant, acted as anesthetist, and Phil, feeling very important and professional, was allowed his first taste of operating-room technique when he was pressed into service to spray iodine vapors about. With instruments so primitive as to be pitifully inadequate, I removed a gangrenous, ruptured appendix. I used a piece of rubber glove for a drain. For sutures I resurrected some salesman's samples.

It was over at last. The ship got under way again. And I returned to my stateroom to worry and to think.

The news of the operation was all over the ship before Fim and I were on deck the next morning. Fim smiled as she pointed to the headlines of the ship's newspaper:

NOTED CHICAGO SURGEON OPERATES ON
BANDMASTER THOMAS COLE

"How nice to be so appreciated," she said.

I replied grimly. "We are still four days from Cherbourg. If the peritonitis, which was still localized last night, should spread—and I am afraid it may—you will find that your hero husband will soon fall from his pedestal."

It didn't spread, however. And Thomas Cole recovered.

Let me add that one of my first acts, when I finally got back to Chicago, was to buy for Dr. Jones a fine set of surgical instruments and send them to him with my compliments. I did not want him, or any other traveling surgeon, to be caught as I was caught.

The operation on Tom Cole could easily have ended in tragedy. But I have a vivid memory of another occasion when I was pressed into service which was sheer comedy of the kind that convinces me that the gods have a sense of humor.

We were returning from Europe with our newest family member, the emasculated chimpanzee which Serge Voronoff had given to us as a souvenir.

Dawn was coming up like a red-breasted robin and the tang of salt wind followed the light through the porthole. There was a knock at my stateroom door. I opened it cautiously. A clean, rosy, thoroughly British face was before me, and bright blue eyes clouded with trouble looked into mine. I heard an inimitable Cockney voice, hesitant but insistent, asking my help. The regular surgeon attached to the ship, the voice was explaining, was on furlough. His substitute was puzzled and bewildered by a case which fitted into no part of his medical knowledge.

"A most peculiar case," the substitute stammered. "Could you consult with me? Overnight one of our most influential passengers— She has developed a large tumor!"

"A tumor? Overnight?" I asked as I hurried to get dressed. "Where is it?"

"I know it sounds impossible, sir." The young doctor was blushing now. It's on her tongue, Doctor. It's frightful. She can't speak. I don't know what to do."

He looked relieved when he saw that I was ready to follow him.

"Have you your instruments, Doctor? If not, we will do what we can to scurry some up for you."

"Let's see first what we'll need," I said and we started off.

Into one of the most luxurious suites on the palatial boat our guide led us, and we saw our patient. She lay there on the finest of linen sheets beneath a pale pink down coverlet. The lady was not young. Her blonde hair showed gray at the roots and her heavy body bore all the marks of full maturity. But she was beautiful and regal all the same. From her white soft shoulders dropped away an exquisitely fine and heavily embroidered *robe de nuit* of a heavenly shade of blue. Beneath that robe her full bosom rose and fell with violent emotion. Yes, she was beautiful and queenly. But just at this moment the whole effect of queenly beauty was grotesquely ruined by that great tongue. The ship's doctor had not exaggerated. There it was, protruding from her

mouth, ridiculous, inharmonious, and positively improper! The eyes that looked at us over this distorted feature were irate, angry and helpless. Only that tongue seemed to greet us with a perverse and vulgar impudence all its own.

I knew that tongue. At least I had heard about it. Since the boat sailed from Southampton it had been busy slashing and hurting everyone within its reach. Its owner had used it, with telling effect, to impress the power of her wealth and position upon stewards and upon fellow passengers. And now! The bird of paradise was caught in her own net. The lady was hoist by her own petard. Never in all her fifty-odd years, I would be willing to wager, had anyone had the temerity to tell her to hold her tongue. Now that tongue, slipped out of all control, was holding her.

It was impolite, I know. Perhaps it was "unethical." But I stood in the doorway and burst into hearty laughter. I couldn't help it! After all, she was not my patient and it was not my boat. Why shouldn't I get at least a laugh out of it? Even the ship's surgeon, who did have to maintain a decent decorum, was, as I could see out of the corner of my eye, fighting to keep the muscles of his chubby face under control. His face had a wizened look where a grin was suffocated.

The woman was in no danger. I saw that at a glance. She wasn't in half as much danger as her menials would be when I got to work and restored her to mastery over her unruly tongue. Her cure was simply a matter of syringes. She got a hypodermic injection of adrenalin and an intestinal flushing with soap and water.

By the next day, the "tumor" was gone and milady was herself again. I had proof of the completeness of her recovery when she sought me out and for three hours at least used the full powers of her restored tongue to pour upon me floods of gratitude. Niagara seemed a mere trickle compared to that torrent.

What was the trouble? It was very simple, just a plain case of *angioneurotic oedema*. Which, in layman's language, may be interpreted—The lady was allergic to caviar. She had eaten not wisely but too well of this delicacy in the dining salon. And therefore . . .

I explained all this to the ship's surgeon as we stood together at the rail watching the panorama of sky and sea. I explained to him the vagaries of metabolic eccentricities and reactions to cer-

tain foodstuffs from the common hives to the more painful and distressing forms of malady. Almost anything, I told him, from acacia tea to zebra meat, could set up distressing reactions in the system of some individuals.

"Strawberries can induce hives and allergic poisoning in many persons," I informed him, "even if that famous British bishop did say that God never made a better berry. I have seen some remarkable results which were due just to eating eggs or fish, or drinking milk."

I waxed enthusiastic, scientific, ultra-technical.

My companion listened politely as long as he could contain himself. Then he threw back his chestnut-thatched head and, with all the laughter he had manfully kept pent up the morning before, he roared.

"Call it anything you like! Explain it any way you can! But by Jove, that was and is and ever more shall be, I call it a *miracle!*"

And we both held on to that rail and giggled until we were weak from laughter.

Dolce far niente. You must relax. Why not take a trip to Europe?

I have used that prescription—what doctor hasn't?—on hundreds of patients in my time. I hope some of them have found it good. I hope others have taken it with a grain of salt.

For I must confess that, while I have found adventure and stimulating contacts and moments to remember and scenes that "flash upon the inward eye which is the bliss of solitude," I have seldom, if ever, found travel restful or relaxing.

MAGIC CARPETS

FORTUNATE for the man who needs to get away from overwork and over-worry that he does not always have to rely on the "wings of the morning," or whatever substitutes for those wings the inventive genius of his age contrives. There are also magic carpets. And it has been my experience that they beat steamships and railroad trains and even airplanes—with which I have had practically no direct experience—all hollow, when a busy man, driven by his inner ambitions as well as by external circumstances, needs to find the complete rest, the complete change of scene which will effect a renewing and restoration of depleted energies.

If I have come thus far in a life, crammed to overflowing with hard, incessant work, with zest for living and doing unimpaired—I attribute that fact to my large and varied pile of these magic carpets!

Music heads the list. To the boy growing up in the Tatra Mountains, music was as much a fundamental necessity of life as bread and butter and air to breathe and a roof over his head and the old tile stove sending out its glowing warmth against winter chills. I can scarcely remember when my small fingers first held the bow, first guided it across the strings of my first "fiddle."

Back in those days that fiddle carried me out of the prison of bashfulness and diffidence into a world where I could look at last into the eyes of my beloved and take her by the hand. It gave me Fim, the greatest gift life ever brought me. When I undertook the difficult adjustments of life in a new land, my violin was my passport, my meal ticket, my key to the good life

locked behind America's promises. And always, through all the years, it has been a solace and a refuge and a strength.

I make no claim to that proficiency with the bow which raises violin-playing to the heights of great art. But I know, and know well, that those critics are right who insist that no one can ever be truly initiated into the appreciation and enjoyment of any art until he has himself shared, however falteringly and imperfectly, the struggles of the artist. There was an entertaining article by Gerald W. Johnson in an American magazine a few years ago, "On Playing the Flute Badly," in which the author described the new world which opened to him when, without any of the aptitudes and skills which a flute-player needs, he essayed nevertheless to learn to play the flute. I have always known the Open Sesame which swings wide the gates of that world to the true initiate. And I have found behind those gates a realm of wonder into which the cares and tribulations and worries of operating room and laboratory and consulting office cannot intrude.

Any man with an inquisitive mind—and how can one be a surgeon without such a mind?—collects hobbies as naturally as a small boy collects in his wonderful pockets sticks and stones and beetles and frogs. I am by no means an oddity in my profession because I do. Physicians and surgeons have always been among the best collectors of magic carpets in the world. The great Viennese surgeon, Billroth, for example, was an accomplished musician in whose judgment on matters musical Brahms had great confidence. The Vienna Orchestra, composed exclusively of doctors, built for itself a world-wide reputation. Hyrtl, the great Viennese anatomist, was an etcher of distinction. The American Dr. Oliver Wendell Holmes was as well known in literary circles as he is in the world of medicine. Dr. Hertzler, who wrote *The Horse and Buggy Doctor*, tells me that his hobbies, in addition to writing, are farming and target-shooting. One could make a long and interesting book about the hobbies of men of my profession.

"One cannot practise medicine alone, and practise it early and late, as so many of us have to do, and hope to escape the malign influences of a routine life," said Sir William Osler. And thousands of good physicians and surgeons have echoed his words and sought, deliberately or instinctively, to balance professional rou-

tine with hobbies which use the same skill of hand and delicacy of perception.

The achievements of medical men in the arts should surprise no one who remembers that Aesculapius was reared, so legend goes, by Chiron who taught him, not only surgery (*chirurgie*, hand work) but also music and ancient lore; that St. Luke was not only the "beloved physician" but also the poet who wrote what some have called "the most beautiful book ever written," the hymnologist who composed some of the earliest hymns of the Christian Church, and the painter whose seven portraits of the Virgin "first taught Art to fold its hands and pray"; that the great artists of the Renaissance—Leonardo da Vinci, Michelangelo, Raphael—were great anatomists as well as great painters, giving to medicine and surgery almost as great an impetus as they gave to art.

The tradition is strong up to our own times. No history of poetry could omit the doctors: Rabelais, Schiller, Keats, Goethe, among them; and no history of literature would be complete without such medical literary men as Oliver Goldsmith, Tobias Smollett, Weir Mitchell, Sir Arthur Conan Doyle, among them.

Music has been a refuge and a solace to hundreds of my confrères: to Albert Billroth, pioneer of visceral surgery, who composed music and wrote about its physiology; to Leopold Damrosch, who founded the New York Symphony Society; to Herman Boerhaave, founder of eclectic medicine; to Hermann von Helmholtz, renowned both in science and ophthalmology; to Louis Pasteur, founder of bacteriology.

And in the graphic arts also the followers of Aesculapius have made their mark. Some, like Richard Bright, Thomas Hodgkin, Wilhelm His, and Lord Lister, have used their considerable talents to illustrate their own books. Others have become "Sunday painters," or developed to professional quality their amateur interest in etching, sculpture, photography, and allied arts. Jean Martin Charcot, outstanding neurologist of the nineteenth century, was a talented draftsman, a witty caricaturist, and, in his spare time, a skillful decorator of porcelain. He has many parallels among the medical men of today.

Often a doctor's hobby carries him out of his own circle of professional confrères. I remember with great pleasure my association with the Chicago Business Men's Orchestra, made up of

doctors, lawyers, merchants, artisans—accomplished musicians all. It was founded by George C. Lytton, owner of the Hub Store of Chicago, who loved music and understood it. He played the bass viol in his orchestra. My own contribution was made in its first violin section.

Often, too, the hobbies of medical men bring their riders into a kind of comradeship with men of their own calling impossible in the limited field of professional activity. To know a man as a brother artist as well as a brother surgeon enriches friendship. The American Physician's Art Association, which I helped to found, provides many a magic carpet for busy professional men. I devoted much time to this organization while I was its secretary. I am its vice-president now, and I delight in the exhibitions which the association holds whenever the American Medical Association meets. Some of the oils, sculpture, and graphic art shown on these occasions would hold their own with credit in any professional art exhibition. But excellence in technique is only half the story. It does not matter so much that the paintings and the drawings and the sculptures be perfect. Good or mediocre, they stand for refreshing journeys on magic carpets for some country doctor in isolated Alaska, some medical professor in a great university, some hard-pressed city physician. Names of stars on the horizon of the world of medicine and names of obscure practitioners appear side by side in the exhibition catalogues; and it is by no means always that the ranking bestowed in the profession carries over into the world of art.

I have had my full share of hobbies. Some of them have been fascinating and fleeting, the engrossing entertainment of a month, a year. And some, having once been admitted to my private stables, live on there, eating up more or less of the corn of my substance and requiring more or less currying to keep them in condition. Music and art and autographs and books are among them. Always I have been almost instinctively drawn to the art galleries of the Old World and the New. And my relaxation and joy in the contemplation of old masters is all the greater because of boyhood studies in drawing and life-long experiments with my own pencil. I have collected as many fine paintings as my means afforded. My autographs have double fascination to me. They bring me almost face to face with men and women whom I admire, both those of yesterday and those of today. And they

are also, in their own way, additions to my collection of works of art—if one recognizes that art is fundamentally self-expression. What more natural and universal medium of self-expression is there than the writing of one's own name, the filling of a page with the calligraphy which, in very truth, is one's intimate self? I regret that the art of calligraphy suffered a terrific solar plexus blow with the advent of the Palmer method of teaching writing to boys and girls. That rigid and soulless training may produce more legible handwriting—though I am in doubt even about that—but it has curbed, during the past two decades, innate talent in many children, barring to them an avenue of self-expression which might have enriched their lives. I suspect that Palmer is just one more evidence of the retrogression in the arts which I find so palpable since the last war—the irritating cacophony of modern music, the retrogression to primitive and deliberate distortion in painting, sculpture, and the graphic arts, the curse of Gertrude Stein . . .

During the mad scramble of the Golden Twenties I made one of the greatest discoveries of my life. I added to my stable of hobbies a pure-blooded beauty which made the rest of my stable resemble nags. I secured for myself a brand new magic carpet on which I have delighted to go adventuring ever since. I discovered photography.

Necessity turned my thoughts in that direction. I was working too hard. I knew that, and my friends and mentors knew it. Professional worries stuck to me like burrs in the few hours I set aside for rest and sleep, and continued to stick even when I put an ocean between me and the duties of my calling.

Personal sorrows added to the strain. I had established my mother and father in a quiet, Northside home of their own and I had had the great joy of seeing them secure and contented after years of vicissitude. My father had found great delight in seeking out old cronies who could talk endlessly with him about the hardships of years gone by and the bright blessings of the present in a land where one could breathe freely, speak one's thoughts without restraints, and work without interference. My mother shared his joys. I had been able to do much for these two dear people who had done so much for me, but I could not stay the hand of time.

One summer morning in 1926, my mother's frightened voice on the telephone told me that Father was ill. I hastened to his bedside. When I touched his clammy forehead, when he pointed with his right hand to the pain in his left chest and told me that it went into his left arm, when I saw his livid lips and felt his fluttering pulse, I knew that angina pectoris, called the "doctor's disease" because it strikes down so many of our profession, had set its finger upon him. We were helpless. My lips closed his eyes— Philip, in Minnesota doing post-graduate work at the University of Minnesota, came home to pay his last respects to his grandfather at Rosehill Cemetery, where his bones lie not far from those of many of my teachers, many once prominent citizens of his adopted city. My mother followed him only a few years later.

Hard work, anxiety, grief—how could one find respite from them? Someone suggested a camera. It was a perfect prescription.

A surgeon walking along the Lake Front on his way to his office finds it fatally easy to perform, in his head, difficult and intricate operations, to settle problems of hospital management, to prepare scientific papers, in complete oblivion of his surroundings. But not if every human face he sees, every tree-branch bourgeoning with spring, every trick of light on water, challenges him to solve instead problems of composition and exposure time and camera angles. It was a revelation to me to discover the rich variety of the physical world around me, and to discover, too, the value of bringing to my day's work, when the office finally was reached, the freshness of a mind which had been released completely, if only briefly, from its treadmill of worried preoccupations.

I am one of those who maintain stoutly that photography is an art, a creative art, if the man behind the camera has artistic talent, and that the camera worker has greatly erred who has been fooled by the current ballyhoo that photography is inferior to other arts as a medium for artistic achievements. I see no reason why films and lenses should put upon the artistic spirit seeking expression obstacles more insuperable than those which confront a sculptor when he stands before a block of unyielding granite or a painter who has only a handful of oil pigments and tufts of hair and an expanse of cloth with which to create a universe.

There is, I am quite willing to admit, a temptation for the neophyte camera worker to be led astray by the mechanical possibilities which he discovers, to become so fascinated with gadgets that he never gets beyond their power. Those gadgets! I know how alluring they are. My own progress in the art of photography followed that of most amateurs, I think. Almost any beginner who is touched with enthusiasm for his new art goes through a gadget-collecting period. Where one camera almost scared him stiff when he began to "take pictures," he will gather, discard, bring into use again, half a dozen instruments. He will experiment with as many kinds of film as the manufacturers allow him access to, with as many kinds of exposure meters and developing formulas and printing paper as he can discover with diligent research. And he will—and this is the real danger—begin to blame his failures on his gadgets. If he had this kind of camera, or that kind of film, or that new trick appliance to take guess-work out of camera art—then, he is sure, all his pictures would be perfect!

Much experiment is absolutely essential to a beginner. He must learn the use of his tools by the same painstaking practice which brings the etcher his proficiency with zinc plate and etching knife, the painter his skill with brush and pigment. But he ought not to go on endlessly experimenting, endlessly trying to find a mechanical combination which will make all his prints exhibition pieces. That is chasing will-o'-the-wisps in real truth! Sooner or later most painters find that they work best with a certain type of brush, a particular grade of canvas, a special make of paint. Then, if they are artists, they begin with those tools to develop the individual technique which, in great paintings, is as clear a signature on a canvas as the artist's name in the corner. The camera artist should do the same thing. And when he has reached this point, which many never reach at all, he is just beginning to get ready to earn his right to call himself an artist.

The purpose of the camera artist, like the purpose of any other artist whatever his medium, is to reproduce for others, not just what his physical eye sees, but the emotion which filled his soul when he saw it. "Art is the mingling of Nature and human nature," said Van Dyke. In the art of the camerist this holds true as firmly as it does anywhere in the world of art. For the true artist, the camera furnishes but a "mental thumb-nail sketch"

of the result he seeks. To attain that result, he needs a thorough understanding of the principles of rhythm, harmony, balance, and symmetry. And he needs inexhaustible patience. He must serve his art as faithfully as Jacob served for Rachel.

Modernism was sweeping the Western world in the days when I was serving my novitiate in camera art. I have never had any use for the cult of ugliness and distortion which that movement represented. It seemed to me then and still seems to me a perversion of all that is best in every art. From the vantage-point of the 1940's, it is becoming possible at last to appraise with sanity the fads and fancies which had the art world of the 1920's by the ears. The strange fires which burned with such furious intensity have died down now, leaving heaps of smouldering embers. That anything new and fine was tempered in the blaze while it burned high and hot, I very much doubt. We are able now to relate the movement to the world in which it happened. It was part and parcel of the psychopathic hysteria which World War I left in its wake. It led to inevitable poverty and depression once the orgy was past.

So completely do we take the miracles of photography for granted today, that it is something of a surprise to most people to realize that the whole history of its discovery and development spans hardly more than a century. Discoveries, of course, do not burst full blown from the brain of a single inventor, and hints and foreshadowings of the possibilities of photography crop up in history much earlier than the nineteenth century. For some very early ones, one turns—as one so often turns when a thoroughly “modern” invention is under discussion—to Leonardo da Vinci, who made some interesting notes on his *camera obscura*. Giovanni Battista della Porta, writing his *Magiae Naturalis* in 1558, had something to say also about the *camera obscura's* value to artists. But both these gentlemen spoke of a *camera obscura* which was literally a “dark room” in which light through a tiny aperture on one side threw upon the opposite wall inverted images. Not until the eighteenth century had the camera been reduced to box-size through the use of a lens.

Johann Heinrich Schultz, a German physicist, came close to discovery in 1727, when he experimented with silver chloride solution and discovered that it was not the sun's heat but its rays

of light which caused certain substances to turn dark. But he never carried his experiments to conclusion. Thomas Wedgwood and Sir Humphry Davy came closer in 1802. They were actually able, using silver salts, to record the profiles of objects. But they found no way to remove the silver salts, and the images they recorded gradually faded into the darkening background.

Perhaps the first "photograph," as we know the term, was made by Nicéphore Niepce, in 1816, in Châlon-sur-Saône, France. He succeeded in making a record of a camera image on paper sensitized with silver chloride. He had the secret almost within his grasp, but he did not know it. He did not realize that he could have made any number of positives of his print by simple contact technique. He gave up his experiments, but he paved the way for the work of the Englishman, W. H. Fox Talbot. And he worked for a time as partner of Louis Jacques Mandé Daguerre, who, after Niepce's death, perfected the heliograph and christened the new process "daguerreotype."

Two techniques of photographic reproduction thus came into use almost simultaneously. Talbot worked to achieve relatively permanent results on chemically prepared paper. His work was aided by such men as Claude Félix Abel Niepce de St. Victor, nephew of the inventor of heliography, who worked out a usable technique by coating glass plates with egg whites and potassium iodide; Désiré Blanquart-Evard, who introduced albumen paper and so greatly reduced the time of exposure; and François Arago, politician and scientist. Daguerre, meanwhile, continued to work for results on metal. His first successful plate, now in the Société Française, is dated 1837. The French Academy of Sciences investigated his process and made it public property. Daguerreotypy (on metal) and talbotypy (on paper) were rivals for more than a decade. Then both gave way to the collodion negatives (on glass).

Frederick Scott Archer was the man who put both the earlier methods into near oblivion when he introduced collodion as a medium for fastening silver salts to the glass surface. Dr. Richard L. Maddox, an English physician, succeeded in making what we now call an "emulsion," using gelatin as a support for light-sensitive silver salts. Some years later, in 1890, Ferdinand Hunter and Vero C. Dreffield, both British amateurs, studied mathematical relationships between exposure time, development and density of the gelatino-bromide emulsion, laid down basic rules for correct

rendering of tonal values, proposed scientific measurement for the sensitivity of emulsions, and made an exposure table in the form of a slide rule. Their innovations greatly increased the speed of the process.

Other men of the nineteenth century began to experiment with color photography. Clerk Maxwell as one of the first and John Joly of Dublin was another. They had little success with their experiments, but they laid the foundation on which have been based the discoveries and inventions giving the world color photography and even colored motion pictures in our own lifetime. The panchromatic film was all but forgotten in the first quarter of this century, but it became suddenly popular in 1927 and a new era of photographic history was begun.

Nineteen hundred twenty-seven was the year also of other revolutions in the world of photography. Sound was introduced into the movies. A few years later electric flash bulbs, "speed light," devised by Grier and Germeshausen of the Massachusetts Institute of Technology, helped perfect the mechanical process and adapt it more readily to the requirements of the popular and scientific press. And photography today has become one of our chief means of communication, one of our chief sources of recreation, and an indispensable tool to modern living.

My own profession was somewhat slow in making use of photography for its own ends. Not until 1890, after the invention of anastigmatic lenses, did medical men begin to find the new art truly useful to them. But here also there had been pioneers—Dr. Alfred Dunne of Paris, who presented to the French Academy in 1840 microscopic daguerreotypes obtained by artificial light; Donné and Foucault, who also worked in microphotography, Johann Nepomuk Czermak, one of the founders of laryngology, who tried, in 1860, to photograph the larynx, heart-beat, and blood, and who, although he failed, paved the way for Thomas Rushmore French who perfected laryngeal photography.

Cysto-photography followed the successful experiments in the field of laryngology. In 1877, Max Nitze produced the first modern cystoscope. He employed electric light, using that light close to the field to be examined, and a lens system. Nitze was able to take excellent photographs of abnormal conditions of the bladder.

It is interesting to note that the motion picture owes its origin, in part at least, to the efforts medical men made to adapt the new

science and art to their own uses. Etienne Jules Marey, who lived in France from 1830 to 1904, was not trying to invent a new kind of entertainment for the world when he set up twenty-four cameras in a row and photographed trotting and galloping horses in all phases of motion. As a physician, he was far more interested in his improvements on the sphygmograph which made it possible for him to record more accurately the pressure of blood within the blood vessels and the heart.

But his galloping horses caught the attention of Governor Leland Stanford of California, who passed along his interest to James Muybridge, an Englishman who was head of the State Surveyor's Office Photographic Division. So Muybridge landed in Marey's Paris laboratory in 1881 and showed the doctor his zoöpraxiscopes "marvel drum" which would take serial photographs. Then from these fertile brains, and others, came such inventions as the "photographic rifle," and the "chronophotographic gun" which could "shoot" a series of twelve views. Marey used his gun to "shoot" seagulls. He thought he could learn from them the secret which would enable men to fly. When he had his pictures pasted on a disc, the disc was rotated swiftly. The bird's wings moved again. Not the airplane, but the motion picture, was to grow out of the good doctor's efforts.

Camera art could not develop, obviously, until the camera itself was made a responsible instrument. But when that time came, hundreds and thousands of men and women came into possession, as I did, of a new magic carpet which could take them where beauty comes forth at the artist's bidding.

I have always been a believer in organizations. I recognize the need which human beings feel to exchange ideas, experiences, theories, and tall tales with like-minded souls. Therefore, when I discovered that this new world of photography into which I was entering was a world without an effective system of communication, I was surprised. There were camera clubs here and there, and some publications also through which one could seek advice from one's fellows. But there was no national association in this country, binding together all serious pictorialists. Surely there was a field for such an organization. Could I do anything to help at this point?

The editor of *Camera Craft*, Sigismund Blumann, to whom I broached the subject, was not encouraging. Blumann is an artist

to his fingertips, an excellent painter, a poet. I valued his opinion.

"I have tried it," he told me, shaking his head. "It just doesn't work. Such societies on a national basis die off just about as soon as they get started. I don't know why. People just don't seem to be interested!"

People seldom are interested, I know, in the immense and painstaking labor which must be done before any organization of large scope is rolling along on its own power. As I diagnosed the case, a few strong shoulders applied to the wheel steadily and strongly would do the trick. Well, mine was one shoulder which could be counted on. And there were others. The Associated Camera Club of America was already in existence, and it did not "die off."

Byron H. Chatto and Lou Boucher were the leading lights of that organization in its early days. I was its secretary. I felt that America should have an organization comparable to the Royal Photographic Society of Great Britain and the Royal Society of Arts, in both of which organizations I am a Fellow. But I found that building such an organization was a tremendous undertaking. There were discouragements on all sides. But we came through. The obstetric ward for the new organization was the Fort Dearborn Camera Club of Chicago, of which I am Honorary President. Thus, with the aid of those men and some others, I founded the Photographic Society of America. The society has grown up now. It has its headquarters at the great Franklin Institute in Philadelphia.

Creating things, founding organizations, seeking always for what is newer and better—the urge to such activity seems ingrained in the protoplasm of my being. There is satisfaction in such accomplishments. And there is added delight in the vistas which such accomplishment and striving open up in the realm of human contacts. It would be quite impossible to list all the friends my magic carpets have brought into my life, friends whom I have met face to face, unseen friends whom I know almost as intimately through the exchange of letters. I cannot resist naming just one, who came to me because I wrote that book on my most treasured magic carpet—*Creative Camera Art*. She is Rosalind Maingot, Fellow of the Royal Photographic Society of Great Britain, accomplished artist and delightful person. I have never

seen her, but the letters we have exchanged have been a constant delight to me. And, through her, I have come to know also her husband, the eminent English surgeon, Mr. Rodney Maingot. A magic carpet has thrown into happy contact two Aesculapians who worship at the same shrine and who, but for its magic, might never have known each other . . .

PART V: DEEP WATERS

21

NO BIGGER THAN A MAN'S HAND

OCTOBER, 1929! The witching hour was striking in Wall Street. And all over America men stood aghast as their golden coaches turned into pumpkins and their proud high-stepping steeds into white mice. The ball, which joyful prophets of ballyhoo had told us was going to last forever, was abruptly over. The bubble had burst.

I was caught with the rest. Overnight—or so it seemed—the savings of a quarter century evaporated; possessions, even those firm substantial properties of brick and mortar, were whisked out of my hands as though they were thistledown in the wind. We lost completely the apartment house which Fim had built on the site of the old fisherman's cottage. The apartment home which we thought we "owned" in the towering palace on what had once been our property on the new Drive, turned into a place in which we must, like any other tenants, "pay rent." And that rent was hard to come by sometimes.

The hospital shook on its financial foundations as though caught in an earthquake. But the foundations held. Not until the storm was well over did I know how much Fim had to do with bringing us safely through. I discovered then that she herself had interviewed the employees who had been with us for years and assured them that somehow some sort of salary would be forthcoming for them. She pawned her few jewels, converted her personal holdings into cash. The wheels moved again. Salaries were paid. The hospital survived in a time when many similar institutions, especially those which, like ours, were without endowment, went down before the whirlwind.

The debacle had one good effect, on me as on many others

throughout the land. It jolted me completely out of whatever rut my life was running in. And when the shock was over, I found that making a new start was not so bad after all.

I had taken pride and comfort in my specially built Cunningham and the punctilious ministrations of my liveried chauffeur. Now I found that my Ford was just as satisfying. For more than twenty years, Fim and I had gathered family and friends around us for Sunday dinners at our "*Stammtisch*" at the Blackstone. Now we discovered that the same warm family atmosphere could surround a more humble table in a more obscure corner of Chicago, where our weekly reunions were just as enjoyable if not so ostentatious.

And if the golden touch was gone and skill and study and unremitting toil no longer brought that miraculous unsought-for harvest of worldly wealth, they seemed to bring, in greater abundance than before, rewards far more gratifying, far more lasting, in green laurels and the generous recognition of peers. In 1935, the Republic of France honored me with the Cross of Chevalier of the Legion of Honor. Other distinctions followed, bringing me far greater satisfaction than money could ever bring.

And, most remarkable of all, my mind seemed set free to plan new things, to make old dreams come true. Now I could think of new ways to give effective help to young surgeons, whose problems were never far from my thoughts.

You can't do that! said my friends in shocked surprise when I told them that I was writing a book on errors of surgery. To admit thus publicly that surgeons could make mistakes would be, my colleagues warned me, "suicidal." It would bring down on my head a storm of criticism and it would "shake public confidence." I can be stubborn at times, and I turned a deaf ear to such admonitions. The book appeared in 1932 under the title, *Surgical Errors and Safeguards*, and Dr. Arthur Dean Bevan, my erstwhile professor of surgery, wrote the foreword to that first edition.

Behind that book is my firm conviction, developed out of years of extremely varied practice, that surgeons can never free themselves completely from the danger of error in judgment or technique. Into his art, as into almost no other field of endeavor, the human equation brings unexpected and often dangerous complications. No two surgeons are alike; no two patients are alike; no two "cases" are alike. The removal of a gallbladder or the

draining of a pelvic abscess is never twice the same operation, since the circumstances surrounding it vary with the individual on whom it is performed, with the surgeon who performs it, as well as with the nature and condition of one particular gallbladder, one particular abscess. The surgeon never repeats. If he comes to think that he does, he is in double jeopardy that this very overconfidence may lead him into the avoidable mistakes which may handicap his patient for life or even result in the patient's death.

Only frank recognition that this is so, I believe, can guard the men of my profession against such mistakes. The surgeon who is willing to acknowledge that, no matter how many times he has performed even the simplest operation, he must, on each new occasion, mentally review the possibility of error, and, as he works, be wary of meeting some new and unexpected peril, is far less likely to fall into such error.

In my book I stated this thesis very frankly, and I attempted to set up, as clearly as I could, the signposts and danger signals which will, if watchfully observed, warn the surgeon while there is yet time. I felt that my years of practice and clinical teaching of general surgery justified me in acting, without presumption or vanity, as a mentor to those just entering on the perilous paths of surgical practice. If my own mistakes and failures and disappointments, honestly admitted, could save other, younger men from repeating those experiences, how could I refuse to hold out my hand to help them, merely because some people thought such admission would be "unwise"?

My critics were wrong. The volume was a tremendous success. As I write this story of my life, the fourth edition of it is being released. In the new foreword, Sir Hugh Devine of Melbourne, past president of the Australian College of Surgeons, honorary fellow of the Royal College of Surgeons, generously calls the work one which has a "mission in the pursuit of truth." He says:

The book is written with the intention to help, much as a surgeon-father would wish to help a surgeon-son and as the Guilds of the Middle Ages passed on their secrets from generation to generation.

One of the most difficult feats which I ever attempted in the medical literary work which has had so great a part of my thought

and attention in recent years was the translation of Fedor Krause's three-volume work on *Surgery of the Brain and Spinal Cord*. German writers are likely to forget that grandiose, poetic, flowery embellishments are inappropriate in a work designed to impart information from one man of science to another. They will write a whole page sometimes which can be put into a couple of sentences of good sound English. It was a gigantic task to wade through this voluminous verbosity and to extract from it the sound, simple, matter-of-fact, understandable information which an English and American audience demands. And it was especially difficult to be sure that, in this process, I retained the exactness and nicety of Krause's knowledge of that intricate and complicated mechanism, the human brain and spinal cord. I hope that I succeeded.

I have had the satisfaction of being the "translated" as well as the "translator." My work on *Modern Surgical Technic* in three volumes has appeared in Spanish and in Portuguese. I hope its style gave the devoted men who made these translations less trouble than Krause's style gave me! And to that line is now being added yet another form of the work which, in a way, gives me more pride than all the other nine volumes. *Modern Surgical Technic* is now, I sincerely hope, helping to win this war. The war edition is in a single volume.

Strictly scientific surgical books and contributions to the journals of my profession have caused me to burn much midnight oil since I began seriously to set down my experiences. A busy and active surgeon cannot set aside days and months for writing as the professional writer can. He always has to make literature secondary to action. And the printed pages which bear his name are for the most part the fruit of hours stolen from sleep. Yet I have somehow found the time to write not only these, but other works which have taken me into professional by-paths. This story of my life is, of course, my most ambitious excursion away from the special field of surgery. But there is also the book I wrote on *The Human Face in Health and in Disease* which to me proved a fascinating study.

I wrote that book because I was conscious that physicians and surgeons of our times, depending more and more on the discoveries and inventions which science has given them, are apt to lose some of the natural acumen on which our ancestors in the pro-

fession were forced to rely exclusively, just as a man with good stout crutches may lose the free power of his limbs. I would certainly not recommend tossing away those discoveries and inventions. But I believe that they should be made to supplement the five senses God gave to surgeons as well as other humans and not to supplant them. I set myself the task of sharpening my own observations and perceptions in an effort to discover whether my unaided eyes could detect in the faces of patients certain signs and stigmas which would aid me in my diagnoses. I found much to surprise and interest me. And I set down my findings to encourage others to repeat the experiment.

Even when I was occupied with writing, I continued to work on other plans to reach the young surgeons. I thought of their relation to surgical societies. It has always seemed to me the height of stupidity that surgical societies should limit membership arbitrarily, as though they were some kind of industrial cartels instead of channels for the exchange of professional knowledge. How can anyone decide that only one hundred and fifty or two hundred surgeons in a given country are competent and able enough to be included in such a society? In a country as broad as the United States there should be—must be—many, many times that number of competent men. Otherwise the profession is indeed in a sad way. To limit membership thus arbitrarily is not worthy of our great profession, which is not concerned—or should not be concerned—with killing competition, but is morally bound to the greatest possible diffusion of the soundest possible knowledge. The limitation obviously works greatest handicap to the young men who are just beginning their careers, the young men who most need the advantages which come with association with their peers and their superiors if they are to grow in stature.

It was not for me to set the policies of existing societies and associations. And it seemed to me that every possible group of specialists already had its national and international society. The eye specialists, the nose and throat men had theirs—the neurologists, the obstetricians, the psychiatrists, the gastroenterologists and seemingly all others, were organized.

But, wait a moment, what about the surgeons? . . . Wasn't there room here for a new kind of international organization? And wouldn't the men who had vision and courage to build such

an organization have the great opportunity to fashion it according to their own ideals?

My correspondence with fellow surgeons in many lands, always large, grew to tremendous proportions. I found many kindred minds, men troubled as I was troubled, men thinking toward the same solutions I had glimpsed. Somewhere in that exchange of thoughts, the idea of the International College of Surgeons crystallized. Men separated from one another by thousands of miles of land and sea began to work to make it a reality. Before the end of the 1930's its organization would be complete.

Occupied with my practice, my writing, my study, my planning, I was as unconscious as were most of my fellow Americans of the cloud "no bigger than a man's hand" which appeared on the horizon in the darkest days of the depression. There was something almost like comic relief in the stories that began to trickle across the Atlantic of an absurd little paperhanger who seemed to be the victim of delusions of grandeur which made him believe that he could be a second Mussolini! Even his moustache, looking as though it had been pasted on his upper lip by an amateur at the art of theatrical make-up, was funny. And his name, the real name given him by his Austrian father, was enough to make anyone with a sense of humor double up in paroxysms of roaring laughter—Schicklgruber!

We laughed a little more unsurely when the funny-man actually got in the saddle. That was carrying the joke too far. And when it became apparent that Germany was now ruled by a sadistic maniac, the laughter ceased.

To Fim and me the ominous rumble from across the ocean sounded very near when we began to get letters from Philip in Vienna, letters which accented the matter-of-fact news brought to us in the daily press of our own land.

The completion of Phil's surgical education had presented no small problem to him and to us. And now, just as he was ready and eager to crown his study with advanced work under the tutelage of the great surgeons of the world, we found ourselves helpless to provide the necessary funds.

It was the old story of the will and the way, however. Friends came forward with generous loans. And one September day in 1932 I found myself standing with my boy on the pier in New

York where the *Berengaria* rode at anchor, found myself pressing him to my heart in a mutually moist-eyed farewell.

At the Hotel New Yorker that night I stood and looked out over a dismal city. Ever since Phil was born I had looked forward to the day when he would be ready for this journey, but I had dreamed a far different setting for it. And I was lonely, apprehensive of the dangers and difficulties the boy might have to face alone, apprehensive, too, of the effect his absence might have on his mother, who would miss him even more perhaps than I.

We kept stiff upper lips, Fim and I. We exchanged reassuring smiles and hid from each other the worries each knew the other shared. Rosa helped, too. She lived with us while Phil was gone and her bright cheerfulness was a blessing to us both. And when the letters began to come, they dispelled some of our gloom.

From the press rather than from Phil's letters we began to hear more disturbing news. The infamous Hackenkreutzler had ominously raised its ugly head again. There were uprisings in Vienna. Drums were beating . . .

The drum beats were faint in Phil's glowing letters, but they were there, nevertheless. We became more and more alarmed. When the university was stormed by marauders, I cabled Phil to come home at once.

Of course, he did not come. He replied that he was all right, that he had responsibilities which he could not leave.

Not until he was actually home again, his studies completed did he fully express to us his deep concern over the course of events in troubled Europe. He was grave, fearful of the future, keenly aware that the tiny cloud on the horizon boded a terrible storm.

He showed us then the diary he had kept during his Vienna days. In it we read, sandwiched between entries of personal and professional affairs, the story of the terrors he had seen as Vienna was shaken and torn in a dreadful year, prophetic of worse years to come. I can tell that story best by quoting from the diary. Early in the fall he was writing: "Nazi fury broke loose today."

And as 1933 began, the entries are more frequent, more alarming. "Shooting up and down Mariahilfer Strasse . . . Streets deserted . . . Anxious faces all around . . . Our gangsters in Chicago are babes in arms compared to these barbarians . . . Torchlight parades of Nazis nightly . . . Anti-Dolfuss demon-

strations . . . Bought secondhand overcoat for eight dollars and eighty cents . . . Vienna Nazis announce all U. S. banks closed . . . Vienna A.M.A. in Panic!" (March 6, 1933.)

"American Travelers checks not honored in Vienna . . . My South African chum Todd writes from London, 'Your fifty dollars are worthless in England.'

"Celebrated Dad's birthday (March 10, 1933) by assisting Finsterer in a stomach operation which lasted almost six hours . . . There are great scientists here but give me American technicians . . . Studying anatomy at night . . . In bed with streptococcic sore throat . . . Gisella, the maid, gleefully announced the first day of spring . . . It was zero weather, nevertheless . . . My co-student Carlo Scuderi, brilliant, accomplished draftsman, thumped his fist on the table. He will not live in a place where the tooth-picks are brought back for use at the next repast! (Scuderi's now coming to the fore as an accomplished orthopedic surgeon) . . . So we moved to *Pension Fischer* . . . A special reception of bed-bugs kept us up all night and 'Scud' found a cockroach in his breakfast cocoa . . .

"Have seen over fifty machine guns ready for action . . . This is an odd sort of *Gemütlichkeit* . . . Our group vowed not to return in a German boat . . . Working on a paper with Professor Finsterer on Splanchnic Anesthesia . . . My friends treated me to an Easter trip to Budapest . . . How could I resist a visit to the land of my Dad and his Fim? . . ."

"Must leave Vienna before May 1, the day of riots and bloodshed . . . Vienna under veritable siege . . . Machine guns, barbed wire, field kitchens, police, soldiers marching, drums beating . . . Felix Mandl feels Hitler will control Austria . . . More marching . . . More drums . . . Dad would detest this atmosphere as we all do . . . Martial spirit fills the air . . .

"In the restaurant a man in distress because he did not know the German for radishes . . . We helped him out . . . It turned out to be Hal Roach of Hollywood . . . Even a radish may be a means for good . . . Met Professor von Eiselsberg. He wished to know all about Dad . . . He has aged much . . . Obermedizinalrath Kronfeld entertained me at dinner . . . great admirer of Dad . . .

"American dollars gradually depreciating . . . Hitler's uniforms forbidden . . . Looks like hell will break loose . . . It

did break at the *Anatomisches Institut* . . . Two American students sustained fractured arms . . . Hope I can get out of this hellhole soon . . . Sold my secondhand overcoat to a dealer for three dollars and thirty cents, thus five dollars kept me warm all winter . . .

"Four of Hitler's ministers arrived in Vienna . . . They are not welcomed by the Viennese . . . Looks like trouble again . . . In bed with flu . . . *Heimwehr* marching . . . Nazis trying to break up parade . . . Six hundred Nazis jailed . . . Things getting hotter every day . . . S.S. *Europa* flying swastika . . . Leaving for home on *Olympic* . . ."

America had ceased to laugh at the mad paperhanger. But some Americans continued to shake off news and rumors from far across a protecting ocean with a shrug of the shoulders which said, "It's none of our business."

Some of us could not shrug it off, however. Our senses tuned by remembered horrors caught once more the rumble of dreadful drums. We knew—of course we knew—before most of our fellow countrymen were awake at all to the danger, that the forces of evil and intolerance and slavery were on the march again. And we knew also, with frightening clarity, that those drums, sounding across thousands of miles of ocean, were echoed by drums beating close at home, drums which made a harsh, discordant undertone to the sweeping paean of American democracy. The enemy was not only in far-away Europe; he was within the very gates of our citadel.

In those clouded days before the storm broke, I heard many speak in the accents of intolerance in the very heart of the citadel of democracy. Perhaps my ears were tuned to catch that accent. I could not forget those flare-ups of hate and fury which I had witnessed in my Tatra Mountain home. I knew how full of dynamite are the unreasoned prejudices in the human heart. My earliest memories had been seared by explosions of that dynamite. And I recognized earlier than many Americans, for that very reason, the full horror of the thing now happening in my world. Those scenes of violence in my boyhood town had been, for the most part, spontaneous outbursts of savagery. Cruel as they were, they were seldom calculated in their cruelty. The roll of drums and the sound of marching feet brought them to an end. The forces

of the law moved to restore order. They could not be compared with the deliberate terror fathered by Hitler and his gang, using the worst and weakest sin of the human heart shrewdly and cold-bloodedly for political ends. That some of my fellow Americans should feel their own prejudices stirring in response to the diabolical wizardry of the Nazi leaders astonished me and made me sorrowful and apprehensive.

I had limited means to fight the poison when I found it. But I did have the resources of our hospital to offer as a haven and a refuge. What one man could do to counteract the spreading terror, I resolved to do. Into my office and my home in these later years have come an endless procession of the victims of the new Germany. Doctors who, serving with single heart their mission of healing, believed that even the swastika would not dare to enter the temple of Aesculapius, have told me their stories, bewildered by the senseless cruelty which sadistic storm troopers have meted out to them. These stories have a sickening sameness—the same desire to minister to all humanity on the one hand, the same blind violence on the other.

To some of these shipwrecked colleagues of mine, our hospital has been a firm rock on which they could stand for a little time until they had gathered strength to strike out once more. Our hospital family has taken on, in the past ten years, the aspect of a League of Nations, without the League's internal jealousies and distrusting. Men from all the oppressed nations of the world have worked together here. And at their sides have worked also more and more men from our neighbor countries to the south.

Anyone who has watched the developments of this past decade must share my concern about those South American neighbors. It took the shock of war to make us understand how sorely we had neglected them. We realized it then with the desperate discovery that our indifferent policy had left the doors of the southern part of this hemisphere wide open to the emissaries of the fascist world, whose obsequious flattery was all the sweeter against the background of our arrogant superiority. Most of those doors we did manage, with herculean effort, to close just in time. But they will certainly not stay closed unless we succeed in building sound, well-grounded friendship among the Americas.

Feeling as I do about this phase of our national policy, I was particularly glad to welcome the young interns and physicians

from Latin America who came to our hospital to visit or to join the hospital family. As they worked alongside the refugees from Europe and the able men of our own land, they could hardly help learning, I hoped, lessons both in the meaning of fascism and in the hope of democracy. And I have seen that hope amply fulfilled.

The cloud which we saw on the horizon as the 1930's began was, to us in fortunate America, "no bigger than a man's hand." But others in less happy lands saw its full size and blackness. The coming into our staff of aliens and strangers from both sides of the Atlantic has strengthened that staff. These men are able, competent, well trained and loyal. Our debt to them is great. And I firmly believe that we have been able, working together, to fashion one more bulwark against the tide which all but swept away the democratic way of life throughout the world.

IT TAKES ALL KINDS

"If you will undress, I will examine you."

The medical man who is obliged to request that human beings appear before him stripped of the disguises they offer to the world at large, and especially the surgeon who may, if circumstances warrant, go exploring into the inmost regions of those human beings, is bound to discover, in the course of his practice, a plethora of remarkable phenomena for which the closest study of the most learned books could not prepare him. Truth is stranger than fiction; it is also stranger, at times, than treatises on science and medicine and surgery!

For the most part, people who submit themselves to a doctor or surgeon for treatment do not question his right to require a stripping process. They may be coy, at times, but they are, in general, admirably docile.

François X, who had just been brought into the hospital for an appendectomy, was apparently an exception. As I approached the room in which preparations for his operation were going forward, I could hear excited voices.

The orderly's voice, high pitched, nasal, reverting under great emotional stress to Cockney English, "But, sir, I have to shaive you! I tell you I have to! Come, now, sir! Surgeon's orders, sir!"

And a weaker voice, vibrating with fear and urgency, "I won't! I swear I won't! Get out of here!"

The orderly turned to face me, with helpless indignation on his countenance, as I stood in the doorway.

"I do 'ave to shaive 'im, don't I, Doctor?" he appealed to me. "He won't let me take that belt off to do it."

Cowering among tangled bedclothes, François looked at me

with stark terror in his eyes. I dismissed the orderly and sat down beside the trembling man.

"You know," I said as gently as I could, "we have to shave your abdomen before we do that operation. It is for your own protection."

He burrowed into the bedclothes until he looked more than even like an ancient mummy. He said nothing, but his eyes continued to plead for mercy!

"Come, come!" I said. "There's nothing to be afraid of. What is the trouble anyway? You can tell me about it . . ."

A weak whisper answered me.

"Are there any women around?"

"None at all," I replied heartily, and I went to the door, made an elaborately careful survey of the corridors. "None in sight," I added.

He seemed just on the point of speaking again. And then, with a sigh, he gripped the sheets tighter in his powerful hands and shook his head.

"It's no use, Doctor. It's no use. I can't have that operation. Just let me die."

How long it took to argue, cajole, persuade, I do not know. It was a long session anyway, and I was weary when the man finally broke down and told me his secret.

"When I was eighteen," he told me, "I was in the French Navy. All the boys had tattooing on their hands, arms, all over their bodies. You weren't really a full-fledged sailor until you got some decoration like that. I didn't like the idea much, and I guess the boys thought they'd get even with me for snootiness. Anyway, they got me drunk one night . . ."

He broke off suddenly, trembling.

"I was too drunk, I guess, to know what the tattoo man was doing to me. I'd have had him do some flags, perhaps—those aren't so bad! But when I woke up the next morning and looked at the picture he had put on my belly . . . Oh, Doctor, you don't know how I felt. I couldn't look at it. It made me sick. I got me this belt just as quick as I could. I had to cover it up. I've worn it ever since. And I've been so scared, Doctor, always so scared! Suppose my wife should see it! She'd divorce me, sure! And she'd be right! I couldn't let any woman—not even a nurse—see that dreadful thing.

"So you see, Doctor. You see I can't have that operation! I'd die first!"

"Oh, yes, you can," I said soothingly. "We can arrange an all-male cast in the operating room. I'll prepare the operative field myself now and no one will be the wiser."

He looked at me gratefully and, almost to my surprise, he made no further protest as I began to untangle him from his bedclothes and to unfasten the belt.

I confess that I had a shock when the belt was off. The tattoo artist had far outdone all the pornographic pictures of old Pompeii. The scene I looked upon was obscene, frightful. Let any woman see it? François need not have worried about that. I felt just as he did about it. What a horrible thing to carry with one all through a tortured life. But was it necessary that the poor fellow go on being tortured?

"Would you be willing," I said as I went on quietly working, "to let me get rid of this for you?"

He almost knocked me over with the vehemence of his response!

"Let you!" he shouted. "Let you! Doctor, I've tried every possible way to get rid of that thing! I would bless you to my dying day! But you can't do it! No one can!"

And then, in a quieter voice, in which fear and hope were mingled, "Do you really think you could do it? Do you, Doctor?"

"All I need is your permission," I said. "I don't dare to promise too much. But I can try!"

The operation, with the all-male cast I had promised, went smoothly. When the abdomen was closed again, I protected the field of operation carefully from the upper part of the abdomen and set to work to excise the whole Bacchanalian orgy. It was no small task. The work of "art" covered almost all of the anterior upper abdominal wall from about one and one-half inches above the navel to the ensiform cartilage at the pit of the stomach. How could I cover this tremendous defect?

The patient was rolled to his left side and from the right hip I fashioned a graft of the needed size and shape. I transposed it to its new bed.

François left the hospital a new man, the happiest person I ever saw. He had almost forgotten the gangrenous appendix which had brought him into my hands. The pain that had caused

him was nothing, he told me, to the mental anguish he had suffered for years because of that tattooing. Both pains were gone now.

François gave me one of my greatest surprises in my exterior explorations. But it remained for William B. to reward my internal probings with the strangest collection of booty an operation ever netted me.

A plain safety pin gave me the right to open William up and look inside. It had got stuck somehow in the wall of his stomach. Corrosion caused by the action of the gastric juices had brought about a nice case of peritonitis.

The operation crowded the amphitheater with curious spectators among our staff, who watched with fascinated amazement as we drew forth from the stomach of William B., not only the offending safety pin, but also one hundred and ten nails, seventy-seven safety pins or parts of safety pins, twenty-two paper clips, four bolts, twelve tacks, two nuts, thirty-three thumb tacks, and a metal beer check, as well as enough miscellaneous washers, screws, cartridges and coins to make our total "bag" two hundred and seventy-six articles, weighing in the neighborhood of three pounds!

For William was no ordinary run-of-the-mill patient. He was known in vaudeville circles as "The Human Ostrich" and he had been demonstrating his peculiar appetite at one of the Chicago theaters when that safety pin had proved his undoing. Large as our collection was—and it makes a very nice exhibit mounted and hung upon the wall of my examining room—it was as nothing when one thought of the endless stream of similar articles which, during a long and brilliant career, had gone safely in one end of William and out the other!

As he told me later, when he was convalescent, he had been following his ostrich diet since childhood. He had noticed then that cherrystones he greedily swallowed seemed to find a safe way of egress from his body. So he had tried peach pits. All right again. Then bullets. And then—well, one thing just led to another.

"You've had your lesson now," I told him. "You don't want another experience like this one. Better stick to the menus the rest of us use in the future."

He grinned. "Guess you're right, Doc," he said. But before he left the hospital I caught him one day just as he was about to demonstrate before a group of nurses how he swallowed a crushed electric light bulb . . .

Yes, a doctor is due for surprises when a patient disrobes. But his greatest surprises come from the fact that those patients, quite without suggestion or urging from him, so often take off more than their clothes when they come into his life. Under the compulsions of illness and the fears which illness generates, minds and hearts are stripped as well as bodies. And the physician or surgeon who does not learn about human nature from his patients is an obtuse man indeed.

He learns odd things, for example, about human courage and fortitude.

To Zbyszko, the giant wrestler, who could take and mete out gruelling punishment for hours in the arena of combat, I once helpfully suggested that I could give him relief from the discomfort he was suffering by opening a boil on his neck. The giant fainted!

When George W. came to me in a pitiable condition, suffering from cancer of the bowel, I knew just by looking at him that here was a case which needed to be treated with great gentleness. He was a thin little man, emaciated and anemic and drained of all force by the terrible illness which had fastened itself upon him. An ignorant cultist had treated him for colitis and his disease had progressed far when I finally told him that an operation *might* save his life.

Spinal anesthesia was used, and George was, therefore, conscious when the operation began. We had, however, blindfolded him carefully with an appropriate bandage reënforced with adhesive tape.

I soon found that I had indeed a formidable undertaking on my hands. A large malignant tumor affected the large bowel. To remove it many feet of the small bowel had to be cut away also. It was an operation accompanied by the gravest danger for the patient. Blood was transfused into his veins during and before the operation.

As I worked, Jennie the anesthetist at Cook County Hospital talked in calm reassuring tones, telling poor George that every-

thing was going well, trying to guard against the fear and panic which we both thought the man must be feeling.

The job was done at last. I took off my gloves and unbandaged George's eyes.

"It's going to be all right, I believe," I said to him confidently.

"Sure, I know it, Doctor," he said cheerfully. "You certainly did a complete job! I saw you throw my bowels into the slop bucket. Will I get along all right without them?"

He had seen the whole thing! I was dumbfounded. I knew that we had placed that blindfold carefully.

"I've always wanted to see an operation, Doctor," George explained. "I wanted to be a surgeon when I was a boy but my father said I didn't have brains enough. Maybe I'd make a good carpenter, but he wouldn't trust me to saw up anything but wood.

"And so," he went on, with a twinkle in his eye, "when you sat me up to get the spinal anesthesia, I just loosened up the adhesive enough to see what was going on. I could look up into the mirrors on the lamp above the table. I think you're good with the knife, Doctor!"

You can't tell about courage. It crops up in strange spots. And you can't tell, either, about things like gratitude, or sense of honor, or ethics.

I suppose that no medical man lives who has not at some time in his life at least wished with all his heart that there could be a well-defined code of ethics for patients as well as for doctors. "Pulse first, and purse last," the old professor used to say. And, by and large, the best of us try to live and practise by that motto. If it is suspected that we reverse the adage, we are due for some pointed criticism from the mentors who guard the code of our profession. And we are due also for the far more disturbing accusations of our own hearts and consciences.

There is no profession or business in the world, except medicine, where "bad debts" are taken so completely for granted, where the slightest effort to collect money justly due is considered "bad form." I am perfectly willing to agree with my confrères that we doctors must always proceed on the assumption that it is more blessed to give than to receive. But I could wish that the general public was a little less willing to agree so wholeheartedly with their physicians on this point.

It puts a somewhat unreasonable strain upon our benevolence when we know, as we cannot help knowing, that the doctor's bill goes down to the very bottom of the pile of obligations to be met. When the new fur coat is purchased and the new automobile is in the garage, when the new spring finery and the orchids have been bought and the house refurnished in the latest mode, then, *if* there is something left over, the doctor may get it.

Perhaps the psychologists can explain it. Perhaps it is just the natural inevitable effort of the human mind to forget, as quickly and as completely as possible, moments of unpleasantness. The doctor's bill is a last distasteful reminder of those days a few months past when I was feeling so miserable—Away with it! I'm well again!

We doctors grumble at the unfairness of it all. But we know we are helpless. I remember once when I tried to be businesslike, using an energy which any merchant or lawyer or manufacturer could only have described as puny. A wealthy patient had neglected his bill for months. I had saved his life—and he knew it. He had plenty of money and I, just at that moment, was in a period of financial worry. Why shouldn't I urge him to pay? My next statement carried the gentle message: "A payment would be appreciated at this time!" The scathing note which came back, enclosing half the amount requested and the blunt statement that I would get not one cent more, cured me of my ambitions to combine bill collecting with surgery. I have stuck to surgery since then.

People who get all disturbed about Communism are quite willing that medical men practise one of its precepts—that they give to their patients "according to their need" and collect from them "according to their ability!" At least they are willing to go half way. People who need medical and surgical service and cannot pay for it should get it any way, they say. And there I heartily agree with them. It is a satisfaction to me to think that, in all the many years of my practice, no man or woman has ever been turned away from our hospital doors because he or she could not pay for the services dispensed there.

But shouldn't the rule work both ways? Shouldn't "ability to pay" enter into the doctor's calculations when that ability mounts into the skies? It would seem to me that there is logic in such

reasoning. But it is not a logic which appeals to the general public.

Into my consulting room one afternoon came a plainly dressed young woman. Her clothes were neat but obviously inexpensive and they showed signs of long and careful wear. Even her gloves, as I noticed when she laid them on my desk, were neatly mended.

The directness with which my visitor jumped over the usual preliminaries of an office call surprised me.

"Doctor," she said bluntly, "what will you charge me for removing a tumor from my breast?"

I am not accustomed to have my patients diagnose their own cases, prescribe the treatment, and inquire the price for this treatment all in one breath. But questions brought out the explanation that another doctor had made the diagnosis, and recommended operation.

No probing, however, could elicit the name of the doctor or his place of residence. No, he didn't live in Chicago. He was many miles away. I would not know him. There were "reasons" why the lady had preferred to come to me instead of having him perform the operation.

Whoever he was, I decided when I examined her, he was right in his diagnosis. There was a cystic tumor. And it should be removed. Again the patient asked, with some anxiety in her voice, the cost of the operation. I hesitated for a moment. I did not think that I could expect from such genteel shabbiness the amount which I might normally charge for such an operation.

"Would you feel that two hundred dollars was beyond what you are able to pay?" I queried.

"Oh, no," she said quickly. "That will be all right. When may I come in?"

I suggested that, since she was from out of the city, she might like to get the thing over at once. What about the next day? That, she told me, would be satisfactory. And then, to my utter amazement, she pulled out a check book, wrote a check for two hundred dollars and handed it to me. I had certainly not expected payment in advance!

When I saw my patient next I had another surprise. She was installed in the most expensive rooms in the hospital. A private nurse, a husband, and a French maid hovered over her to do her bidding.

I was non-plussed, of course. But I was busy. I had no time for questions. And I was a little piqued also. I had no intention of giving this woman the satisfaction of knowing that I was puzzled. I asked no questions.

But I got the story, all unasked, when she came to say goodbye to me. She was voluble in her appreciation and she emphasized her words with a wave of her diamond-studded hand. Then she smiled.

"I see you haven't recognized me yet, Doctor," she said. And when I indicated that I had not, she went on,

"Fifteen years ago you operated on me for fibroid tumors. Since then I have married. My husband is Count G— de S—, and we live in Rome. When the best physicians in Italy told me I needed an operation, I made my husband bring me straight to you . . ."

I remember now! The lady had been a very attractive brunette when I saw her last; now she was a platinum blonde. That had effectively disguised her, but I was still puzzled about that first appearance in my office. Why had she done that?

"Oh, I'm wise to you doctors," she said flippantly. "If I had come to you as Countess de S— you would have charged me at least ten thousand dollars. You know you would!"

She chuckled.

"I borrowed my maid's clothes. I wasn't sure it would work. But it did!"

There was triumph in her voice and a metallic hardness as she finished her story.

"Life taught me long ago to use my wits. That's why I am Countess de S—!"

How well I remembered her now! She had been born plain Maggie F—. She'd made effective use of those Irish charms and that Irish native wit. I would not have changed places with her.

Fortunately for my faith in human integrity, there are plenty of incidents to set off against the episode of the Countess de S—. Gratitude and generosity do make their homes in human hearts. And, contrary to the ideas of many, they do not always disappear when wealth comes to the owners of those hearts.

I had removed fourteen gallstones in an operation on the wife of a wealthy Chicago hotel man, and I was discussing the success

of the operation with that anxious husband, I wanted to put into expressive words what I knew it would mean to the woman to be rid of those troublesome stones which had caused her such suffering.

"Each one of these," I said picking up the gallstones, "is worth a thousand dollars!"

I had to leave him then. Work was pressing that day. When I returned to my office late in the afternoon, a check lay on my desk. It was for \$14,000.

No, he had not misunderstood me. He knew as well as I did that I had spoken figuratively. But he was saying—also with the use of figures—"Fourteen thousand dollars' worth of life and comfort is worth—precisely \$14,000!"

My feeling of warm gratitude was not for the money alone. And the gratitude was not to be diverted by the flippancy of one of my assistants, who whistled over the size of the check and then said:

"Too bad he wasn't the husband of the woman we operated on yesterday. You remember, *she* had seventy stones!"

Infinitely varied, infinitely astonishing—the men and women whose lives have crossed mine at those moments of crisis and strain when their guards were down, when I could see them as they truly are. They have given me, the best of them and the worst of them, whatever philosophy of living I possess. And against the things which they have taught me I find myself continually checking the new theories of special pleaders which appear again and again as men struggle with the problem of suffering in the world.

Euthanasia is one of these recurring theories. My ideas on it are clear and sharp. And the patients who have shaped these ideas deserve, and shall have, a chapter to themselves.

THOU SHALT NOT KILL

THE Greeks had a word for painless and peaceful death—Euthanasia. The euphony of the term has helped to make it a favorite of authors, for it is found in the writings of Thomas More, Bacon, Arbuthnot, Steele, De Quincey, Bailey, Hume, Burke, our own Jefferson, Carlyle, Disraeli, Macaulay, Lecky, and in the poems of Pope, Byron, Dobell and John Davidson. Indeed, poets and philosophers were more inclined to advocate euthanasia than the physicians, but of late certain members of the profession seem to be beguiled by the arguments for easy death. I am not a preacher, and I hope my writings are reasonably free from moralizing, but I have been face to face so often with death that I feel this is a subject on which I should not be silent.

“Mercy Killing,” which has gained a certain momentum within recent years, will never find me among its adherents. My first objection to the painless killing of incurables is that medicine is making rapid strides in every field. Diseases considered incurable yesterday are curable today. Legalized euthanasia would be a dangerous law, since errors in diagnosis are at all times possible, and occur even in the best hospitals. It must be emphasized that medicine is not an exact science like mathematics. Patients have “miraculously” recovered when every rational hope was gone. Who among us has not witnessed cases of this kind? We cannot judge all human beings with the same measuring-rod. There are those whose resistance amazes physicians. Therefore, to kill sick people seemingly condemned to death, because they are suffering intensely, would often be a medical blunder. More than one patient who was given a limited time to live has outlived his mistaken physician by many years.

We admit that the proponents of euthanasia can point to certain much-discussed examples: the aged afflicted with diseases of progressive agony, the criminally insane, idiots and monstrosities, before which groups of baffled physicians stand without weapons. In the presence of lives apparently useless to themselves, and a heavy burden to society, logic and reason would appear to demand that these unfortunates be eased out humanely. Yet against this solution some impulse arises to urge the zealous guarding of human life. No scientist can define life. We just do not know enough about it to tamper with it, or to presume to take it into our own hands.

I sit at my desk, looking over various pleas for euthanasia. Several of them are written in excellent English, evidently by clever copy-writers of death. Across all of them I want to write the commandment: "Thou Shalt Not Kill." Is medicine helpless in the ceaseless warfare against pain and the agony of consuming disease? Are there not innumerable drugs which lessen anguish and bring restful sleep to those who endure? Has the poppy lost its power in our day? Suffering is made more and more bearable by the increasing skill of doctors and nurses. The "deathbed agonies" of which we read belong largely to fiction and to the past. I recall that innumerable cases brought into the hospital as "hopeless" are now living useful and happy lives. If I thrust aside the euthanasia literature with impatience, it is because the following case passes in review before me.

My supervising nurse said: "That leg case was just brought in, Doctor. He is in Room 318. He is suffering a great deal and wishes to see you as soon as possible. He has a letter from Mr. Borré." (Emile Borré, of the Chicago Federation of Musicians, serves his organization, valiantly and diligently, despite his eighty-odd years).

I answered: "Make him as comfortable as you can and I'll be up in a short time." There were still several patients to see, and in addition an inventor who had persistently pleaded for an interview.

After the patients were dismissed, I felt obliged to keep my definite appointment with the inventor and his peculiar-looking machine. Both made their appearance in the office. It was, he stated, "The Happy Home Blood Pressure Recorder." His enthusiasm and pride in his machine would have been amusing, had

it not been pathetic. The invention, he explained, was for home use exclusively, and with it any member of the family could take his blood pressure at will. I wondered what they would do about it after they had determined their blood pressure, either as individuals or as a family. I regretted that I could not take time to discuss his idea with him further, for even a freak invention can be of interest.

Reaching the bedside of the patient in Room 318, I saw an obese man of middle age lying helpless, on his countenance a look of complete despair. He brightened up somewhat as I sat down by his bed and began a friendly conversation about his condition. He told me of a series of illnesses which had finally brought him to our hospital, after he had been "given up" by some as he put it. He complained chiefly of his foot, which I found upon examination to be gangrenous. I realized that the leg must be amputated above the knee. The patient had a malformed arm, which he explained had been that way since birth.

He looked up with the pleading eyes so familiar to our profession: "Is there any hope for me, Doctor?"

"Of course there is hope for you!" I exclaimed. "If you will follow instructions. Follow them, however, you must."

He looked at me incredulously. "I was told by some nothing could be done," he said. "They even told my wife and she has given me up entirely."

I planned to operate on him at eleven o'clock the next day.

The following morning a woman awaited me in my office. Despite the extreme nervousness she displayed, there was a look of defiant determination on her face.

"You are planning to operate on my husband this morning," was her abrupt greeting.

"I plan several operations this morning," I replied, somewhat annoyed at her belligerent attitude. "To whom do you refer?"

"Mr. R——" she said. "I refuse to permit the operation. Why do you torture him further? I want you to let him die." She looked at me squarely in the eye. "He is fifty-two years old; he has a malformed arm; his toes are falling off, one by one, from disease of the bloodvessels. The doctors say this comes from incessant cigarette smoking. The intern tells me you are planning to take his leg off above the knee. What good will he be with one leg

and a malformed arm? Please let him die. I refuse to permit an operation."

I looked at the woman in amazement. "How long have you been married to this man, Madam?" I asked.

"Twenty-five years," she answered.

"Do you love him?"

"Of course I do," she said, her voice breaking. "That is why I want him to die. I do not want to see him suffer, I cannot endure it. If you leave him alone he will die soon. If you operate you will only prolong his agony. Doctor, please let him die."

"But, Madam," I said, "suppose we can improve his condition."

"No! No!" she cried, "I cannot see him suffer. They say he cannot be helped."

"We doctors," I said, "are not executioners; our mission is to prolong life, not shorten it."

She gave me a look of utter contempt. "How brutal!" she flung back at me, as she left my office, actually slamming the door behind her.

I proceeded with the operation on schedule. I amputated the man's leg above the knee. Two days later he was in a wheel chair, his face beaming. I then learned he was a violinist. He called me to him and held my right hand firmly in his own left. His eyes were alight with bliss. A tear slipped down his cheek. There was a moment's silence, then he spoke:

"Doctor, they tell me I can have an artificial limb and walk. I have been using an attachment to my right hand to guide the bow over my violin. If I can walk and continue as I am now, how happy I shall be! No more cigarettes for me. I've been smoking three packs a day for years. The doctors told me I would lose my toes if I smoked, but I thought I knew better than they did . . . I've learned by a hard lesson, who was right . . . I still have my hands, I have my spirit, I am filled with hope. How wonderful to live again, to play again, to love my sweet wife again. Doctor, I shall never forget you. I wanted to die. Now I'm writing Jimmy Petrillo, and I'm going to tell him, yes, I will tell him."

He broke into sobs for a moment, overcome by his new-found happiness. They were truly tears of joy. I patted him on the shoulder. "We must all be soldiers," I said.

He left the hospital, a well man. He has his artificial limb and is playing his violin. The other day I met his wife. She looked at me smilingly, yet doubtfully: "Oh! Doctor, I hope, I hope you have forgiven me." Meeting my eyes, an air of contrition about her lips, she said: "Oh, Doctor, I am so glad, and Emile Borré is glad, and Jimmy Petrillo is glad, and the cronies at the C.F.M. talk about it, and I am so glad!"

With our euthanasia exponents, let us walk down the ward of our so-called "Incurables." On the medicine tray is the hypodermic syringe, filled with a death-dealing potion, if the law permitted its use in these cases. Here is an old, white-haired woman, frail to emaciation, but her face is cheerful, her eyes are bright and eager. She is the mother of ten children, all widely scattered. Incurably afflicted, she lies day after day in her bed. She is accustomed to the routine. The patients are all known to her and she is interested in them, their ailments, their interests, and their troubles. She comforts them all. They have become a family—each concerned with the other's welfare. Were they to succumb to despair, truly enough they might be called The Community of the Damned. There is no known help for any of these patients at present, but within the consciousness of every living creature there is implanted an urge to survive, a belief in the future. All are possessed of what we call "hope." As long as hope dwells in the soul, defeat cannot enter. Mother Morrison does not desire the fatal hypodermic.

Young Ellen is next to old Mother Morrison. Her cheeks are pink, and her hair falls in charming waves over her pretty face. She is hopelessly crippled with arthritis. Ellen is possessed of a beautiful voice. Her soul does not recognize her crippled body. When life grows dull, Ellen fills the ward with a lilting Irish melody; a folk song of Hungary; or a tender love song from the "land of heather," while down in the farthest corner, Grandma McGee, whose legs are useless from ulcers, but whose mind travels happily to her girlhood days in the green meadows of Killarney, clasps wrinkled old hands and lives again her carefree days of childhood.

Across the ward lies Mammy Cole, a Negress of the Old South. She does not know her age, but recalls that she was born of slave parents. Mammy is politeness itself, and grateful to tears for

every attention given her. She holds a Bible in her horny black hands. "Praise de Lawd for his goodness to us poor, sinful chil-lun," she cries, and in braver crescendo, "Hallelujah!" Mammy Cole is afflicted and helpless in body, yet powerful of soul. Her vision rises on wide wings. With all her twinges and helplessness, she is a happy person. Here, truly, we have found a sisterhood of sorrow and a brotherhood of pain. "Man does not live by bread alone." We look at the hypodermic, and put the needle aside. We must not dim Mammy's spiritual exuberance.

In the next bed to Mammy Cole is Miss MacM—; she was a practical nurse from a small town outside our city—a war-scarred veteran of many a battle, finally fallen on the field. She has opened and closed the eyes of half of her community for forty years. She has no kin; she is unmarried. Old age, loneliness, undernourishment, together with abdominal tumor, bring her here. She is made of the stuff of warriors. She battles interns and nurses, and is satisfied only when the superintendent settles the controversy. She has beneath her pillow a bottle containing a special pill her old doctor had told her never to be without. His word is law and gospel to her. She is determined to take these pills. It is against orders—the little nurse in training is distressed.

"Miss MacM— is so stubborn," she explains. "She refuses to take the laxatives prescribed. She spits the medicine we give her all over her bed. What shall we do?" she asks us.

We allow the old ex-nurse to take her pills in peace. She is again in the best of humor. There is something game about this mighty hulk, beaten and driven by the winds of circumstance. She battles us, but she is brave; she causes us trouble, and despite ourselves we admire her for it. She fights with us, but she also fights for us. We see by her chart she is seventy-one; there is still a fighting chance. There is splendid courage in those old eyes; a valorous look at life. Shall we give her the poison needle? No! That would be poor thanks to one who for over a generation had fought disease on its every front. We walk on. She waves us a cheery good-night, and we wave back.

Here is Nellie O'B—, a frail skeleton of a woman. She has cancer of the liver. There is a sorrowful cycle of distress ahead of her, with no earthly help for this patient. Indeed, a perfect

case for euthanasia. We almost reach for the needle, but wait! Nellie is the widow of a man who, in a drunken orgy, murdered his best friend. Day after day, the beads of her Rosary slip through the thin white fingers; she is praying for the peace of her husband's soul; for his final forgiveness. We are not in a position to know just how long this may take. We acknowledge that there are many things that doctors do not know; however, there is something that moistens our eyes as we stand by her bedside. The devotion of a woman who loves long after death. No! We shall not put an end to Nellie's praying. The hypodermic still holds its poison load.

The last case in this ward is Mrs. S—, the mother of five children. She came to us much too late. We were forced to close the incision because of a malignancy. She does not know this. Her face is alight with hope. She has many bouquets on her table, a large pile of letters and cards from family and friends. Someone is glad she is alive. Her case is utterly hopeless. Our poison needle would save her much suffering. She may live some months, yet with her God-given intuition, which seems to belong to mothers, she is meticulous in admonishing her sixteen-year-old daughter and her fourteen-year-old son to be watchful and thoughtful about the home; to train carefully the smaller children; to be sure they get to Sunday School on time; to watch that they do not get wet feet or catch cold. She tells them to look carefully after the comfort of Tippy, the family dog.

From her gentle wisdom they are learning life's greatest lessons. Her few months of life will count mightily in the future conduct of this impressionable boy and girl. Her teachings will live within their lives and characters, long after her frail body lies in dust. We cannot use our poison needle on this gentle, little mother; she has still a message too worthwhile to leave with those who love her. We walk gravely out of the ward. These women are not whining; they are brave women of unconquerable soul.

Let us for a moment look over the roster of the world's great and famous men and women. How many of them suffered the most distressing physical handicaps? Their names are legion. For many years of their lives, Darwin and Spencer did not have a single day of normal health.

I know intimately a doctor greatly deformed from a spinal

injury in childhood. He is one of the outstanding pathologists of his time. Day after day his keen eye is glued to his microscope. He has done much to alleviate human suffering. He is beautiful in spirit, self-sacrificing, kindly, lovable and helpful. As a child he would have been an excellent subject for euthanasia.

Only by long and continuous observation may we learn the course and progress of disease. We must know its manner of attack, its periods of incubation, the cycles through which it passes; what efforts nature may make to combat its ravages. In some diseases, particularly in those known as the acute disorders, resistance antibodies form in the victim's blood. Often from a patient who has recovered from a disease, a serum may be made which will prevent an attack of the disease in another person, or greatly accelerate recovery if he does take it. When this procedure and the underlying processes are better understood, it is hoped that most diseases will be preventable.

Chronic cases present a splendid field for observation and study. Here time permits us to make comparisons, observations, and to undertake a careful and prolonged effort to gain a specific treatment which will bring the so-called "incurable disease" into the bracket of the "curable disease." Slowly but surely we shall uncover many hidden secrets. We have made amazing progress in the past decades by continuing along the present lines of research. Diseases which once filled the hospitals and clinics are now among the vanishing diseases. For this reason alone, we would defeat our own purposes, should we, by mass massacre, do away with our only true sources of enlightenment. The real physician does not kill but seeks diligently to cure. Euthanasia is the stupid act of a petulant child, who erases his partly solved problem because he has not yet made sufficient progress to know the answer.

If euthanasia were the rule, the almost desperate urge to solve the secret, say of cancer, would not dominate the minds of medical men as it does now. Nor would they feel the same urge to battle all diseases that bring upon their victims the slow, creeping agony of delayed death. The way out would be too easy. Few men would be fired by desperate desire to deal these enemies of mankind a death blow. As has been the case, and as is the case now, in every laboratory under the sun the battle goes on, day

and night, and new victories are reported, new ramparts taken, and gradually but surely the foe forced back.

The medical profession marches on, a peacetime army, its only enemies pain and premature death. There is no Armistice Day in this warfare, no surrender, and no mediation. The physician marches under a banner that is never furled; the incurable diseases of yesterday become the curable diseases of today or tomorrow.

Situated in the neck, saddled upon the windpipe, is a two-lobed organ without an excretory duct, pouring its internal secretion directly into the blood-stream; this ductless gland is shield-shaped, and hence known as the thyroid. If the thyroid does not function in early life, the result is a big-bellied, frog-like animal, a thick-tongued dwarfed idiot, hitherto existing in hopeless darkness—this is cretinism, and those affected are cretins.

If ever a condition seemed to call for euthanasia, it is cretinism. In former times, the curse of cretinism was ended only by death; today this deformed and drivelling idiot, properly treated with thyroid, is turned into a normal specimen of childhood. It is one of the miracles of modern medicine, for the child that emerges is literally "born anew." For example, a cretin whom Hector Mackenzie had treated since the age of eleven became a university student (1908). Just as the ideal of bacteriology is the discovery of pathogenic microbes and the preparation of antitoxins, so the object of endocrinology is the isolation of the hidden hormones and the production of organotherapy. Endocrinology is the obscurer science, and we stand today at the gates, and gradually pass beyond. Another generation shall enter, and much that is closed to our eyes shall be open to those who succeed us. Where we stumble in uncertainty, they shall advance by the light of the new knowledge. Where we attempt to halt the monsters of disease with imperfect weapons, they shall conquer with swords dipped in a hundred discoveries.

I cannot conclude this chapter better than by quoting a letter from the man who was for years the honored dean of American medicine, since the letter does not appear in his authorized biography: "I am opposed to the acceptance by the medical profession or the state, of the doctrine of euthanasia in the sense that it is right or permissible to put an end painlessly to the

lives of those believed to be afflicted with incurable disease or injury. Physicians, more than the lay public, are, I believe, alive to the uncertainties and dangers of the recognition and application of such a principle, so contrary to the traditions and practice of our profession." The writer of these words was William Henry Welch, and they may be regarded as Popsy's testament to his younger colleague.

ARCTIC ENIGMA

ABIDING satisfaction dwells with the man who can look back over four decades of medical and surgical practice and remember that no one in need, of whatever race, color or creed, has looked to him in vain for help. He would be, however, a poseur and a hypocrite if he did not admit that there is satisfaction, too, in remembering that, as he moved into years of maturity, he was privileged to serve more and more of the great ones of this earth, the men and women set above their fellows by accomplishments, by possessions, by ability, even by just sheer luck.

Not that I see much difference between the men and women who step out of the spotlight of their usual lives into the calm impartial brightness of a hospital room and those who emerge from dark obscurity into that same brightness. Illness is a great leveler. At its touch, the artificial distinctions of society vanish away. People in the hospital are just people.

Yet, each sufferer in each hospital bed comes there from his own special world and will return to that special world. Meanwhile, as he lives in temporary exile, he is eager and willing to give to his trusted friend, his surgeon, glimpses of that world and messages from it which he might reticently conceal when he is his own man again. It would be silly to claim that the worlds in which poverty and fear and toil rule are more interesting to catch such glimpses of than those in which big business is done, great pictures painted, laws made and administered, science advanced, and explorations achieved. I have been proud and happy many times that skill and knowledge are able to restore to active useful life men and women doing great and important work.

Names to conjure with! There have been many on my roster of

patients during the past quarter century, as they are on the roster of every busy surgeon. But no name I ever saw there gave me more of a thrill than did the name of one man on whom the eyes of the world had been focussed for a brief and fleeting moment and who had seen the adulation in those eyes turn to scathing contempt.

In July 1932 the physician friend who had brought me the new patient spoke that name.

"He has been greatly misunderstood, greatly abused, greatly robbed," he was saying. "He has suffered much. I have brought you Dr. Frederick Cook, Doctor. He is ill. Will you take care of him?"

Dr. Cook! Great Arctic explorer—or great Ananias? Over twenty years had passed since I had read, with fascinated attention, every word I could find on his triumphant return from the frozen North, bringing the news that he had stood where no man had ever stood before, on the top of the world. Over twenty years had passed since, in the midst of the celebrations in his honor, the world had been electrified by a second voice from the ice-bound wastes, Robert Peary's voice, saying unequivocally, "This man is a liar!"

Everyone was talking about the rival discoverers back in 1909. Their claims were weighed at every dinner table, and partisans waited breathlessly for the verdict of the University of Copenhagen which would settle the dispute after the data submitted by Cook had been studied there. The verdict came—"Not proven." And Cook crashed from his briefly held pedestal into ignominious oblivion.

Everyone had been interested in this man once. And I had been intensely excited. For ever since my boyhood I have been an arm-chair explorer of the snowy North, a fireside traveler whose imagination has often sledged in silence through the Arctic night with Eskimo and dog. As my friend talked on, explaining to me the needs of the new patient he had brought to me, my mind flashed back forty years.

I was a boy of seventeen, that summer of 1897, when Salomon August Andrée, dauntless Swedish engineer, made an explorer out of me. He never knew that he had done it. Probably it would not have seemed important to him if he had known! But who can fail to thrill when it became known that this man, with two

brave companions, was ready to make a dash for the North Pole, not with dog-sleds, not with sailing ships, but with that newest wonder of transportation—the balloon!

As clearly as though it were yesterday, as clearly as though I had seen it myself, comes the memory of the farewells. Andrée and his intrepid comrades stand beside a balloon of pongee silk, slowly filling and swelling, swaying a little in the breeze. There are handclasps, embraces, the last pleadings of fearful friends, and then suddenly Andrée breaks away from the watching crowd. He is in the wicker basket. His voice is clear and firm:

"Strindberg . . . Franaenkel . . . Let us go . . . One! Two! Cut!"

An eye-witness describes the scene and his words echo in my heart as though I had written them myself out of the fullness of my feeling, "Scattered along the shore, we stand motionless, with full hearts and anxious eyes, gazing at the silent horizon. For some moments, between two hills, we perceive a gray speck over the sea, very, very far away, and then it finally disappears. The way to the Pole is clear, no more obstacles to encounter—the sea, the ice-fields, and the Unknown!"

"The sea, the ice-fields, and the Unknown!" "Let us go! One! Two! Cut!" Over and over again, I whispered those words, with fast-beating heart, as I, with all the world, waited for news from these heroes. A carrier pigeon brings good news: "Good journey. All goes well on board. Andrée." And then silence—and anxiety—and apprehension—and fear! Not for thirty-three years did the world know the ending of that adventure. I was a man of fifty when I read that the bodies of these pioneers of aviation had been found at last on White Island.

I never lost the thirst for vicarious adventure which Andrée gave me. And I had followed with keenest interest the exploits of man of my own profession who had braved the dangers of the merciless North—unforgettable men like James Markham Marshal Ambler, Elisha Kent Kane, and Isaac Israel Hayes. When I began to read about Peary, I was interested to learn that the surgeon of his 1891-92 expedition was a young doctor, just out of medical school. I had an unbounded admiration for this youthful Aesculapius who had elected to serve his internship above the Arctic Circle. I had been puzzled by his break with Peary.

I had thrilled when I read that Dr. Frederick Albert Cook had himself gone in search of the Pole.

"Take good care of him, Doctor," my friend was saying, and I came back abruptly from my flight to my youth, to assure him that Dr. Cook would have the best private room available and the best of everything the hospital afforded.

Great weariness was the most important malady we discovered when we examined the doctor. He wanted, he told me, just to "sleep for hours and hours!" It was a fortnight, therefore, before I ventured to draw my chair to his bedside one evening and talk with this puzzling man.

"Do you know, Dr. Cook," I told him, "I'm a hero-worshipper?"

There was deep sadness in his eyes, but a faint, courageous smile upon his lips, as he said:

"Was I one of your heroes?"

"Indeed, yes!"

"But I am no longer?"

His eyes searched mine in quest of some hint that I still believed in him, or at least reserved judgment.

"Dr. Cook," I said, "the claims and counter-claims are difficult for a bystander to weigh. I only know that I would gladly do to help you anything that lies in my power to do."

He smiled an enigmatic smile.

"You can help me right now, if you are not too tired," he said. "It would help me to talk with a man whose mind is not already closed."

There was a long silence which I made no attempt to break, and then Dr. Cook spoke again.

"I'd be forgiven, I think," he said, "for feeling that I've had more than my share of misfortunes. When Peary and the publications and scientific or pseudo-scientific societies succeeded in discrediting my discovery of the North Pole, they also tore down public faith in earlier achievements, in the ascent of Mt. McKinley, for instance, which I made in 1906. They did a thorough job while they were at it. And after my fellow explorers had finished heaping shame upon my head, I had to get mixed up in the oil business in those days when oil scandals were popping thick and fast all over the country. I went to prison for that, you know!"

"Yes," I said. "That's the side of the story all of us know. But there must be more to know than that."

"There is," he assured me. "You don't know, do you, that when I was in the thick of that oil trouble, a government accountant testified that I was the largest cash investor in my company, that I had no promotional stock, and that every penny was accounted for? You don't know—very few people do—that while I was fighting for release from prison, some of the greatest oil discoveries in history were made on the land which I was accused of fraudulently exploiting. On land, now known as Yates Pool, which I had under lease and was beginning to drill, one well was discovered which flowed nearly a quarter of a million barrels of oil a day. A week's operation of that one well would have more than equalled the entire capitalization of my company! Those are the facts which don't make the headlines. They come after the public has tired of the subject and the newspapers are feeding them new sensations.

"And that McKinley claim," he went on. "I know, of course, that I climbed that peak. I stood on the top of the Continent on September 16, 1906. I had been defeated in the attack I made in 1903. We had tried the approach from the northwest ridge and, though we reached an altitude of 11,000 feet, the cliffs were unscalable. We discovered then that the northeast ridge offered the only workable route to the top. It was that approach which we used three years later. We went up Ruth Glacier from the south until we found a path to the northeast ridge at an altitude of about 12,000 feet. Cutting steps as we moved forward, we ascended the steep hogsback to about 15,000 feet and were then able to reach the great median glacier and follow it to the final summit and the dome. Other parties have climbed Mt. McKinley since then—they have all followed the same route and they have all reported the same conditions which I reported in 1906. And the topographical map I made then of 3,000 miles of the environs of Mt. McKinley has been used ever since by the government for official maps of the region.

"Strange, isn't it—" again a smile played around his lips—"strange, isn't it, that the government should use data which I just made up out of my head!"

There was silence again, and again I waited.

"The thing you really want to hear about," he began again,

"is that Polar expedition. It is hard to know where to start in telling you. I guess I'll have to begin at the beginning and give you something of my background, before we make our dash for the Pole."

He then told me most of the story of his life. He had been born, he said, in upstate New York, in Callicoon Depot, Sullivan County, and his family name had originally been Koch, changed, as names so often are, for better accommodation to the tongues of the neighbors in a new country. He told of days at Medical College of New York University and then of his exciting chance to join the Robert E. Peary expedition to North Greenland, as second in command with the assignment of surgeon and anthropologist. That was the summer of 1891.

For several years thereafter the two men, who were to become such bitter enemies, worked together to conquer the Unknown. The 1891 expedition, a nightmare because of the inexperience of the party, brought Cook one important discovery—not new land, but new knowledge—that a proper diet would prevent and cure scurvy. He was to use that knowledge with good effect at the other end of the earth when, in 1897, he joined the Belgian Antarctic Expedition, which brought him his long friendship with Roald Amundsen and his decoration at the hands of the Belgian King.

A trip with Peary and others in 1892 to the point on the Greenland coast which Peary believed at that time to be the northeast limit and to establish the insularity of that great land mass; a trip in 1893 along the Greenland shore, which Cook led himself, and a second similar trip a year later, described in *The Last Voyage of the Miranda*; the Amundsen expedition in 1897 . . .

"That was a fascinating and dangerous journey," he said. "We were frozen in the ice pack and drifted for fourteen months. Amundsen believed that the expedition owed its fortunate ending to the plan I finally concocted for sawing a canal to release the ship from the ice.

"I was medical officer, anthropologist and director of photographic work on that trip. In Patagonia and Tierra del Fuego, it was my privilege to report on the primitives of the Farthest South. The four races we studied then have since disappeared, but the records we made of them are still in existence.

"I wrote about that expedition, you know, in my book, *Through the First Antarctic Night*, which was translated into French and German almost at once. It wasn't the official narrative of the trip, of course. That, with full scientific data, was sponsored by King Leopold and published in ten quarto volumes at a tremendous cost. Not for the general reader, that book!

"No one has ever tried to discredit that trip," the Doctor said somewhat grimly. "It was the first of the modern South Polar expeditions. One of our best discoveries was a navigable channel in the unknown south of Cape Horn. And explorers since that time have had us to thank for many articles of light equipment which we worked out for our own use."

It was taking rather a long time for us to come to the Polar expedition on which my greatest curiosity was centered. I tried to help matters along with a question.

"I have always wondered," I said, "how you came to break with Peary. His violence against you in 1909 must have had roots in things that happened earlier. It didn't just spring up all at once. Or did it?"

"I have asked myself that question, too," Dr. Cook said, "and I really am not sure just what the answer is. You know perhaps that I resigned from the Peary expedition the second time I was appointed. There was a not too pleasant argument at that time. Peary told me that I could not publish the results of my ethnological work except in his books and under his signature. That didn't seem fair to me and I decided not to go. But that difference of opinion didn't break our friendship. You know that if you have read what Peary said of me in his story, *Northward Over the Great Ice*. And we were still regarded as friendly enough in 1901 so that his sponsors appointed me to act as guide in the Peary Relief expedition sent out to search for the party from which no reports had come for two years.

"Perhaps that was the point at which things broke. We found Peary with his wife and daughter on the old *Windward* anchored at Etah. I was shocked when I saw him. He had frozen both feet and Dr. Dedrick had removed eight of his toes, leaving only two small digits and painful stubs with which he could barely walk. But that was almost the least of the things wrong with him. He was broken, tired out, discouraged, weakened in physique, ambition, and hope. When I examined him I found him suffering

from early symptoms of pernicious anemia. I told him he must eat raw meat and liver . . . He said he'd die before he swallowed such poison!"

The smile on Dr. Cook's face now was one of sheer amusement, though it quickly gave place again to worried puzzled concern.

"Peary asked me then to stay and take Dr. Dedrick's place. Possibly he was hurt when I refused. But you will see that I could not ethically have done what he asked. And besides I wanted him to come back to civilization with us and take a few years out for rest and recuperation. He needed it. He never was able after that to bring to his explorations the full and vigorous command of mind and body which an explorer must have. His real work came to an end at that time."

Dr. Cook was watching my expression as he spoke.

"That's true," he insisted, "even if every schoolboy today can tell you that in 1909 Peary discovered the North Pole, crowning with success a long career of exploration!"

He paused a minute. Now, I knew, it was really coming! I was right.

"I discovered that Pole myself. And I still do not believe that Peary was even second on the spot. I think I'd like to tell you about that ill-fated adventure of mine just as I remember it. Would you be patient and listen?"

Of course, I would, I assured him, trying not to sound too eager.

"I had long been watching attempts to reach the Pole," he began, "and I had decided that Peary's so-called American route was too far to the east. That problem of a route, you know, was one of the toughest nuts we had to crack. The Polar Basin is almost entirely landlocked. From Bering Strait half way round the world to Scandinavia there are the continents of Asia and Europe. From Bering Strait east there are only narrow breaks in the land barrier until we reach the channel between Greenland and Europe. Mighty rivers pour their floods into the Arctic Ocean and the overflow necessarily drains into the Atlantic Ocean through the Greenland Sea, as water pours through a funnel. It is a powerful current. Explorers attempting to strike north from Spitzbergen and Franz Josef Land drifted back almost as rapidly as they struggled forward. Nansen, who entered the ice north of Bering Strait, drifted clear around to Spitzbergen. Peary, try-

ing to go straight north from Greenland, found rough ice and a steady drift eastward toward the funnel mouth.

"My plan was to base in northern Greenland, go northwest by dog team, live on the rich game lands which Otto Sverdrup had discovered west of Greenland, and thus reach the Arctic Ocean at a point where the path northward would be less disturbed.

"When, early in 1907, John R. Bradley invited me to outfit a schooner for a hunting expedition along the east coast of Greenland, my plans were ready. I told him that I would accept his invitation if I might, finding conditions favorable, stay over the winter and try to make an attack on the Pole.

"Conditions did seem most favorable. In August, we found two hundred and fifty Eskimos living at Annoatok, only seven hundred miles from the Pole. They had plenty of dogs in fine condition. I had brought with me the finest of special equipment. And Mr. Bradley, before he sailed south, left me all the supplies he could spare. I was left with one white companion, Rudolphe Francke, and a tribe of golden pygmies. We spent the winter making ready.

"At sunrise, February 18, 1908, we started—eleven men and one hundred and three dogs drawing our laden sledges. We crossed Smith Sound and began picking a new route across Ellesmere Island. We had poor hunting at first, so poor that Francke returned to Annoatok to guard our base there in case we must make another try the following year. But we found more game as we moved on, and on March 17th, I stood on the shores of the Arctic Ocean at Svartevoeg, which had been discovered by Sverdrup seven years earlier. We had killed one hundred and one musk oxen and hundreds of hares on the way. We had deposited along our route caches of canned food and oil at fifty-mile intervals. We still had forty-six dogs and we calculated that, allowing for the killing of some dogs to feed others as the loads lightened, we had food enough for the final dash.

"All but four of the Eskimos left us at this point. And on March 18th, we started, with four half-loaded sledges, over the rough shore ice. Three days later, when we were sixty miles from land, two of the boys dashed back with empty sledges. I was left alone with Etukishook and Ahwela, two sledges loaded to capacity, and twenty-six dogs. We had food enough for eighty days. That should be enough.

"It was hard going. Sometimes we would find smooth floes of a mile or more. Then we would come upon pressure ridges over which, when we could not hack a passage through them, we had to lift our sledges. Open leads of water forced detours. Storms delayed us on some days, but on others we could make as much as twenty miles' progress. Navigation was not difficult. We were almost constantly on the magnetic meridian, with our compass pointing due south.

"We were surprised when we saw no trace of Crocker Land, which according to Peary's report had been discovered in 1906 just west of our path. Fitzhugh Green and Donald MacMillan proved in 1914 that the land did not exist, but we had naturally taken Peary's word for it!

"The farther we moved north the more difficult our progress became. We were drifting, my observations told me, eastward about three miles a day. By March 30th we were nearing latitude 85° . During the following week we struggled one hundred miles nearer, to $86^{\circ}37'$. We were losing weight. The low sun played tricks with our vision. Mists boiling from open leads into air as cold as fifty below zero glowed with fantastic hues. Fields of snow took on the colors of sky and mist.

"By April 14th, we were well beyond the 88th parallel. By the 19th, only 30 miles separated us from our goal. On April 21st we made a last fifteen-mile dash. We knew we were in rifle shot of the Pole. We set up camp. We took observations for two days at six-hour intervals. We measured shadows every hour. The sun circled around the horizon, spiraling steadily upward. There could be no question about it. By every test we knew, by every fact our instruments recorded, we knew that we stood at last at the Great Nail!

"We were triumphant, but our triumph was mixed with a sense of desolation. We had reached our goal. We stood where no man had ever stood before. But of what avail was such victory if we could never return to the world of men and tell our tale? Behind us stretched a frozen desert. Below us was an unplumbed sea. We were the only pulsating creatures in a dead world of ice. Could we hold our courage and our strength for the last long struggle which lay before us?

"I pressed a small American flag and a brief account of our journey into a cylinder and left it in the ice. If we were lost,

that record might some day come into human hands. Then we turned south.

"We attempted a straight course for Svartevoeg, by dead reckoning, for we were fogbound most of the way. I tried to allow for the eastward drift I had noticed, but the attempt involved us in near disaster. We were caught in a then unknown drift and carried far to the south and west of our destination. On June 13th, for the second time since we started south, I was able to make an observation. We were latitude $79^{\circ}32'$, separated from our line of retreat on Heiberg Land by fifty miles of open ice and water and by many miles of unknown terrain. We were weak from half rations. We knew that to the south of us were Sverdrup's Rignes Islands and south of them more lands occasionally visited by whalers. Our one chance was to reach those lands.

"We killed enough game to keep us alive. We reached Jones Sound and started east in our canvas boat. We left one sledge behind us and cut down the other to go into our boat. We came to Baffin Bay in September, but too late for a ship. We retreated to Cape Sparbo and prepared an old Eskimo cave for winter habitation. We were out of ammunition. We had no food except what we could capture with harpoons and bows and arrows which we made from bones and sledge parts. Our clothes were in tatters. But we hung on. During that long night I wrote the manuscript of my book about our journey.

"In February 1909, we were on the move again, started on our long walk to Greenland. We could not carry enough supplies on our little sledge and twice we were very near to starvation. But at last, some time late in April or early in May, we reached Annoatok.

"My first news from the civilized world was that Peary was himself somewhere back in the frozen waste I had just left, making his own vigorous attempt to reach the Pole. Harry Whitney told me this. He had come north with Peary the summer before, and I found him living in my hut when I came to Annoatok. He told me also enough of Peary's attitude toward me to surprise and grieve me. I sensed then that I could expect only the most ruthless kind of rivalry from my one-time friend. My only hope of reaping the fruits of my hard-won victory was to reach the world first with the story of my discovery.

"I decided to sledge southward at once and try to catch a

steamer for Europe. It would be a hard and dangerous trip, I knew. I thought it best to guard against loss of equipment or even of life itself by leaving with Whitney some of my records and my instruments. That was a mistake, as I learned to my sorrow, for Whitney told later that Peary had refused him permission to bring my belongings south and I sorely needed those records when I was called to prove my claims.

"It was late summer before I found passage on the Danish steamer, *Hans Egede*. When the boat touched Lerwick in the Shetland Islands, I cabled an announcement of my success and left a three-thousand-word story which was purchased and published by the *New York Herald* before I landed at Copenhagen three days later."

Dr. Cook had been leaning forward eagerly, tense with excitement as he relived his great adventure. Now he relaxed against the pillows and a look of defeat came into his eyes.

"You know the rest of the story, Doctor. Everybody knows it. You remember Peary's message coming in by wireless on September 6th—'Stars and Stripes nailed to the North Pole!' You remember the hue and cry that followed! Peary played his cards well. He sent announcements to all the geographical societies before he published a word about his journey. They were with him from the start. He had a magnificent press organization and he knew how to use publicity. He was awarded dozens of medals before a single detail of his expedition was known.

"He attacked me, as you know, with every weapon he knew. I had no instruments, he said. He should have known since it was he who forbade Whitney to bring them back to me! The Eskimos told him, he claimed, that I had never been out of sight of land. I wonder which of the dwellers in that frozen country he chose as his informants. He cast doubt upon my navigating ability and somehow his unsupported word made people forget the testimony of such men as Amundsen and Lecoq, who had been with me in Antarctica. He said I had stolen his supplies. That, considering the Whitney episode, was perhaps the most brazen of all his claims."

I thought that the story had come to an end, for the discredited discoverer was quiet for a long time and seemed to be weary from his long exertion. I was just preparing to leave him, when he spoke again.

"I don't expect you to believe me, Doctor," he said. "With the whole world convinced that I lied, I cannot hope that you will put your faith in my unsupported word. But I do want you to know that I am not without hope of vindication. Men whose opinion counts most to me, men who have most carefully studied my claims and the claims of my rival, come increasingly, I know, to question the popular verdict rendered back there in 1909. There have been other discoveries, many of them, since that day. And the discoverers, increasing our knowledge of the mysteries of the North, have repeatedly brought back confirmation of my observations and my claims. They have found Arctic drift as I reported it. They have confirmed my discovery that Schei Island is a peninsula. No one has ever found a major flaw in the book in which I set down my findings, a book which has been in circulation now for twenty-five years. New discoveries have discredited page after page of the book which Peary wrote, but they have not touched the careful reports which I prepared in that Eskimo hut in that dark Arctic night.

"You realize, of course," he added, "that the one thing which to most explorers might be the final evidence of veracity is of no use to me. That flag, that cylinder I planted at the Pole! Even if someone found it, it would not mean a thing. There is no land at the pole, only shifting ice. There is no such thing as nailing the stars and stripes there, no way of leaving, for other men to find, a clear firm proof that one actually has stood on the top of the world!

"I'm not the first explorer to be doubted and flouted. Marco Polo was. Stanley Africanus was. Many others have been and will be. But history in time has given its laurels to the men who truly earned them. I confidently await the verdict of history."

My feelings, as I left Dr. Cook's bedside that night, were mixed, and in the mixture bewilderment predominated. The recital had all the ear-marks of sincerity. I had followed the old controversy with care and eagerness, and yet I could detect no discrepancies in the story my patient told. That he believed what he said, I could have no doubt. Could I likewise believe it?

I welcomed the opportunity which came afterwards to tell the story of my experience to Ted Leitzell, who is something of an authority on the Cook-Peary fight. He was more than ready

to talk about his hobby. He is certain, he told me, that Cook has been a much maligned man.

"Behind the grotesque caricature created by the sound and fury of the controversy," he said, "is one of the most honorable men who ever lived, the real Dr. Cook, who, whether or not he found the Pole, is the greatest adventurer America ever produced."

And then he went on to talk of the researches he had made, of the studies he and others had undertaken to settle the truth of the Mt. McKinley story. He had gone over much of the ground himself and he hoped at that time to produce on his next expedition a photograph of the summit which would go far to answering the question.

"One photograph of the summit will do the trick," he told me. "For Cook's summit photo is the only one in existence. Later climbers, who are usually detractors, singularly enough have failed to bring back photographs of that summit."

He then analyzed for me the conflicting claims on the Polar expedition. The statements said to have been made by Eskimos that Cook had never been out of sight of shore seemed to him most damning evidence if those statements could be believed. But could they? He said that Knud Rasmussen talked with the Cape York Eskimos in Greenland before they talked with Peary and found them ready to give ringing support to all Cook's statements. And he was inclined to believe that story rather than the more widely circulated statements of Peary about what the same Eskimos told him.

"Why, Whitney, who, you may remember, was excluded from the conference which Peary had with the Eskimos, tells of having the boys come to him in bewilderment, saying they did not understand what Peary's men were trying to get them to say. Do you call that reliable testimony?"

He pointed out discrepancies and weaknesses in every attack made on Cook's story; the juggling with mileage figures which attempted to prove that the man's own record would not bring him to within five hundred miles of the Pole; the far-fetched suppositions which underlie the assertions that he could not have had food enough or supplies enough for the journey; the shuffling of maps; the fantastic transparent lies. He backed up Cook's estimates of the inaccuracies of Peary's work.

"Three Danish explorers lost their lives in 1907 by following maps based on Peary's findings," he said. "They tried to navigate Independence Bay at the east of Greenland which he had 'discovered.' They found it is actually two hundred miles of rough, mountainous country!"

And when he had finished his analysis he summed it all up.

"As I see it, it's here in a nutshell," he said. "Every statement made by Dr. Cook about his journeys which has since been subjected to proof has been confirmed.

"Every charge brought against Cook is either irrelevant, an error, highly improbable, or a downright lie.

"Every impartial student, who has made a careful investigation of the subject, has leaned strongly in his favor."

"You make a strong case," I said. "I wonder . . ."

"Why, man!" Leitzell exclaimed. "You don't even have to weigh the scientific evidence to lean strongly in favor of your patient! Look at the psychological factors alone!

"Cook stood on the shore of the Arctic Ocean, only five hundred and twenty miles from his goal. That much his worst enemies concede. He was equipped. Nothing stood in his way but an unknown path. He had traveled thousands of miles and spent nearly a year reaching this point. He had behind him a brilliant record. Why on earth would he at that point deliberately decide to fake his story?

"But just suppose he did! The human mind and conscience are unpredictable. Suppose he did just that! Would he then have gone through that terrible winter in the cave? Why didn't he just return along his line of safe retreat? He could have reached the world in the autumn of 1908 with a story which could not have been challenged for at least a year. That would have been the natural thing for a liar and a schemester to do.

"No, you can't get around it! There has never been a story of that expedition one-half so probable as the story Dr. Cook tells himself. It is the only one that fits the facts as they have been revealed to date."

Do I believe that story myself? It is hard to say. I have neither Dr. Cook's knowledge of what exactly happened nor Leitzell's specialized research on which to base a conclusion. The episode has served, however, to convince me of one thing beyond a doubt.

The story of the North Pole and its discoverer was not ended when Cook's name was so carefully erased from the schoolbooks. The story will never be ended until, patiently and unceasingly, evidence has been shifted to the very bottom and the truth brought into the full light of certainty. Whether that truth will reverse the old verdict and place the discoverer's laurel wreath once more on Cook's brow, I do not know. But I am convinced that it will inevitably remove from his name the shameful shadow which that name has borne for more than a quarter of a century. If he did not discover the Pole—I am certain of this at least—his claim to discovery was an error, not a lie. He will be known some day as one of the greatest Polar explorers of his day. It would give me deep satisfaction if I could think that, in setting down his story as he told it to me when he was weary and ill and discouraged, I may be hastening the day when justice may be done to him, when we may all learn at last the true solution of an Arctic enigma.

SPICE OF LIFE

SOLEMN and sometimes pontifical are the pronouncements in which we of the medical and surgical profession report to our brethren, and to anyone else who cares to listen, our accomplishments and our achievements. With ultra-seriousness, we write for professional journals and conclaves of our peers our accounts of the operation which couldn't be done and we did it, of a new operative technique developed, of new treatment discovered, of complications and of researches and of crumbs of new knowledge which we are privileged to offer for the good of all. For men entrusted with high matters, the very stuff of life and death, what other tone would be appropriate?

We would be a sorry crew, however, if those carefully drawn self-portraits were completely true to life. Few of us, I think, would live long enough to write, as I am writing, the story of forty years in the service of healing, much less the story of fifty, sixty years, which I hope to write. Fortunately the saving grace of laughter belongs to us as to all men. Fortunately, the long hard days of work and study, the battles with death, have their lighter moments; our bread of earnest toil is spiced with humor.

Plenty of funny things have happened to me. You won't find them in my contributions to the literature of the profession, in the books and papers I have written. But this book is different. Somehow they do belong here.

Laughter strikes with peculiar brightness to break a moment tense with anxiety and dark with fear. I think that I never laughed harder in my life than I did when a big burly Negro, on whom we had performed a gallbladder operation the day before, looked

up at us one morning with a puzzled but trusting look on his ebony face and said:

"Doctah, is everyone who gets dat operation having a sore tongue and bottom next day?"

Leroy had only a few hours before lain on our operating table ostensibly as dead as a door nail. We had hesitated to operate at first, for the gallbladder trouble was only one of the ailments to which his two hundred and fifty pounds of flesh was heir. Diabetes, syphilis, degeneration of the kidneys, arteriosclerosis—those were a few of the things wrong with him. And when we tried to administer the spinal anesthetic, once we had determined to go ahead with the operation, we added to that formidable list an arthritic spine! We were just ready, after something of a struggle, to begin to operate, when Leroy stopped breathing.

We had used every means of resuscitation we could think of. A forceps grasped his tongue and we tried pulling it rhythmically forward to aid artificial respiration. We tried dilation of the anal sphincter. We tried injections of adrenalin into his heart. Our foreheads were bedewed with sweat. My arms ached from the considerable physical strain of trying to apply artificial respiration to a bulk of such vast proportions. No use! We were licked! I started to pull off my gloves.

And just at that moment, when we had conceded defeat, Leroy uttered one short jerky gasp!

And now, here he was, quite unconscious of his recent performance of the role of Lazarus, merely not quite sure why an abdominal operation should leave such strange effect on a man's tongue and "bottom"!

There was victory and relief in our laughter as we assured him that his symptoms need cause him no anxiety.

Sometimes the laughter has a sharp point which performs a salutary puncturing of a surgeon's inflated ego.

I have another Negro patient to thank for a lesson in the truth of the old adage "pride goeth before a fall."

Oscar, whose full name was Oscar Lincoln Whitesides—although his sides, as well as the rest of him, were actually black as the ace of spades—was suffering from an umbilical hernia—rupture of the navel. I told him that he must have an operation.

I was sorry, but not surprised, to see a look of sheer terror cross his face.

"Don't worry," I said reassuringly, "you'll be all right."

But it wasn't the operation that caused Oscar's eyes to roll heavenward and his voice to ring with anguished pleading as he cried,

"Doctah! You isn't goin' to take off mah belly button, is you?"

That, of course, had been just what I had intended as an incidental result of the operation. I had been removing belly buttons on occasions with utter *sang froid* for years. And Oscar was the first patient who had shown the slightest attachment for this creased depression which is the common abdominal adornment of the human race.

"Yes, Oscar," I said, "the belly button will have to come off."

I was not prepared for the explosion which followed.

"Doctah," he moaned, "there ain't going to be no operation! I aims to keep mah belly button!"

His eyes roved wildly from door to window. Suddenly there was a flash of black and white and one of the interns grabbed a flying figure by the short tail of his hospital gown just as he was disappearing down the corridor. Not for nothing was this man named "Oscar"—the dictionary will give you the meaning—"leaping warrior."

Obviously we were going to have to use persuasion and plenty of it if we ever got Oscar to the operating table. I assigned the job to the Resident and when, two days later, he reported to me that we had the green light, I was pleased with his work.

I congratulated him and I detected some embarrassment in his response.

"How did you get Oscar to sign the permit for the operation?" I queried.

"Well, er . . . you see, Doctor," he stammered. "I just had to tell him you would try to save the belly button!"

I groaned. But I had been thinking about Oscar, wondering whether he didn't have something on his side of the argument. After all, a man's belly button is pretty personal. And if a man values it . . . ? He wasn't asking anything beyond the realm of possibility. Hadn't I successfully transplanted many nipples on female breasts? Anyway, I said to myself, a promise is a promise. This one I didn't make myself, but it was made for me . . .

And so, when Oscar, duly anesthetized by Jennie Hoagland, staff anesthetist, was rolled into the operating room and I went quickly to work to excise the tegumentary structures, I saved the umbilicus and reimplanted it in its normal habitat at the end of the operation. "Nothing ventured, nothing gained," I thought. "We shall await results . . ."

I was glad that I had at least tried to keep my promise. For, when I left the operating room, I was waited upon by a veritable army of Oscar's relatives, in-laws, out-laws, neighbors, and friends, who lined up in a doleful semi-circle, their big eyes solemnly searching my face. The ponderous dark lady nearest to me was their spokesman.

"I am Mrs. Whitesides," she announced ominously. "We understands you had to tampah wif de belly button of my husban', Oscar Lincoln Whitesides. Is you done it or isn't you?"

I shall never know what dark tribal taboo I might have violated had I been forced to plead guilty at that moment. But my conscience was clear. I adopted the tone of solemnity which the occasion clearly demanded.

"Madam," I said. "In order to reduce the hernia from which your husband suffered, I was forced to excise the button . . ."

There was a subdued but disquieting murmur from my auditors and I hurried on,

"But I have made a satisfactory graft! I have never, in all my experience as a surgeon, seen a handsomer or neater navel. It is my belief that nothing but death itself can separate your husband from his abdominal adornment!"

Light flooded every face as I spoke. There was a flash of white teeth in now smiling countenances. There were softly spoken words of gratitude.

I hoped when I spoke that I was telling the truth. The days passed and I was sure of it. As the whole hospital staff, suddenly and, I fear, hilariously, became belly-button conscious, watched and waited, Oscar's navel seemed to be healing by "primary intention," smoothly and perfectly. I was proud of it. So proud that I could not resist showing my handiwork to Dr. Karl Meyer, head of the hospital in which the work had been done.

He was duly impressed, so much so, in fact, that he persuaded me to show off Oscar and his belly button at a meeting of the Cook County Medical Society.

The exhibition was conducted with all the pomp it deserved. Into the amphitheater rode Oscar in a wheel chair pushed by an orderly. I followed with assistants and interns at my elbow. I assumed my most dignified manner.

"Gentlemen," I said, "I have the pleasure of presenting to you the first successful transplantation of the umbilicus. Henceforth no one need worry about smooth abdomens! You may restore them to their pristine state, thereby satisfying aesthetic tastes . . ."

With a quick and confident sweep of my hand, I removed the adhesive tape, and stepped back to receive the applause.

It did not come. There was dead silence for an instant and then a gathering roar of laughter. I looked down. The "belly button" of Oscar hung there attached, not to Oscar, but to the adhesive tape!

So Oscar lost his belly button after all. I wish that it had happened otherwise. And I wish, too, that Oscar, wherever he is, could know that, because of him, many men have been spared the embarrassment of facing the Judgment Day with the smooth navel which must on that day, I suppose, make Oscar liable to be mistaken for Adam, the founder of the human race, who was, presumably, created without that decoration.

I have transplanted belly buttons in great number since Oscar's time, with growing proficiency and increasing success. But I have always been careful in removing the dressings. And the memory of Oscar has checked me more than once when I have been tempted to make a proud triumphant flourish. Meekness is a good quality to cultivate whether or not it inherits the earth!

The possessive instinct is strong in all of us, though it does not always take the odd turn which Oscar's took. "This is *mine*!" There is a vigor not to be denied in that declaration. And probably the church fathers are right in insisting that the right of private property is divine as well as earthly.

Mike, for whom it had been necessary for my instruments to do what proper diet would have prevented, seemed not to have a strong sense of possession himself. At least, once his gangrened leg was actually severed from his body he was quite willing to forget about it and turn his whole eager attention to other mat-

ters. But Mike's family more than made up for any lack of proper feeling on his part.

The leg, as Mike's married daughter explained to us, was "part of poor Papa." It must be carefully kept, embalmed, and put to rest along with Mike's other members "when the Good Lord called him." On the arrangements to be made to attain this admirable end, however, she and her husband, who nodded his agreement with every word she said, were distressingly vague.

And the second family delegation, Mike's sister and nephew, had just as positive ideas on honor due to part of Mike, and just as much helplessness in the face of practical details. They were a strange pair, straight off a farm in the Kentucky mountains and steeped to the eyebrows in Irish superstitions augmented by the lore of their mountain neighbors. Back home there were people who could "handle serpents," they told me, people who knew how to ward off the evil eye by burying bottles of urine, with human hair and perhaps a piece of fingernail or toenail in it, behind the houses of those who wished them ill. The mother's talk had traces of a once strong Irish brogue, but the boy, an awkward gangling lad of seventeen, could only make idiotic syllables with the incoherent accents of one born with a cleft palate. I had difficulty in understanding his voluble flow of words. But I gathered that Mike's leg must not only be kept and buried but that it must be given a funeral in keeping with the tenets of some strange cult to which these two belonged. Unless this were done, the mother warned me as she left, she would "put the law on me for malpractice and hurt feelings."

A third contender in the fight for Mike's erstwhile pedal extremity was announced in a letter. Mike's uncle was making a coffin for the leg. Be sure, he wrote, to keep it safe until he was ready with that coffin. It would be a good one, for he was an expert carpenter.

We had plenty of patience and we could wait for time to settle the family feud. But Mike's leg could not wait. A near-by resident telephoned to complain that the leg, lying in the morgue, was all too present in her nostrils when the wind blew from the wrong direction. The hospital charwomen held their noses when they passed the morgue door. The superintendent complained. And then one day a representative from the Board of Health paid us a call, expressing in language not polished but very much

to the point the opinion which he and others held regarding legs which became nuisances.

We had, of course, consulted Mike about the disposition he wished made of his possession. He had been nonchalant, vague, indifferent. He had other things to think about. He refused to be bothered. He was enjoying his holiday to the full. It was, perhaps, the only holiday he had ever had. He was resting and, more important still, he was basking in the limelight and loving it.

For no sooner had the news of Mike's loss reached the world outside the hospital walls—by what grapevine route I do not know—than the whole power of high pressure salesmanship was turned full on one poor little Irishman who needed a new foot. Letters and circulars, booklets, pamphlets, packages, and photographs piled high on his bed and continued to pour into the hospital mail room in such volume that our normally peaceful mailman went about muttering his disapproval of circumstances which transformed him from a civil servant to a "pack mule"! And the salesmen! They appeared everywhere, seeming to burrow into Mike's ward through doors and windows and even coal holes.

The welcome the salesmen received from the hospital staff was anything but warm, but Mike made up for our coolness with his expansive enthusiasm. He listened with fascinated attention to all their stories. And in the rare intervals when they left him alone, he pored over the literature, especially the pictures which showed fat men, lean men, bald men, hairy men, old men, young men all proudly wearing one of those ingenious appendages which Mike so coveted. His gaze lingered admiringly on those heroes shown holding up the silver cups and trophies which proved their athletic prowess. One could almost see the conviction shaping itself in Mike's head that, even if one was no great shakes as an athlete with two legs of flesh and blood, one could scarcely escape winning fame as a Marathon runner once one leg had been replaced with wood.

We didn't like to bother Mike, especially when we saw as we entered the ward that he was practically in an hypnotic trance as he listened to the latest of his salesmen visitors. But we had to do it.

"Mike," we shouted, "you simply must tell us what you want done with your leg!"

He made one magnificent gesture, keeping his eyes still fixed on the salesman's face.

"Let the leg go to hell!" he said.

We were goaded into action finally when a peremptory order came from the City: Remove the leg without delay! Like good citizens, we hastened to obey. And Lo! the leg was gone! Not for some weeks was the mystery solved. Then the night orderly confessed that he couldn't stand it any longer. He had simply put it in the incinerator.

It was gone, but its ghost put in one final disturbing appearance. Messrs. B—, MacC—, B—, B—, and MacC—, attorneys, apprised the management one month later that legal procedures were about to be instituted against us to recover the leg or its equivalent in gold of proper fineness and weight commensurate. Greatly perturbed, we approached Mike. He was still complacently smoking his pipe and dreaming of the trophies he would win when he had his new leg under control.

"To hell with it," he said.

Nothing more happened.

Good hearty chuckles come to a doctor which he is sometimes prevented from sharing, except with his cronies, by considerations of good taste. Plenty of rough roistering yarns are spun when brothers in the profession foregather. And they belong in that choice company of the true initiates. I would not break with tradition by telling them here. But I have had a whole series of funny experiences in my life which just miss being perfect after-dinner stories through the simple and regrettable fact that the doctor's right-hand sleuth is, like the detective in one of Anna Katherine Green's novels, considered not quite genteel enough for the best society.

A man with persistently recurring migraine is the hero of one. He told me of his struggles to get rid of these headaches which made it so difficult for him to hold a job as well as giving him exquisite torture at about fortnightly intervals. He had tried everything and had at last resorted to a new doctor whose bright advertisements promised cures for every ill under the sun.

"I thought he had cured me, too," the man said dolefully. "He didn't use his X-ray machine like he did when he cured my wife's sister of Bright's disease and sugar diabetes. He didn't use any of

the gadgets and things he had in that fine office of his. I never saw any office like it, Doctor. He had just everything, and patients were coming and going all the time. I guess he must be good. He just looked me over and said, 'Brother, all you need is the right medicine!' And he gave me some pills and told me to take them three times a day. He told me how I would know whether he'd struck just the right prescription. Maybe we'd have to try several things before we hit it, he said. He told me to urinate in a glass and watch it. If the stuff turned deep bluish green, I'd know the headaches were licked. Simple, wasn't it, Doctor? It seemed worth the twenty-five dollars he charged me to get help quick like that."

The man with the headache looked up, smiled wanly, and went on with the story.

"Well, sir, I set up pretty near all night waiting to see what would happen to that urine. And sure enough along about two o'clock it turned the prettiest greenish blue color you ever saw. I was so pleased that I could hardly wait to get back and tell the Doctor about it. He had told me to come again in five days.

"And was he delighted when I brought the stuff in and showed it to him! He called his nurse and he says to her: 'Title this, Long Standing Migraine Cured in Five Days.' Then he says to me, 'You wouldn't mind having her write down just what you've been telling me, would you?' Mind? Of course, I didn't mind! I was glad to sign the paper on which the nurse put down what I told her!"

There was a long pause and then the visitor sighed a long and gusty sigh.

"You know, Doctor," he said. "Sometimes I think that man is a fake. The headaches came back again in a week or so. I think they're worse than ever now."

. . . Methylene blue will turn any person's urine blue or greenish promptly!

It was urine of another color which brought to my office one afternoon a fresh-faced lad whose country background was evident in everything he wore and everything he did. His new blue serge suit was poorly tailored and he was ill at ease in it. He wore light tan shoes and a shirt of somewhat striking plaid. His necktie was the bow type which is set on the collar with a hook. I liked him on sight, and I summed him up as a good, whole-

some, ruggedly healthy farm boy. He almost bowled me over with his first statement.

"I'm afraid," he said, blushing to the roots of his sandy hair, "I have one of those bad diseases you read about."

Plenty of sufferers sit in our offices while we patiently draw out of them reluctant admissions to explain the plight we know them to be in. But this was a new approach.

"What makes you think so?" I asked him.

I think I was rather relieved that he did not give me another blunt straight answer at once. He was human enough to beat about the bush a little, to give me the story of his life before he could bring himself to the point of the interview.

I was right in my guess about his background. He had only just come to the big city from a small town in northern Pennsylvania. An uncle "in the wholesale business" had arranged for him to be with him during the winter so that he could go to work. Before he had left home, his father had given him fatherly warning.

"I've tried to be careful," the boy said. "I've kept out of public toilets. But I guess I haven't been careful enough. Day before yesterday I began passing blood from the bladder . . ."

He almost broke down then from sheer fright. And when he had, at my request, handed the specimen to the nurse, his lips were trembling.

"It's still bloody," he said. "I don't know what Dad will say . . ."

I didn't know what to make of the boy. He was nineteen. Surely he must know more than he seemed to know about the facts of life. Any city school boy would have known all the answers. Was he perhaps a perfect actor? Hollywood was missing a treasure if that were true!

"Have you been dating the girls?" I asked him, trying to relieve the tension and draw him out.

He colored again.

"Oh, no! Doctor! No!" he said. "I've got a girl back home. If I can make good with my uncle we are—we were—going to get married pretty soon. She's pretty, Doctor, Gee! . . ."

The nurse came in at that moment. "This deep red colored specimen is negative. No red blood cells. Benzidine test neg. . . ." the report read.

"Are you taking any medicine?" I asked the boy.

"No, Doctor. I ain't been feeling sick."

"What have you been eating?"

"Just regular meals. My aunt has been giving me a lot of beets lately. She says they're good for growing pains. I like them. She gives them to me about twice a day."

The mystery was solved.

"Buddy," I told him. "You better lay off the beets for a while. You're as tough as Joe Louis. No germ has got you. You can just stop worrying."

His face was aglow as he started to the door. Then he turned, pulled out a thin leather wallet, and said a little anxiously:

"What do I owe you, Doctor?"

"How rich are you?" I said, trying not to smile.

"Not so very," he told me solemnly. "I'm savin' up to get married."

I put my hand on his shoulder.

"You don't owe me anything," I said. "You aren't sick. You don't need a doctor. Just buy something nice for your girl!"

Yes, it's a good reliable sleuth and a doctor would hardly know what to do if he could not look for help to the tell-tale evidences in human urine. But the sleuth can turn trickster at times.

I found that out for myself a good many years ago when, in the best of health and spirits—so I thought—I was confronted with a rejection report from a reputable insurance company. The report cast me into the depths of anxiety. Plenty of instances came to my mind of physicians I had known, good physicians, who had overlooked, until it was too late, serious symptoms in themselves. I was just another like them, I told myself. And I began to think of drawing up my will, getting my affairs in shape.

But I kept my head above the waters of despair enough to ask the insurance company for definite facts about my malady. The report was long in coming, but it came at last: sugar in the urine. Well, I could check that myself. Professor Haynes, my teacher, taught us to ascertain that in a few moments by the Haynes test, (a modification of Fehling's test). I got negative results. I tried again. Still negative. What kind of a disease was this, I said, that appeared only when I walked into a certain insurance office? I went

around to the laboratories the company used. The answer was there. It was very simple. They were in the habit, in that laboratory, of rinsing out their test tubes with formaldehyde. And the traces of formaldehyde left from such rinsing caused discoloration similar to that which indicates the presence of sugar.

They found another method of disinfecting the test tubes after I had talked with them.

Prove everything! Assume nothing! Those first laws of the scientist's world were ground into my mind when I went to school and confirmed again and again by the experiences of years of practice. I believe I have observed them carefully. And yet how fatally easy it is for human beings to essay simple sums in the head, to add the obvious two and two for an answer of four when the correct sum set ought to give a result of three—or five!

Rushing through the hospital waiting room one day, I saw two sobbing Negro girls sitting on one of the benches. I knew at once who they were and knew also the reason for their grief. Only that morning our head nurse had spoken to me about their aunt, slowly dying of tuberculosis.

"The end is here," the nurse had said. "It's a matter of a few hours at most . . ."

I put my arms around the shaking shoulders of the two young women and drew them into my office. I wanted to give them what comfort I could. I wanted also to persuade them to give us permission to perform a post mortem examination.

It took patience to quiet the sobs, more patience still to gain my second point. But success crowned my efforts at last. They were very quiet and calm as I turned to the interoffice communication system and put in a call for Dr. Neiman.

"Dr. Neiman," I said when his voice came to me through the orifice of the square box, "will you please attend at once to the post mortem on Mrs. —?"

There was a shriek of horror from my visitors. I turned in surprise and found four round repoachful eyes fixed upon my face.

"Auntie isn't dead yet!" wailed the pair in unison.

We had to postpone that post mortem, it turned out, for nearly a week, while Auntie clung with unbelievable tenacity to the last thin thread of life.

A buxom young woman talked with me anxiously about the pale, undernourished baby she held in her arms. The child, she had told me, was breast fed and had great difficulty during feeding.

"He doesn't seem to get enough to satisfy him," she said. "He goes on crying and having temper fits until we give him the bottle."

In a moment I had the young woman in the examining room, carefully scrutinizing her breasts. That must be the trouble, I had instantly known. To my utter astonishment, I found that I was looking at the breasts of a virgin.

"Why, of course, Doctor," the woman said when I voiced my amazement. "I thought you knew. I'm not the baby's mother. I'm the nursemaid!"

Take nothing for granted! What a hard rule that is to follow! And what moments of flushed embarrassment reward the doctor who dares forget it for an instant!

The natural docility which a patient assumes when he or she enters the mysterious portals where the arts of medicine and surgery are served played its part in this story. Any sufferer expects doctors and nurses and members of a hospital staff to tell him to do strange incomprehensible things and he is willing to obey without protest or question the instructions and orders which go with the solemn ritual of healing. We should all be hard put to it to carry on our work if things were otherwise, if we had to give our reasons whenever we asked a patient to "put out your tongue!" But sometimes the tractability of the patient can cause absurd complications. They did in the case of Monsieur D.

I had met Monsieur D. at a dinner in New York and I had been greatly drawn to this gentle, distinguished French scientist, with his pale scholarly face accented by a spreading black beard, and his shoulders bowed from years of poring over heavy books. I invited him to visit me in Chicago and was delighted when his letter came naming the day and hour of his arrival.

The day he appointed was an exceedingly busy one for me, but I knew that, as a scientist, he would understand the obligations which a busy surgeon must meet. I gave most careful instructions for his reception, impressing on the minds of the hospital staff the

great honor he did us by being our guest. Everything must be in shining readiness for the great man. I should have to be operating at Cook County Hospital when he arrived. But I knew that I could trust my colleagues and assistants to do him full honors until I could reach his side.

I had talked with them long about Monsieur D. and I had spoken also of the expected arrival in the near future of a new patient being sent us by a colleague in Kansas City. This patient being probably, my friend had warned me, need careful handling. He was a man of great wealth and he was accustomed to having his own way. It would not do to cross him or to anger him.

Just routine instructions. Nothing unusual about them except for my special concern about a famous guest. I dismissed the whole matter from my mind. Responsibility had been shifted to competent shoulders. I would hurry back as soon as I could from Cook County, but only because I was eager not to miss any time with Monsieur D.

I rather expected to find him in my waiting room, but my secretary told me that our guest had been tired and was taking a nap on the divan in my study.

"Did the new patient come in?" I asked.

"Oh, yes. He is in bed on the third floor. He gave us no trouble at all," she assured me.

Monsieur D. was sleeping so peacefully when I entered my darkened study that it seemed a pity to wake him. I was mildly surprised to notice that he had shaved his beard since I saw him in New York. I would not have thought him so quickly adaptable to American ways. I tiptoed out of the study and went up to see the new patient, just to greet him and to be sure that he was comfortable.

I opened the door and then I had a sudden impulse to run away—fast! For there, propped up against the pillows, his fine black beard spread wide upon the sheet, lay Monsieur D. His black eyes snapped angrily. I recovered my balance as best I could.

"My dear friend," I exclaimed. "I find you in bed! Are you suddenly ill?"

"Eel?" he snorted. "Of course, I'm not eel. I come here to veesit you, and your nurses and doctors they escort me here. They tell me your orders are I go at once to bed. Tell me . . ."

His voice lost some of its anger and took on a note of anxiety. He was watching my expression intently.

"Tell me, Doctor. Have my family request zis? Iz eet a trick? Iz eet that they think I suffer some deadly sickness that I don't know?"

Fury flooded back into his face again.

"They are wrong! Wrong!" he declared. "I am a man of good health! I am a strong man, Monsieur le docteur! See! Look at zis muscle! I study much. Yes. But I exercise much! I fence! I win trophies! Must I through my foolish family submit to torture? Let it be soon over! I do not like 'ospitals! Zis is . . . Zis is an evil place . . . a place of sickness! I will not stay here!"

Light burst suddenly across my brain. That smooth-faced sleeping man in my office! He ought to be here! What a terrible mistake! How should I ever be able to make things right with either of these two important gentlemen? And after all my careful planning! To have things turn out so absurdly!

Well, no use trying to dodge. The harm was done. I squared my shoulders and made a clean breast of it. My apologies were profuse and I watched anxiously for any sign of clemency on the scientist's face. It was a long moment of suspense. Monsieur D. understood English imperfectly and my English at the moment was rapid, incoherent, more than usually hard for him to follow. Then I saw dawning comprehension, a twinkle of good Gallic humor, and before I had finished my explanations and excuses, Monsieur D. was rocking with laughter while tears streamed down into his beard!

That was half the battle. But what about the rich irascible patient slumbering in my study? Would he see the joke too, or had I offended his dignity beyond repair? I was relieved to find that his nap had left him in the best of humor. He had thought, he told me, that there was something unusual in hospital procedure which required an incoming patient to take a long pleasant drive along the Lake Front, to partake of delicious tea in the surgeon's study, and to rest in the surgeon's inner sanctum before he was admitted to a hospital bed at all.

"But I liked it," he assured me, reaching out a big hand to slap me on the knee. "Ought to be done oftener! Makes a fellow feel good! Most hospitals too damn impersonal!"

He was so completely enchanted by the whole absurd episode

that he forgot to exhibit the unruliness of which my friend had warned me. All our plans for him were perfect, he assured us. Not one peep of complaint came from him during his hospital sojourn. He was a model patient.

Spice of life! Thank heaven it has been sprinkled with a lavish hand into my portion of living.

THE TRAGEDY OF APPENDICITIS

"SOMETHING I ate, I guess. What can you give me to stop a bellyache?" says the young man to the corner druggist.

Perhaps he is right. But perhaps also, as any surgeon knows to his sorrow, he is speaking the opening lines of a tragedy in which he is to play the leading rôle.

"There's nothing much the matter with John (or Jenny)—just an appendix. It's not acute. No reason to worry."

And again, in the careless words, the shadow of tragedy looms close and dark.

The casual manner in which the lay public regards this disease which annually claims the lives of some twenty thousand persons in the United States, some three thousand in England and Wales, is a matter of constant amazement to us of the surgical profession. We know that appendicitis is at least as old as ancient Egypt since A. M. Spencer discovered an acutely inflamed perforated appendix preserved in the mummy of a young Egyptian princess. We even suspect that Hippocrates himself died of the malady about 370 B.C. But the understanding and treatment of the malady belongs almost completely within our own generation. We know that, in spite of great strides taken in the handling of the disease, in the techniques of operation, and in the methods of diagnosis, the mortality rate from appendicitis remains discouragingly constant. Statistical studies, gathered from painstaking observations by some leading hospitals, show that the mortality rate today is just about what it was twenty-five years ago.

Why should this be? We know the answer to that question. We know that the deathrate could be reduced almost to the vanishing point *if only* the lay public could be made to understand the

crucial importance, in appendicitis as in few other diseases, of early accurate diagnosis and prompt intervention. "*On ne doit pas mourir d'appendicite*," said the great French physician Dieulafoy. Certainly one should not die from appendicitis, and one is far less apt to do so if one understands how great is the danger that one will!

Robert — would not willingly have trifled with his own life. He was the father of a son and two beautiful daughters and he had much to live for. Yet when he felt the symptoms of what seemed to him to be a "touch of ptomaine," he merely stepped into a drugstore and got some cathartic pills. When he was brought into the hospital scarcely twenty-four hours later, it was too late for us to save him. We did our best, operated quickly under local anesthesia, inserted a drain, and hoped. We hoped in vain, for Robert — died a few hours later, his invalid wife and his children at his bedside. The tragic scene was unforgettable. And behind the tragedy was a harmless appearing little brown pellet . . . a *pill did the kill*.

Pills are probably responsible for more appendicitis deaths than the average layman has any idea. Keys states that the mortality among appendicitis sufferers who have taken cathartics is eight times as great as in those who have not resorted to this remedy. But with the radio blaring forth its cheerful assurance that So-and-so's pills will fix up that abnormal feeling in no time at all, and with the friendly druggist on the corner ready to recommend "something for indigestion" to any sufferer who faces him across his counter, there seems little hope of correcting this appalling situation, unless it is possible to make the public understand the risks they run and pause and consider before they run those risks.

The facts on which there should be much more general understanding are, in themselves, fairly simple. Here they are. When an appendix becomes inflamed, such inflammation often tends toward pus formation. The pus, being confined to a rigid, worm-like tube, the appendix, tends to distend the yielding organ. If increasing pressure is put upon this organ, it may rupture, releasing the poisons into the peritoneal cavity around. The action of a cathartic is exactly the spark that ignites the flame. Just the opposite treatment is the safe one. The diseased appendix must be protected from pressures and strains until the surgeon's knife

can remove the offending appendage. Good old Hippocrates seemed to know this even in his day when appendicitis was unheard of. "In Sharpe Diseases, and in their Beginning," he wrote, "we ought seldom to use a purging medicine. Neither must it be done without great advice and judgment." It has taken considerable more than two thousand years for that wisdom to reach the general public.

More people know this now than knew it a few years ago. That is encouraging. But many go right on being careless because they know too well—with perilous half-knowledge which is the despair of doctors—just where the pain ought to be if it is caused by an inflamed appendix. They would treat with respect a sharp pain low down on the right side. Anything else they are willing to regard as mere "stomachache."

The truth of the matter is, of course, that appendicitis does not usually start where it is supposed to at all! It usually begins, not low on the right side, but in the pit of the stomach or about the navel. It localizes then in the right lower abdominal region. Hamilton Bailey recognized this and gave, for the guidance of medical men, two questions to ask when appendicitis is suspected.

"Where was your pain when it started?" is the first of these questions and Mr. Bailey asserts that the physician should begin to prick up his ears with suspicion if the patient points to the pit of his stomach or to the region about his navel.

"Where is your pain now?" is the second question. And if the patient then points to his right lower abdomen suspicion becomes near certainty and prompt action is indicated. At that point, the physician may save—or lose—the life of the man before him.

In spite of the willingness of the man in the street to diagnose his own case by this rule of thumb or that, the reputable medical man and surgeon knows that appendicitis "symptoms" are tricky enough to tax the diagnostic acumen of the most expert. Nausea and vomiting occur in about seventy per cent of the cases, but they are absent in others. Changes in the blood picture are found in about seventy-five per cent of the cases, but they are not inevitably present. In about ninety per cent of the cases there is sensitiveness of the skin overlying the affected area, but even this is not conclusive proof. Meticulous evaluation of all evidence is necessary, and the difficulty of making such evaluation is increased because symptoms seeming to point clearly to appendicitis

may prove not to indicate this disease after all. In children particularly evidence often proves untrustworthy, especially in girls between the ages of four and ten years. The late John B. Murphy, who did great and pioneer work in the battle against appendicitis, insisted always that a rise in temperature was one of the cardinal signs of acute appendicitis. He probably knew as much about appendicitis as any man of his generation, and yet we know that he was mistaken on this point. We know that the temperature rise is a most unreliable sign for the diagnostician. In fact, temperature is usually low in the first twelve hours of an appendicitis case; often there is no fever at all. It is quite possible for the best of us to diagnose as appendicitis something which is not appendicitis at all. And it is just as possible for us to mistake mild symptoms for indication that a serious case has not yet reached a danger point.

I emphasize this, for I wish that I could make those who read these lines understand that diagnosis of appendicitis is no job for a layman. It is a difficult and tricky job at best for the skilled diagnostician who has long years of study and experience to help him.

I had had much of experience diagnosing appendicitis cases myself when, one day, I found myself discussing symptoms with a burly stage carpenter sent to my office by "Pop" Rosenbaum, manager of the Ziegfeld Follies. The man had appendicitis—that seemed clear. But his symptoms were extremely mild. When he asked me whether, in my judgment, immediate operation was absolutely necessary, I hesitated. I knew that it would be a hardship for him to stop work with little or no notice and undergo the operation. I weighed the evidence carefully . . . His temperature was only slightly elevated . . . The blood picture was not much altered . . . He had little pain . . . There was little tenderness or muscle rebound. I told him that I thought he could perhaps wait a while, but to keep in touch with a surgeon.

He was just about to leave the office when his wife, who had accompanied him there, intervened.

"But we are leaving for Milwaukee tonight," she said. "Tell me, Doctor, are you sure that my husband will not get worse while we are away from Chicago?"

"No mortal man could possibly predict what will happen to

an inflamed appendix," I told her. "I believe that your husband's case is mild at present. I would not dare to hazard a guess as to when it might become acute and critical."

She had good sense, that woman! She insisted that the operation be performed without delay.

And when I operated I found a gangrenous, greenish-black appendix! I have always been thankful that those tickets to Milwaukee were not used.

I have seen other cases like that, cases where preliminary examination showed only the mildest symptoms and the operation disclosed most serious conditions. And, on the other hand, I have operated when every sign pointed to serious involvement of the appendix, only to find the seat of the trouble unexpectedly elsewhere. Gallbladder trouble, inflammation of the pancreas, stone in the kidney or ureter, pelvic abscess, lead colic, ectopic pregnancy, ovarian or tubal diseases—these are only a few of the maladies which may, in their symptoms, masquerade as appendicitis, to the great discomfiture of the diagnostician, and the greater discomfiture of the surgeon. A man who sets out to remove an appendix needs to be ready for any surprises. He may have to change, in the twinkling of a second, his whole plan of campaign.

"That damned right side!" my old teacher, the late Christian Fenger, used to exclaim in the operating room. He knew what it was to operate on what seemed to be a "typical" case of acute appendicitis, and find a perforated ulcer of the stomach, an acutely inflamed gallbladder, an inflammation of the pancreas. The great Theodor Kocher of Bern, Switzerland, often said quite frankly that his conscience did not trouble him when he operated for appendicitis and found that the patient didn't have it, but that he would be deeply mortified to know that a single case of appendicitis had ended in tragedy because of maldiagnosis. Better to operate and find no appendicitis than to fail to operate and give that treacherous disease the advantage of delay: most surgeons are inclined to this opinion today.

For the medical world today recognizes appendicitis as a surgical disease. "The physician treats appendicitis, the surgeon cures it," said the German Kümmel. His French colleague, Poirier, went a step further, asserting: "There is no medical treatment for appendicitis." Theories of treatment which omit, or try to

omit, the surgeon's knife have had some vogue from time to time, but they are now almost completely discredited. "Whom do you wish to conserve," inquired Gussenbauer, commenting on the briefly popular "conservative" treatment for appendicitis, "the patient, or simply the appendix?" And the late John B. Murphy, with his customary vigor, once scored off the so-called "expectant" treatment, in these words:

The mention of "expectant treatment" for appendicitis is to me like waving the banderillo's red scarf at *el toro*. I can't keep quiet. I am still hunting for a term which expresses my opinion on the method. I find the English vocabulary too limited, however, to suit my desires. A Latin medicus might have called it the *expectans mortem* treatment. To name it the *mañana* method is not malapropos, but it is too mild. To describe it as *dolce far niente* is expressive, but this soft Italian phrase is impossible when I am showing all my teeth in a Rooseveltian glare. If I had Roosevelt's genius of phraseology I might find the needed term, but as yet it eludes me.

Not only does there seem to be no substitute for the knife; there is no substitute also for promptness. If action can be taken within twelve hours of the onset of the disease, the chances of the patient's recovery are immensely increased. After the first forty-eight hours, the picture begins to look blacker. Some surgeons speak of the third and fifth days as the "dark days" because of the high death rate which these days build up. It is at this point, also, that the surgeon with mature judgment realizes that the moment for safe and effective use of his scalpel has temporarily passed. After the third day, experience tells him, resort to the Ochsner-Sherren treatment is the wisest procedure.

This is a régime of starvation for the patient and a tense period of hawk-like vigilance for his attendants, who must be alert for every change which indicates the progression or retrogression of the disease. The bed of the patient will be pointed to the operating room and everything kept in readiness for an emergency operation. But it will be the hope and the endeavor of surgeon and attendants that the symptoms may gradually subside and the patient move slowly out from the shadow of death.

The convalescing patient, however, is given clearly to understand that he has not escaped operation but merely been given a temporary reprieve. If he is wise and willing to listen to the

counsel of his surgeon, he will return to the hospital just as soon as his general physical condition permits and have the offending appendix removed.

It is perfectly true that appendicitis, like many other diseases, seems to manifest itself both in acute and chronic form. The acute type strikes like a bolt from the blue, and usually sends the sufferer at once to his doctor for help. The chronic type, causing intermittent discomfort, is all too apt to give the patient a false sense of security. He feels that there is time to procrastinate. It seems so unnecessary to go through the ordeal of an operation for a pain which is so mild. I cannot emphasize too strongly the fact that such procrastination is never "safe" in cases of appendicitis, whatever may be true of other maladies! With the ticking away of every hour, chances for recovery grow less. The man who knows he has chronic appendicitis and does nothing about it is, in a very grim sense, gambling with death. Even in elusive cases, it is better to have the appendix out—at once.

I wish that I could find the words which would puncture forever the layman's notion that appendicitis is a disease that may safely be trifled with. I wish too that I could disabuse his mind of the idea that an appendicitis operation is "not very serious."

Even the position of the appendix is by no means as constant as most people think. Its classical position is the so-called McBurney's point, a spot in the lower right abdomen. But the surgeon who goes looking for it may find it instead behind the large bowel, under the liver, attached to the kidney, or even on the left side, or deep down in the pelvis. He may have to hunt for it. He may discover that it is buried in adhesions or obliterated. And this is only one of the surprises which may meet him as the operation progresses.

The experienced surgeon knows the pitfalls and dangers which surround even the "simplest" operation. Perhaps he has himself lived through the sad experience of having a ligature slip when tying the appendiceal stump too short. He knows the dreadful penalty which must follow if he misjudges a single step in the process, if he ligates the appendiceal artery improperly, if he misjudges this or that . . . He knows how lightning quick and sure must be his decisions when the abdomen is opened and a gangrenous appendix revealed to his gaze. Is it best to go ahead? Is it wiser to leave the appendix undisturbed, introduce a drain,

wait for a more favorable opportunity? No lore derived from medical and surgical books will give him the answers. They must come to him almost instinctively as the result of experience and the skillful wisdom that experience alone can bring.

The outcome of an operation for appendicitis will depend in part, of course, on the stage which the disease has reached before operation. It will depend, more than many people realize, on the condition of the patient. The strain of the operation on a person advanced in years, or on a person suffering from some visceral disease, may help to write a tragic end to the story. Even apparently straightforward cases may develop such complications as localized abscess formations, peritonitis, intestinal obstruction, and other sequelae. The disease is, indeed, as treacherous an adversary as any surgeon cares to meet.

And let me repeat, the outcome will depend, in very large measure, on the surgeon who operates. Why is the death rate in some hands greater than in others? The answer is so simple as to be almost obvious. It lies in the difference between alertness and competency and experienced skill on the one hand and lack of training, faulty judgment, and inexperience on the other. The mortality decreases with the experience of the surgeon. Only in experienced hands does the patient have his maximum chance of safety.

The mortality rate in appendicitis remains high enough to weigh upon the heart and conscience of every sincere and earnest surgeon. It need not continue high. It could indeed be reduced almost to nothing. It will be so reduced when we have succeeded in accomplishing three things.

We surgeons know well that, within the memory of many of us, methods of treating appendicitis have improved vastly, but that the techniques of early diagnosis of treacherous cases have by no means kept pace. Here is the first of our problems and we may confidently hope that the scientists of our profession will move surely toward its solution.

Lack of training and experience on the part of the physician attending cases or the operating surgeon we can also overcome, especially if the public will aid us by demanding the best of skill and knowledge in the men it calls upon for help when appendicitis strikes.

But how are we to overcome the abysmal ignorance which

makes the appendicitis sufferer fall an easy prey to the deadly cathartic pill or purgative which leads him to fatal neglect and procrastination? A life devoted exclusively to the education of the layman so that he may recognize symptoms of appendicitis when they occur and take the wise measures to deal with the disease in its early stages would be indeed a life well spent!

For it is indisputably true that the more educated is the lay person, the more experienced the surgeon, the prompter the intervention, the lower the toll of human life claimed by this treacherous enemy. When we have managed to overcome public ignorance and professional incompetence, when medical man and layman alike understand the full dangers of trifling and procrastination, we shall be able to claim proudly that we have conquered appendicitis. But that conquest lies far in the future yet.

PART VI: TOWARD TOMORROW

27

RIGHT SIDE UP AGAIN

SLOWLY but steadily, as the 1930's progressed, we fought our way back from the quicksands of depression to the firm ground of comparative security. Never again, we knew, would the dazzling brightness of the pre-depression days shine upon our path. And we were truly and deeply glad that it would not. I rejoiced that my mind was released from the strain of continual worry, that I might once more travel at will, take up again some of the diversions and recreations which gave me pleasure and refreshment, that I had work to do and strength to do it. More than that I did not, and do not, ask of fate.

For Fim and for me the pattern of daily life took on a steadier rhythm, though for both of us twenty-four-hour days seemed just as inadequate for the tasks we wanted to do as they had when we first set up housekeeping together in that little home on Twelfth Street.

My own routine does not vary from one week's end to the other. It includes no "day off" for rest or play. Some of my friends think it is a pretty stiff and strenuous schedule, but I love it! I rise at seven, breakfast on coffee and orange juice; at the hospital at seven-thirty. Hospital rounds take up the next half hour or so. My correspondence is attended to between eight and nine. Usually about three hours in the operating room and I am ready for a light luncheon. To my surgical work at our own hospital have been added operating periods at the Cook County Hospital twice a week, and some scheduled operations at the Municipal Tuberculosis Sanitarium. Afternoons are given to consultations, evenings to literary work. Such leisure as I manage to find I occupy with music, with camera work, with an occasional evening at

theater or concert. Occasionally the whole routine is suspended for days or even weeks, when I must undertake one of those lecture tours which have carried me all through these United States and into some parts of Europe. Research, contemplation, relaxation? Well, I can still steal hours for these from the time assigned for sleeping.

Fim's days are probably less neatly systematized, but they are just as full. She is so quiet, so retiring, that even I am not fully aware of all the manifold activities which fill her time, activities which, diverse as they are, have as their prime motive always the amelioration of the suffering of others. I get some faint idea of how busy and useful she is when I try at times to telephone her at our home—the line is always in use! But no one, not even her husband, knows how many families, how many individuals, she has on her private list for administering needed help in the form of food, money, personal aid, advice. Her self-effacement and modesty have always been part of her unique charm. Many great ones of this world have posed willingly before my camera—I have never persuaded Fim to give me one sitting!

The hospital for which we toil would not be the kind of place it is without her, though she rarely steps within its portals. Not only has she been the moving spirit—albeit an anonymous one—behind the Ladies' Auxiliary which has been such a strong bulwark since the hospital was founded. But she is also the mothering genius of the place. The specialists and experts on our staff could manage efficiently, it may be, without her; but they could never bring into the institution the atmosphere of warmth and friendliness and humanity which she puts there. Her concern about the welfare of the institution which we have built is very deep and it has, I fear, caused her often to strain her limited resources of health and strength. But when I gently urge her to spare herself, to give more time to the music and the reading which she loves, her answer always is: "The work must go on regardless of personal sacrifice."

Fim's Spartan attitude toward her own health has made me anxious at times, but only once—and that some fifteen years ago—did it strike a real chill of terror to my soul. She had been complaining—if one may use that most inaccurate word in reference to her casual remarks about her feelings—of certain symptoms which disturbed me. I had finally persuaded her to visit a promi-

nent and trusted colleague of mine for a thorough X-ray examination.

When the examination was over, my friend called me into his office. He put an affectionate arm around my shoulders.

"Max, my friend," he said, "this is the hardest diagnosis I have ever had to report in all my long practice. I am profoundly sorry that I am the one to have to break the news to you that . . . well, I am afraid Fim has cancer of the bowel . . ."

He went on talking, but I did not hear him. In the black abyss into which I had dropped there was no sound but the roaring in my ears which seemed to come from the very depths of hell.

Struggling back at last to some degree of self-possession, I faced the double problem: How could I tell Fim this dreadful news? How, when I had told her, could I persuade her to undergo the treatment necessary to save the life that was so precious to me? . . . Perhaps I was a coward . . . If so, I am glad that I was . . . I did not tell Fim my friend's verdict, but I did tell her that I was not wholly satisfied that he had overlooked nothing in his examination. She looked at me quizzically, guessing more than I told her, but she made no objection when I suggested that we have another opinion "just to be sure nothing is wrong."

Drs. Mayo, Judd, and Moore, working with consummate skill and thoroughness, conducted their examinations. Finally, in the fluoroscopic room, they were ready to give their report. I braced myself in the darkness and waited for the blow to fall.

"What we have here," said Dr. Charlie, "is clearly a *diverticulosis* . . . There is not the slightest sign of malignancy!" . . .

The room had been inky black a moment before. Now it seemed filled with radiant light. I felt as though a hand had reached down into a dismal tomb in which I lay, as though I had, clinging to that hand, come out into the dazzling brightness of a day which I had never thought to see again.

Only when the experience was well behind me did I realize that, through it all, I had been the sufferer and Fim the strong support on which I leaned! Fim is like that. Even if my friend's first diagnosis had proved to be correct, she would have faced whatever had to be faced with fortitude and calm courage, thinking only to spare me anguish.

The malady which was diagnosed, by the way, is a quite common, and often misleading trouble in persons over forty. Small

outpouchings of the bowel, called diverticula, often form in some part of the large intestine and when there is inflammation deceptive symptoms may lead examiners astray. That mistake in diagnosis, let me add, was one of the things which determined me to go ahead with writing that book on *Surgical Errors and Safeguards* which my friends so earnestly advised me not to write. I had learned at first hand the pain and anguish which can be caused by a simple, forgivable error on the part of an excellent physician. Nothing could have kept me from writing that book after that!

For many years, Dr. Josiah J. Moore, recently chosen head of the Chicago Medical Society, and I discussed many of the pitfalls in the surgeon's path.

"Not only the surgeon's," he pointed out recently. "Many baffling errors may happen in the laboratory as well as in the operating room. They can result from technical mistakes in complicated tests, from improper identification of collected material, or they can be caused by the inexperience of the person who makes the test."

He told me of a young woman of thirty-four, who had faced the knowledge, supported by the findings of a young pathologist, that she had cancer. She had had a growth on her upper gum, between the first and second bicuspid teeth. The young pathologist, who examined the growth after its removal, had been sure that it was malignant. He had reported that long treatment with X-ray and radium, and possibly the removal of the jaw, would be necessary. It was by no means an easy fate for the young woman to face. Fortunately, the oral surgeon to whom she was referred for treatment was not contented with the first analysis.

"He asked me to see the patient," said Dr. Moore, "and suggested that we obtain a slide of the original growth for a second examination. The microscope revealed the existing condition to be an inflammatory growth rather than a cancer. The error in this case was due to the peculiar growth of the epithelial lining of the gum, which suggests a cancer to one who is not familiar with the tissues in this location. We were able in good conscience to give the young woman a most welcome reprieve."

"The pathologist," Dr. Moore added, "like all of us, never stops learning. He is confronted with something new almost every day."

"Laboratory errors are not very dramatic as a rule," Dr. Moore said after a moment, "but I remember one which resulted in a court trial. It was a case of blood transfusion. Through mistake on the part of the operating room nurse, who called the wrong donor at the time of the operation, a patient was given blood of a different type from his own. The patient died a few hours after the transfusion. The relatives contended that his death was due to the mix-up in the transfusion, and brought suit. That mix-up, as it happened, had nothing to do with the demise of the patient, who, as was proved in court, had died as the result of surgical shock caused by the extensive and difficult operation he had undergone for the removal of the cancerous growth. But it does emphasize—if any emphasis be needed—that a laboratory worker should at all times exercise all possible care in typing or matching donors for blood transfusions."

We discussed the development of laboratory tests on which physicians and surgeons have come more and more to rely in making their diagnoses. So much has been done in this direction in my own lifetime. While we all are, as Dr. Moore is, enthusiastic about these tests, he makes his claims, as all scientists do, with caution.

"Even when the tests are most carefully given and most expertly interpreted," he insisted, "there is still a margin of error which the cautious pathologist always remembers."

And he told me an interesting story of an unfortunate young professional man who developed a persistent "syphilophobia" (morbid fear of syphilis) because a single Wasserman test had unaccountably lied to him. The results of that test had been positive, and the young man was badly frightened. Since he had no other symptoms to indicate that he might have the disease, a second test was advised. The results there were negative, and so also were the results of the third, fourth, and fifth tests. But the worry remained. Distracted, the young man made a tour of the United States, having tests made in the laboratories of all the cities he visited. When he had a long record of negative reports, he would be somewhat reassured in his mind. Then the old anxiety would come back, and he would begin again to haunt the laboratories.

"I think our test was the 83rd he had," said Dr. Moore, "and it was negative like the rest. We know now that tests for syphilis

can be wrong. They may be positive from diseases other than syphilis. Technical errors do creep in. We are always ready to suggest repeating the test if the first try is positive, and when there are no clinical evidences to substantiate the laboratory report. In fact, in one of the newer syphilis tests, some positive results arise from a biological factor which makes the blood of numerous animals positive. While we thoroughly believe in serological tests for premarital and prenatal purposes, we do realize that positive reports of such tests should be weighed carefully."

"We haven't developed anything yet," I said, "which makes it unnecessary for the medical man to use his brains all the time."

"Most certainly we have not," Dr. Moore responded emphatically, "but we are constantly working to make our tests more reliable. Several years ago a blood test called the *Abderhalden test* was used to determine pregnancy. The reaction depended upon ferments in the blood serum. In one case, which had three tests made at about the same time, one laboratory reported the patient pregnant two months; a second, four months; and a third, seven months. Subsequent examination of the same patient showed she was not pregnant at all. Further research work demonstrated that the unreliability of that particular test was due to the fact that many diseases increase the ferment in the blood serum and, therefore, there could be many reasons for a positive reaction. The newer test for pregnancy, however—the so-called *Aschheim-Zondek test*—is based upon an increase in certain hormones. While decidedly reliable, it will, nevertheless, while rarely, occasionally result in a negative test in a pregnant woman."

Therefore, the laboratory and the physician are interdependable units and, in spite of these imperfect results, and in spite of the existing margin of error, the work of surgeon and physician becomes surer and less dogged with error as the work of the pathologist develops. It is a wise provision made by the American Medical Association and the American College of Surgeons which requires that every approved hospital must have its clinical laboratory. Dr. Moore has himself described the rôle of such laboratories in words which I am proud to quote with his permission:

"Very few lay people realize that the laboratory, continuously working to increase correct diagnoses, has as its director an unprejudiced specialist, who is at all times ready to discuss and

consult with any attending physician on any puzzling medical problem. While the laboratory is usually in the back of the hospital, or in the basement, it, nevertheless, comes in contact with each and every patient through some of the required laboratory tests and, like the heart, is receiving material from all parts of the institution, and pumping back those valuable reports to the charts for the enlightenment of the physician, and the benefit of the respective patient.

"A few years ago only the largest hospitals had pathologists and these confined themselves chiefly to performing autopsies. Nowadays, every approved hospital is obliged to have a pathologist who is responsible for the laboratory work. The clinical pathologist discusses with the attending physician the interpretation of the numerous blood chemistry tests, the serological tests and the blood picture. Daily he finds his way to the operating room to discuss with the surgeon the type of tumor which the latter is called upon to remove. During the operation, when the surgeon is confronted with the question 'Is this tumor malignant or benign?'—in other words, 'Is it life-threatening or not?' he interrupts the operation, and the pathologist makes a 'frozen section' of a bit of the tissue removed, and in a few minutes he relays to the surgeon the type of tumor he is dealing with, and thus the microscope and pathologist chart the safe course the surgeon is to follow.

"In the field of bacteriology miracles have been accomplished in the saving of human lives. Soldiers are immunized against many diseases, the causes of which were unknown sixty years ago. Cultures are made of various body products of the sick to ascertain what is causing their ailment, and, when found, remedies for their amelioration or cure used.

"The subject of parasitology is of immediate concern to all those who have dear ones in over-seas service. The numerous parasites which have lived in and on the natives of the less enlightened countries respect no one. Any human is meat for their maw.

"The changes in the body fluids due to disease, or the measurement of the concentration of drugs after administration, requires well-trained chemists.

"Finally, the surgical pathologist, examining all the tissues from the operating room, and on occasion, performing the autopsy

wherein, even after death, man renders to his fellow men his last service in increasing medical knowledge through his morphological changes."

The teamwork of scientists, the recognition of their own shortcomings, the constant improvement of their own skills and their own sacrifices, are directly concerned with the welfare of their fellowmen.

I loved Fim when I saw her years and years ago in my Tatra Mountain town. And all through the years since then I have seen men, women, and children repeat my experience. Everyone loves her at first sight! She is so selfless, so outgoing, even those intent on drawing a straight bow to aim an arrow at me are willing captives to her charm.

"The best is yet to be! The last of life for which the first was made!" said the poet. With Fim at my side, I know that he spoke the truth.

We had all come through—Philip and Rosa and Fim and I. We had seen great things happen in the city that was our home. The achievements in public health alone which we had witnessed had wrought changes undreamed of when I first set foot in the western world. We had seen one neighborhood in that city, the neighborhood in which we had chosen to cast our lot, grow from a sparsely settled area on the city's outskirts into a densely populated part of that city's heart. And we had served that city and that neighborhood in the hospital we had built. We had seen all our hopes and dreams come to the very brink of destruction, and we had trembled for the future. That day of apprehension was over. Our hospital was moving into a new day of even greater service.

The significance of that service strikes me anew each time I attend the regular Friday meetings at that hospital. American Hospital? With all these strange faces and these foreign accents? A thousand times yes, in the fullest and truest sense of the word. For here, safe from the madness which engulfs the world, meet some of the great minds of European clinics, sharing with their colleagues of the western world their knowledge and their experience in a fellowship which is the very essence of democracy. One day the great Oppenheim may be scheduled to talk on

"Skin Diseases." On the following Friday, Otto Porges of Vienna may share his unsurpassed knowledge of "Gastrointestinal Diseases"; on another day the intricacies of X-ray diagnosis may be explained by Fritz Rothbart of the Sauerbruch Clinic of Berlin, or Blum, who operated on the famous Lorenz, may add his wisdom to the scientific discussion, or Brunner or Feiler or Neiman, pupil of the great Jaffe, bring the fruits of his pathological researches. Dr. W. W. Wood, war veteran of many battles, American to his fingertips, presides at these sessions. Dr. Greenspahn delights his younger confrères with stories of his experiences through a half century in the practice of obstetrics. Leaders of the profession in Chicago join in the discussions and enjoy the informal sandwich-and-coffee lunches which follow them, where scientific discussion is discontinued and only good fellowship reigns.

HALLS OF LEARNING

WITH deep satisfaction I watched the development of the International College of Surgeons. Here, as in my own more limited field of action, dreams were being fulfilled and hopes realized.

To my great joy I saw that this College was to be, not merely a surgical society, in which membership would be a coveted mark of distinction for a few fortunate men. It was to be a true college whose prime function would be to teach younger men, and older men, and all who thirsted for knowledge of whatever age. Every man in it would be at one and the same time teacher and student.

I found myself thinking of the medieval university. I remembered how scholars traveled the length and breadth of a Europe much longer and broader than it is today to sit at the feet of learned men, now at Paris, now at Padua, now at Oxford. I remembered that those days when learning knew no national boundaries had been days when Europe had attained a spiritual unity lost and all but forgotten since then. I hoped that something of the same idea would be built into the new institution. Perhaps it could become, not only a channel through which surgical knowledge could flow quickly, easily, to all parts of the world, not only a source of encouragement and inspiration for the ambitious youth of our profession, but also a force making for international understanding and good will and peace.

I realized, of course, that the achievement of the goals of the College would not be easy. I recalled the obstacles that were put in the way of Dr. Franklin Martin when he set out to found the American College of Surgeons.

Dr. Martin had said to me once, "Yes, Max, they threw bricks

at me as they threw them at all who had the courage of their convictions."

I remembered, too, the vituperation, by pen and by word, which greeted Dr. Simonds of the American Medical Association, and many others who had tried to pioneer in this field which offered so much for humanity.

But things were moving too fast for me to think of withdrawing—even if I had had the slightest inclination to do so. In many parts of the world where my surgeon friends lived, the International College of Surgeons was becoming more than a dream. Professor Albert Jentzer, Dean of the Medical University of Geneva, Switzerland, and his group had actually incorporated the College in 1935. They had chosen Geneva because it stood, in those days, for the great principle of international amity and coöperation. Jentzer himself had assumed the responsibilities of president of the Founders' Committee and had appointed leaders in the surgical profession to inaugurate chapters of the College in various parts of the world. Dr. Dean Lewis of Johns Hopkins University undertook the task in this country and other illustrious men here and abroad began to add their names to the roster of the young College. Professor Arnold Jirasek, head of the Medical University of Prague, became the first International President of the institution.

Very soon I was to have an ideal opportunity to take an active part in consolidating the plans already so well under way across the ocean. The sailing was to be anything but smooth, however . . . A calm horizon was disturbed by a typhoon of events.

In 1937 Secretary of State Cordell Hull appointed me one of a number of American delegates to the Congress of Hepatic Insufficiencies to be held at Vichy, France.

Never has an appointment to a scientific mission been more welcome. I needed a change of scene, and a trip to Europe would refresh and reinvigorate me. I had only recently perfected a new gall-bladder operation, and I could go to the scientific meetings across the water with, perhaps, something vital and significant I hoped to contribute to their deliberations. I could use the opportunity to attend meetings of surgeons in Paris as well as Vichy. And I could, above all, talk to the men already actually at work in the International College of Surgeons.

Until the very close of the Vichy meetings, the trip was one

long series of exciting, encouraging, gratifying experiences. Even before I left the shores of America those experiences began.

On my way East I stopped at Montreal to talk with friends interested in the development of the College. I visited Professor Eugene St. Jacques in that city and elsewhere in Canada I met Professor Lardennois from Paris. Lardennois was a shrewd man. He wore a toupee, twiddled his thumbs knowingly, and gazed at one above the rims of his bifocals. I could not help thinking that he would make a fine lobbyist in Washington. A Giordano can—or could until recently—combine the functions of surgeon and mayor of Venice. But most of us are little wanted in public office. Perhaps that is one reason why we play our politics in our hospitals, medical schools and societies.

New York brought me a satisfying visit with Waldemar Kaempfert, who talked with me on scientific matters; and a tea, which stirred old memories of my association with theater folk. I met Mrs. William Randolph Hearst. She is vivacious, well informed, charming. Her interest in my work warmed my heart. She offered one of her houses in New York City for the use of the proposed new institution when need for headquarters arose. Her offer brought a flash of satisfaction to the eyes of Charlotte Fish, who serves as a nurse in the Hearst home. Mrs. Fish is one of the graduates of our Hospital School of Nursing and an old and valued friend.

I crossed on the *Normandie*, leaving New York on September 1st. I had planned to use the voyage for complete rest, but I found that was out of the question. Dr. Boheč, ship's surgeon, took me in charge, showed me the palatial queen of the sea from bow to stern. I visited the Parisian shops, the motion picture theaters, the ballrooms, the dining salons, the silent, whirling machinery that drove the ship. I saw the luxury, unsurpassed on land or sea, and watched the passengers enjoying the many diversions of the voyage. I saw, too, Dr. Boheč's operating room, pharmacy, even mortuary and chapel, parts of the ship's equipment discreetly omitted from publicity, since sickness and suffering and death have no place in a holiday voyage.

Memories of that trip and of the return voyage on the same magnificent boat are especially poignant today. The *Normandie*, no longer proud mistress of the seas, lies gutted by fire, submerged in slime, a symbol of the proud and gallant nation which

fashioned her, and which today, betrayed and overwhelmed, lies also in temporary wreckage.

Looking back, one realizes that the war which was to bring both these disasters had already begun in that autumn of 1937. More than a year had passed since Schicklgruber's great gamble on Rhineland occupation had satisfied the obscure Austrian that it was safe to flout the democracies. Small defenceless nations at Europe's center were feeling his iron heel, crying out for help that did not come.

Yet almost no echoes of these cries reached the fortunates at the Mayfair Hotel in London or troubled the gaiety of the Paris boulevards. Even in Geneva, listening post of the world, where I visited with Professor Jentzer, little sense of impending doom darkened the autumn sunshine.

My first stop was London. There I spoke before the Post-graduate School of the University of London on my new gall-bladder operation. Hamilton Bailey, one of the outstanding surgeons of the modern generation, and his beautiful wife, were my hosts. Bailey entertained me at luncheon at his delightful home and I had the opportunity of talking of many things with this quiet, retiring man who has such a keen mind and such a ready pen.

Then to Paris. The Twelfth International Congress of Gastroenterology was in session there and I was privileged to take part in that section of their deliberations which was concerned with the recognition, elimination and cure of acute and chronic intestinal obstructions. Sir David Wilkie of Edinburgh, Dr. Joseph Felsen of New York, and the genial "Tony" Bassler and many others who contributed to this part of the Congress program.

The problem of cancer of the stomach was a major concern of the Congress. Delegates from every part of the world focussed their complete attention on this dread disease, seeking to discover more fully the secret of the early diagnosis which means the possibility of decreasing mortality.

The Congress was presided over by Professor Pierre Duval and Vice-president Sir Arthur Hurst of London. Dr. George Brohée was general secretary. His bearing, his manner, his stature, his appearance reminded one irresistibly of Balzac. Finsterer of Vienna was also there, as was Frugoni of Rome. Frugoni was an

valued friend. I had met him when he visited Chicago with Torrigiani, Ferrari, Egedi, and other fine Italian surgeons.

It was an illustrious gathering and an earnest one. Professor Gosset and his group reported on the early diagnosis of cancer. Every minute symptom, every test that the laboratory, photography, X-ray, chemistry, and physical science offer was scrutinized, considered, and weighed. Gutman of Paris described radiologically every niche, nook, and corner of the human stomach in health and in disease. Days of discussion, days of comparing notes, days of sharing the results of years of study! It was illuminating, absorbing, challenging . . .

Echoes of the Congress went beyond the walls of the Medical University of Paris where the sessions were held. On a Paris bus, on the way home from a meeting, as we passed the obelisk which marks the spot where Marie Antoinette was beheaded, I heard a feminine voice say in English:

"How much nearer are they, Walter, towards solving the problem of cancer of the stomach?"

There was no reply. Turning, I saw a young couple whom I guessed to be an American physician and his wife.

"Not much nearer than we were decades ago," I said, and they looked up in surprise.

"But we are nearer to recognizing it," I added, "and nearer to curing it or alleviating it if we can take it in time, before the cultist, the patent medicine man, and the quack have got in their work."

It was the beginning of a pleasant friendship. The young people were Dr. and Mrs. Walter D. Gilkey of California. We spent many happy hours together in Paris.

Other pleasant personal memories cluster around that Paris meeting. Serge Voronoff and his new wife (his first wife had died earlier, in Paris) entertained me one evening at the Opera. Serge Lifar was the attraction.

Voronoff had not changed since I had seen him last. He was around seventy, still erect, imposing, tall, and obviously proud of the young and beautiful woman in her twenties who leaned on his arm. Voronoff's wife is related to Marie Lupescu. People turned to look at the striking couple as we walked, during intermission, in the famous foyer of the Paris Opera House.

"My friend, Serge," I whispered. "How do you do it?"

He smiled.

"Aren't you reading my books on rejuvenation?" he whispered back.

"Still monkey glands?" I retorted.

"Yes, decidedly," was his reply.

At Paris, too, I renewed acquaintance with Pierre Duval and a number of other fellow surgeons. Raymond Gregoire, then chief of the St. Antoine Hospital, president of the Surgical Society of Paris, entertained me at his villa. He is a brilliant surgeon and a worthy successor to Lejars.

The pompously named Grand Hotel, at which I stayed, was, I soon discovered, "grand" only in name. It was crowded; Americans were fleeced. And its elaborate foyer was evidently used as a favorite rendezvous for the ladies of the demi-monde and their clients. But even this senile hostelry had its compensations. I remembered with emotion that the great Anton Rubinstein had died there. I could forget the drab surroundings as I thought of that artist whose music has meant so much to me all my life. I spent every spare moment at the Louvre.

The Paris meetings ended and I set out for Vichy—for the climax of a glorious trip, since here I was to make my report on the new operation in which I had such great faith. No premonition crossed my mind as I traveled that, although my report would be received with acclaim, Vichy was to stand to me forever afterwards as a place of bitter disappointment and disillusionment.

The name Vichy, that fall of 1937, had in it no touch of political flavor. One thought, on hearing it, not of Quisling statesmen driving shameful bargains, but of the world-famous waters, popularly supposed to be a cure-all and a panacea for the ills of the world. The great plaza was crowded with men and women from many lands, come to participate in the almost mystic ritual of the "cure." And Vichy, proud of the medicinal mission which brought her, not only world-wide fame, but enough money for all her municipal expenses, was ready to do full honor to the medical men now gathering for the Congress of Hepatic Insufficiencies, many of whom, it may be noted in passing, viewed with a certain skepticism the vaunted properties of the Vichy waters.

Given by the Vichy municipality for the visiting delegates, the

grand banquet at the Casino which closed the Congress was one of the most brilliant affairs I have ever attended. Over a thousand guests were present, the women bediamonded and befurred, the men flashing their medals across the coats of their full dress suits, or uniforms.

One small incident might have disturbed our peace and complacency that evening if we had had the foreknowledge to understand then its significance as we understand it all too well now.

Little flags of all nations decorated the tables in friendly tribute to the many peaceful countries who had sent their men of science to the meetings. I remember that I sat that evening between a German surgeon and his wife and a French medical officer and his lady.

Suddenly there was a commotion at the other side of the table. A small American flag had been deliberately and insolently knocked down by a French medical officer in uniform. The disturbance was momentary. It was soon subdued. But it remains in my mind as my first initiation into the workings of the infamous Fifth Column.

The serious business which had drawn to Vichy the distinguished men from all over the world was the study of that mysterious large gland known as the liver, that intricate, multifaceted laboratory with its many mysterious and still imperfectly understood functions. Professor Maurice Loeper, jovial, rotund, kindly, presided, and sages of the medical profession the world around brought their wisdom to the deliberations.

Urbach of Vienna told us how the skin reacts in disorders of the liver. Ivy of Chicago furnished a fine contribution of experimental physiology of liver function. Senator Nicholas Pende of Rome, tall, florid, and interesting, Max Einhorn, pioneer gastroenterologist, Porges, learned Viennese savant, and many others were among the speakers.

A delightful moment in the conference came when, for the first time, my eyes met those of Professor Parhon of Bucharest. We had been corresponding for years, and for years I had looked forward to meeting him. Now we needed no introduction. We knew each other at sight. And the meeting went even beyond my expectations. I found him a kind, thorough, searching Aesculapian, well deserving of his reputation as the foremost endocrinologist of his country.

The Congress went on. It was time for me to present my paper on "How to Reduce Mortality in Gall Bladder Operations," to describe the electrosurgical obliteration of the gall bladder which I had used with such success. I was proud and happy when I arose to tell my fellow surgeons of my endeavors toward a solution for this problem.

Two German observers, Enderlen and Hotz, had shown that deaths resulting from gall-bladder operations may be expected in about ten per cent of all unselected cases with complications. The percentage is, of course, lower—as low as one or two per cent—among patients under forty in whose cases there are no complications and who are treated by competent surgeons. But among patients over forty, when there are complications, as there often are, the global mortality was estimated by these two scientists as 9.6 per cent.

I had been struck with this report and I had checked my own records for a quarter of a century to discover how my experience coincided with it. I found that mortality in my own cases had been twelve per cent. Ten or twelve per cent mortality is too great a loss of human life. I began to think and study.

I knew that, in the gall-bladder bed, at the place where the gall sac is attached to the under surface of the liver, there are small bile ducts and many bloodvessels. When the surgeon removes the gall bladder, he cuts those bile ducts and vessels. Usually bile leaks and such leakage of bile and blood is often responsible for complications and, perhaps, the subsequent death of the patient.

Suppose, I said to myself, we were to remove the gall bladder and leave the back wall attached, without cutting it away. Would that reduce mortality?

Such suppositions can be checked only by trying them. On whom should I experiment? On the dog, of course!

At the Cook County Graduate School of Medicine, I operated on a series of dogs in the manner I have just outlined. The registrar of the school, Mr. James Askin, arranged the time so that I could carry on my experimental work at night. I shall not forget his kindness. The days were too crowded for research. Before closing the abdomen, I converted the remaining gall bladder into an inert tampon by electrocoagulation. All the dogs lived. I was delighted!

Let's go a step higher in the scale, I said. So I tried the same operation on monkeys—the common organ-grinder's monkey—*macacus rhesus*. The monkeys lived! One step higher. I operated on *macacus leoninus*, the baboon. The baboon lived.

I was now confident enough to be ready to try the operation on a human being, and I was fortunate in finding a patient intelligent enough and courageous enough to give me wholehearted permission to use the operation on her. She made a perfect recovery.

For over three years I continued the operation and reported hundreds of cases without a death. It seemed to me that I had proved the worth of this operation without a shadow of a doubt.

This was the story which I told, with much more scientific elaboration, to my colleagues at Vichy. They received my report with interest and enthusiasm. Since that meeting, the operation is being used successfully in many parts of the world with excellent results. One day I received the *British Medical Journal* in which Mr. Hamilton Bailey, F.R.C.S., and Mr. R. McNeill Love, F.R.C.S., reported one hundred cases of my operation *without a single death*. That report encouraged me to travel through my own country demonstrating and describing the procedure. I have continued to use it with continuing success.

As I finished my address at Vichy, I noticed that the most vociferous applause which greeted it came from a tall, swarthy surgeon in the audience, who continued to clap his hands vigorously even after the other considerable applause had died down. His excessive enthusiasm puzzled me.

He rushed to me as soon as the presiding surgeon adjourned the meeting. He threw his arms around me and kissed me on both cheeks.

"Why, Thorek," he said, "I have been looking for you all over Europe. And here you are!"

My new admirer was the secretary of a well-known surgical society. And his admiration, he explained volubly, was not only for my paper but also for my interest in the International College of Surgeons. What glorious possibilities that new organization had! What great ideals!

He spent the afternoon with me in my hotel suite. He offered to assure the full coöperation of his society, adding: "Yes, it will be glorious to join hands and to go forward to accomplish

all the great things which the College is designed to achieve . . . *C'est superbe!*" he gloated.

As I talked with my new friend, I glowed with joy. I could hardly contain myself. I began to recover my confidence in the sincerity and good will of my fellow men. The way seemed miraculously open to a speedy realization of all the best hopes of the founders of the International College. With backing such as was being offered, it could in reality become the greatest post-graduate school in the world, where every member in every part of the world would be a faculty member, where learning might flow freely to all who thirsted for it.

I had no sleep that night. My heart was pounding and I could only pace the floor restlessly and wait for the dawn. As soon as morning comes, I said to myself, I must tell Professor Jentzer the good news. I pictured his joy and his surprise. He had worked hard for the College as president of its organizing committee. Now I could tell him of great, important reinforcement for our cause.

The night hours seemed endless. I could not close my eyes. The morning sun was just gliding the cupola of the Casino when the telephone operator reported that my call was about to be completed. Professor Jentzer was on the wire. I told him the news. He listened attentively. His reply crushed me.

"Why, Thorek," he said, "the man has double-crossed you! He has constantly and insidiously tried to destroy our work. He has blocked us at every turn. His only interest is the complete destruction of our College . . ."

Later in the day, I got in touch with Professor Rudolph Nissen, former head of the department of surgery at Istanbul, Turkey. He was, and is a man whom I love and trust. He was once the backbone of the Sauerbruch Clinic in Berlin. He was the first surgeon successfully to remove the lobe of a lung in a young girl suffering from bronchiectasis, a saccular dilation of the bronchial tubes. He had been surgeon to royalty and the élite. He is a prolific writer—and he is still young. Somehow he reminds me of a surgical Paganini.

He listened as I told him of my experience. He corroborated Jentzer's observations.

I had been lifted to a great height and dashed to the earth again. The disappointment seemed more than I could bear.

But "Rudi" Nissen, who had been obliged to contribute to my disillusionment, did much to draw its sting. With his lovely and talented young wife, he met me in Paris, as I stopped there on my way home. It was his birthday and we celebrated it quietly and happily at dinner in the Bois de Boulogne.

I told him, as we sat there in the golden light of an autumn Paris afternoon, that I had breakfasted with Professor Mario Donati, noted surgeon of Milan. And we smiled together over the story of Donati's struggle for appointment as the head of the surgical department of the University of Rome.

The road to that coveted appointment had seemed smooth enough at first. Donati received the highest decoration from Victor Emmanuel, King of Italy. The post left vacant by Professor Alessandri seemed almost within his grasp. But at just this point Hitler's insane nonsense about racial purity began to color the Italian scene. Professors, who should certainly have known—and probably did know—that the Nazi race myth is nothing but a myth, evil and dangerous, set about concocting formulae to test the purity of the Italian blood.

To Donati the suggestion was made that his blood might be immune from criticism if he were to change religions. He was taking no chances of failure. He entered the fold of a suggested Church.

When the chair left vacant by Alessandri was after all filled by Paolucci, a fine surgeon, a valiant surgeon, Donati was inclined to think that embracing another religion had been a useless move. The story is that he told Mussolini so. Il Duce listened politely, then observed:

"But think, my dear Professor, of the benefactions you will reap in heaven! You made a fine investment!"

Neither "Rudi" nor I laughed, however, as I told of my breakfast conversation with Donati. While sipping a fine brew of coffee, he had lifted his brow, looked quizzically at me, and casually remarked:

"It is too bad . . . Dr. X tells me that the College exists no longer; it has been abandoned."

Yet Nissen's faith in the College was unshaken.

"Pay no attention to intrigues," he said. "The episode of Dr. X is of no importance, really. It is one of the things we all have to live through."

He was silent a moment, then leaned forward earnestly.

"Look here," he began. "This is no ordinary venture to which we have put our hands. It is something new in the history of surgery, something new in the teaching of young men. Already we have drawn to our standard men of the first rank in our profession all over the world. Those men are fed up of the kind of association whose only function is to meet once every three years for scientific and social intercourse and which, between those meetings, goes into a complete state of hibernation. They believe in the College because they see it, as you and I see it, as an institution with a teaching mission, never forgotten and never laid aside.

"Think what it will mean to our profession when thousands of young surgeons all over the world carry with them our credentials—'International Passports' in the world of surgery!—opening to them the doors of clinics and hospitals where some of the greatest men in the profession stand ready to put their knowledge at the service of youth.

"We are competing with no organization. We are setting up no new standards. We are requiring—it is in the very first Article of our Constitution—that members of the College everywhere rigidly adhere to the code of ethics laid down by their respective countries.

"Where we are pioneering is in the democratic way which we are making the rule of this new College. Race, color, creed, politics, financial status—those things are not going to enter into our policies or be used to sift the members admitted to the fellowship.

"Men who believe in democracy are going to have to fight for it in these years just ahead of us. Perhaps it is that fact, in part at least, which draws to the College the kind of men who are working for it. Surgeons will have their part in the struggle—they can have a big part in the organization we are building."

"Rudi" was inspired. His penetrating eyes were riveted to mine. As he talked, my faith revived. I knew that the College could not and must not fail. I sailed home with the resolve to help push the organization on my side of the Atlantic with all my strength.

Things had been moving forward here in a very satisfactory manner. That very winter, in December, 1937, the American

Chapter of the International College of Surgeons came into being at a meeting in the building of the Academy of Medicine in New York with Dr. André Crotti as first president.

To this fine and sincere man the debt of the International College of Surgeons is great indeed. It was he who chose for it its motto: "*Pro omni humanitate*," and he who gave to it the perfect aphorism in which to express its highest ideals—the words of Louis Pasteur: "*La Science n'a pas de patrie, parce que le savoir est le patrimoine de l'humanité, le flambeau qui éclaire le monde.*"

Those sentiments are more than words to Crotti, whose life is guided by deep religious conviction and generous love for mankind.

He was coming to the zenith of his brilliant surgical career when he and I worked together for the International College. He had been assistant to the famous Roux of Lausanne and to the equally famous Kocher of Bern. His work on the thyroid has brought him international fame. And he is a charming, cultured gentleman. The atmosphere which pervades the home where he lives with his talented and charming wife is one of high devotion to the best things of life, to truth and beauty and grace of living.

Crotti succeeded Jirasek as President of the International College of Surgeons. He was naturally one of the first men I talked with on my return from Europe in the fall of 1937 and I was thrown even more closely in touch with him during the years that followed than I had been the years that preceded. The association was always a joy and an inspiration.

What "Rudi" Nissen had called "the episode of Dr. X" was by no means the only shattering experience I met in the formative days of the College. Jealousies and slander complicated the lives of all of us who worked for it. We had undertaken a truly gigantic task.

I became aware at one point that I was becoming the chief target of the poisoned arrows of those who wished to destroy the College. I was shocked and hurt. But I wished only the good of the new organization and I pondered whether, under the circumstances, it might be well for me to withdraw from active participation in its direction. If I did so, many of the arrows, lacking a target, would fall harmless. To withdraw just as the

College was beginning to take form would be a bitter disappointment to me. But if it were for the good of the College . . .

Those days during which the College was gradually being built were full of evidences of the smallness of mind which had plagued me all my life when I discovered it in the ranks of my own beloved profession. Threats even of personal violence were made, some veiled, some shockingly direct. Speakers invited to address meetings of the College were warned against participation.

Reasons for the opposition are difficult to analyze. It is hard to believe, and yet it seems that it must be true, that men accustomed to think of professional organizations as, to use the words of Dr. Crotti, "pantheons where surgeons of prominence come to rest in peace," resented the threat to that peace brought by a vigorous young organization whose members, not content to rest on their laurels, were forming surgical guilds, working in and out of season to improve themselves and the profession they served.

Gradually the strains lessened. Gradually all except the most rabid of our opponents seemed to give up a losing struggle, at least outwardly.

Men of many nations have helped to build this International College of Surgeons. Australia and the Argentine; Belgium and Brazil; Canada and China; England and Egypt; India and Italy; Norway and Nicaragua; Panama and Palestine; Rhodesia and Russia; Syria and Sweden . . . The list of their homelands is far too long to give in full. And men of many nations are banded together under the standard of the College today . . . I can only name a few of those whose devotion to the cause of the College is boundless: Gonzales Castañeda; Darío Fernández Fierro; Manuel Manzanilla; Francisco Castillo Najera; Victor Fernandez Manero and other leaders of Mexico; Herman de las Casas and his outstanding group of Venezuela; the President of his country and accomplished surgeon, Rafael Angel Calderón Guardia of Costa Rica; the serious-minded idealist, Francisco Graña of Peru; Altounyan of Syria; the eminent Ali Ibrahim Pascha of Egypt; the versatile Felix Mandl of the Near East; the eminent Sir Hugh Devine from distant Australia; Gentil of Portugal; Bohmannson of Sweden; the renowned Alejandro Ceballos, Roffo, Carranza, Gutierrez, Cirio, Mirizzi, Allende and Pavlovsky of Argentine; de Aragón and Inclán of Cuba; Erkul, Arel and Bumin of Turkey;

Boyd of Panama; Cavelier of Colombia; Gouvêa and Campos from Brazil; J. Heng Liu of China; Burdenko, Lebedenko and Judin from Russia; Backer-Gröndahl of Norway; Cruickshank and Puttana of India; Hamilton Bailey and Rodney Maingot of Great Britain and many others of fame in all lands and climes. Its chapters flourish in nearly every country in the world. Even in those parts of the earth where the impulse to found such chapters is effectively crushed out by the iron heel of fascism, great and able surgeons watch our progress, looking with eager hope for the dawn of the new day when they may take their places once more in this fellowship in which they see such promise. They will be ready, when the time comes, to take into strong hands again the torch which Pasteur so prophetically said "enlightens the world." Significant in the war-time progress of the College has been the increasing participation of surgeons from Latin American countries. They are bringing rich gifts to the institution and their potential contributions in the future can hardly be over-estimated. The College is not marking time in these war years; it is moving forward solidly and surely. But we who have worked long for its welfare recognize that its true fulfillment lies ahead, in that day when free human intercourse is once more possible all over this round whirling ball we call our world.

The extensive roster of prominent men in the United States Chapter is too voluminous to even begin to enumerate them; Fred Albee of international fame; Desiderio Román, who at this writing has assumed the presidency of the International College of Surgeons; Albert A. Berg, President-Elect, Thomas Shallow of Jefferson Medical College, William Bates of the Postgraduate and others head the roster of eminent men of the United States, inspired by the ideals of the College.

Regarding the nature and organization of the International College of Surgeons and especially of its American Chapter, I can do no better than to quote the analysis presented at the Fourth International Assembly in New York, June, 1943, by Dr. William Bates, professor of surgery of the Graduate School of Medicine at the University of Pennsylvania.

"The International College," said Dr. Bates, "lives up to its name. It is *not a society but a college* devoted to the ideal of affording educational opportunities to the younger men."

There are three classes of members—Associate-members, Members and Fellows—all requiring different qualifications. Associate-members are admitted for five years during which time they are obliged to increase their qualifications until they are worthy of advancement to Membership. Within another five years members must qualify for advancement to Fellowship. If, at the expiration of this period of enrollment, a man is not qualified, his status is reevaluated by the examining board and may be advanced or dropped from the roster of membership.

“The Teaching Guilds under Dr. MacGregor are established throughout the country, making it possible for young surgeons to be instructed in smaller and nonteaching larger hospitals. Those showing promise are received by the older surgeons on certain stated occasions in the operating room and are given an opportunity to acquire additional fundamental surgical knowledge. Under another plan, this same group receives instruction in the basic sciences of anatomy, physiology, pathology, and bacteriology.”

As he ended his address Dr. Bates pointed out that while it is true that the old method of apprenticeship in surgery left much to be desired in the way of some fundamental training, it developed, on the other hand, a loyalty of the student to his preceptor and a supervision of the preliminary efforts that eventually created most of the noted surgeons of today. He urged that the United States Chapter of the College foster the best of such apprenticeships and the best of graduate training without the tremendous sacrifice now demanded by either system alone.

To these words of his, which so clearly envision the special mission of the International College of Surgeons in the concerted effort of surgeons to maintain the highest possible standards and ideals for their profession, I desire to add one sentence from Dr. Richard Leonardo's recent *History of Surgery*. It reads: “With the American College of Surgeons, the American Board of Surgery, and the International College of Surgeons cooperating in the development of surgery, the future of the art and science of surgery seems well assured.”

Sitting in my study, I read with Fim the address made by Dr. William C. McCarthy of the Mayo Clinic at the Assembly of the United States Chapter of the International College of Surgeons

held in Denver in June, 1942. It was an expression of all we had dreamed and hoped for the new institution. It breathed the promise of great and high accomplishments to come. It touched the depths of the finer emotions of those who sincerely love mankind.

I remembered how Dr. McCarthy, standing on the speakers' rostrum after his address was ended, had solemnly added a word of encouragement and faith:

As long as this College continues with its unselfish principles of assistance to the younger surgeons, together with the timely democratic spirit which pervades this organization, we have nothing to fear, either from within or without.

I thought of the war-torn world . . . I thought of the difficult peace to come . . . Surely a noble mission lies ahead for an association of high-minded men whose affiliations cut across the boundaries of more than forty nations! I remembered words once written to me by Lord Moynihan:

I believe the strongest link binding us [our nations] together is that which is forged out of the friendship of scientific people and more especially of the members of our profession.

Fim touched my hand.

"Worthwhile things are worth fighting for," she whispered.

"Yes, they are," I assented, but I added rather ruefully, "Yet the conviction burdens heavily a sensitive soul that the fight would be easier if scientific endeavor could be freed from Satans in the Halls of Learning!"

"Did you ever think," she asked me gently, "that possibly your 'Satans' are only the 'flies on the chariot wheels' of progress?"

PRIVATE WORLDS

THE private worlds in which we humans live have always seemed to me nearly as diverse and multitudinous as the million suns which a starry night reveals. Like the stars, these worlds are discrete and separate each from the other, spinning along complicated orbits with infrequent collision. Unlike the stars, however, they afford to fortunate travelers means of intercommunication and transit. And I like to think that the measure of a man's travel experience in this small earth of ours is not globe-trotting miles but the number of passports he possesses which allow him to step from his own accustomed orbit into new worlds.

I have been always fortunate. Citizen of the world of surgery, I hold citizenship too in that world which speaks the language of darkrooms and developing fluids instead of that of scalpels and serums. Citizen of the country of the "haves," where comfort and grace of living are taken for granted, I still retain the old papers which prove me once a citizen of the "have-not" country of grinding poverty. I may cross with freedom and sure welcome from my own world of science to the world where art is king and where talk and action revolve around the stage, the concert podium, the easel, or to the world of the workers-with-their-hands, with all its struggle and its failures and its noble hopes. Into none of these worlds do I go as a tourist and stranger. Their people have given me always the rights of honorary citizen and friend. And I have learned much in my inter-planetary journeys.

One such journey came a few years ago when the brotherhood of Chicago chefs, those white-capped priests of the kitchen usually invisible to the public whom they serve, invited me to be their

guest at the Fourth Annual Dinner of *Les Amis d'Escoffier* at the La Salle Hotel.

I had ministered to the physical needs of this brotherhood and I knew something of the importance which they attached to this memorial celebration in which they gather to honor the patron saint of cooks, the greatest chef of them all. The invitation was something unusual, for I knew that only those deemed capable of understanding and appreciating the culinary art were ever admitted at this ceremonial dinner.

We were seated, when the great moment came, in a huge horseshoe of tables, sumptuously set and decorated in honor of the occasion. In the center of this horseshoe, the focus of the eyes of all the members and guests, stood a small separate table, also fully set and with a chair beside it. The chair, to uninitiated eyes, was empty. But the eye of faith could see, sitting there, the guest of honor, the great, the only Escoffier. To him were ceremoniously offered each lovingly prepared example of the art he raised so high. The approval of the Master was anxiously sought before any food was offered to the guests and members who had brought their bodies along with them when they came to dinner.

The viands served at that meal were worthy of Escoffier. They defy description, but a recital of the menu may hint of their quality and variety. Here it is.

Dubonnet

Cinzano Vermouth

Martini & Rossi Vermouth

Grand Buffet La Salle

Duff Gordon Sherry-Pinta

Petite Marmite Passée

Quenelles d'Amandes

Céleri en Branche

Olives Vertes et Noires

A. Willm-Riesling-1934

(French Rhinewein)

Filet de Sole Anglaise Sautée Meunière

Pomme Parisienne Persilade

Sherbet Chartreuse

Chanson-Père-et-Fils

Pommard, 1929

Faisan Roti

Guava Gellée

Riz Sauvage

Haricots Verts Sautés

Endive Française aux Anchois

Mousse de Foie Gras

Cliquot Yellow Label

Coupe Marie José

Friandises

Fromages Assortis

Galette Suédoise

Grand Marnier Liqueur

Demi Tasse

The meal progressed with hushed reverence. Conversation on mundane matters of politics and business was banned. For such a ceremonial feast it was of utmost importance that the mind as well as the body be attuned and receptive to the gastronomic delights offered.

The solemnity of the occasion seeped into my soul. I could almost see old Escoffier, and I am sure that he nodded his grave approval of the work of his good disciples. I found myself thinking how little the average hotel patron realizes the devotion and pride of craft which produces the *menu* he scans so casually in search of "something to eat." Much more than the door of the kitchen separates the two worlds in which live the diner and the cook who prepares his dinner.

The spell of the evening waned, after I had left the brilliant room and gone back, not only to my own home but to my own world of concern for the ills which human flesh is heir to. Then questions came. I wondered how much good or how much harm was done by epicurean bacchanalia such as I had just attended. I thought of the Bulgarian peasant with his black bread and his sour milk containing the *Bacillus bulgaricus* so lauded by Metchnikoff at the Pasteur Institute as having definite properties conducive to longevity. I wondered if the way of life of that peasant,

his simple fare, his hard work, were not more conducive to human well being than all the synthetic art of the followers of Escoffier. Someone said very wisely that a man digs his grave with his teeth. If this be true, that dinner of *Les Amis d'Escoffier* and banquets like it are truly the mortician's delight. Like all my confrères in the medical profession I look with approval on the current emphasis on vitamin content and simple cooking, and I agree with them that the so-called hardships of war rationing may be blessings in disguise if they drive us in America, as they have driven Englishmen, to saner and simpler eating.

And yet, for all my questioning, something in that world of the Escoffiereans rings true. The impulse to raise one's craft to the realm of art is too rare in this humdrum world not to be cherished when one finds it.

I thought of my friends, the artists of the skillet, with their sophistication and self-conscious aesthetics, when some months later it was my privilege to cross the borders of a very different world, a world in which a way of life centuries old still lingers in our modern America. That is the world of the Navajo Indians of Arizona in the region of the Canyon de Chelly.

We motored out to the Canyon after the medical meetings at the Sage Memorial Hospital, Ganado Mission, were over. Dr. Clarence Grant Salsbury, capable surgeon and devoted Christian who had spent thirteen years on the Island of Hainan in China, and who is now in charge of the Presbyterian Mission Hospital there, greeted us with grace and kindness and assigned Dr. Sze, a Chinese physician, a "medicine man," and an Indian brave to "show us around."

I did not at once avail myself of the services of these guides. I was tired and I wanted to be alone with my thoughts. I walked out alone, under the starlit sky of the Arizona night, and under the soft magic of the moment I felt the mechanized civilization in which I live fall away from my shoulders. To any man whose psychology is colored by a vast array of forces from the past, making him more than the sum of his own yesterdays, may come at times the consciousness that he is not only the individual but the race. For deep in the wells of his subconscious mind is the record of experiences beyond his own thoughts, often but fragmentary in form, which, rising to the conscious level, bring forth

an awareness of his kinship to all mankind. That experience came to me in the Canyon de Chelly.

The awareness of kinship persisted, even after the bright light of day illuminated the reservation and I set out, with my guides, to meet face to face the Navajos who make their home in this place.

Something of the history of the Navajos was known to me. I knew that they, like other American Indian tribes, are of an ancient race and civilization. I knew that the place of their origin remains shrouded in mystery, though the clear evidences written in their faces gives strong support to the theory that they are Asiatics, probably of Mongol origin. I knew the hectic history of the white man's efforts to exterminate this ancient people as he reached out with grasping hands to possess the land which had been their home. I knew that public policy had turned a new leaf since those days, that now the remnants of the Indian tribes enjoyed the protection of the government which had once fought them. I knew that earnest and devoted men labored unceasingly to bring to these Navajos and others the blessings of our civilized life.

I had approved this policy and this work. I still do. But, walking that day among the Navajos, accepting their hospitality, speaking with them as brothers, I found myself questioning and uneasy. Has our civilization really such worth and such superiority that we are justified in trying to foist it upon another race?

The men and women I met were gracious in their welcome to a stranger. They greeted me with poise, dignity, pleasing cordiality. Their expressive faces bore the marks of intelligence, and their soft, low voices spoke of a calm more alien to the twentieth-century world than their manners and customs. Their hogans were orderly; their meals sensibly prepared; their children clean and obedient; their daughters chaste; their wives faithful; their men good to their families. Rigid codes of conduct not taught by any white guardian, but remembered from the great past of the race, guide them in their steady way of life.

What, I asked myself, had the world outside the Canyon to offer men and women like these? That world emphasizes a feverish acquisitiveness, which measures even spiritual enrichment by material possessions. The white man, still grasping at things to hold and own, knows no rest, does not even know the satisfac-

tions of full free use of his own talents. He stands confused in a machine age which has not developed in him the needed mental balance. My Navajo brother does not regard the accumulation of things as the highest aim of living. He industriously provides and generously shares. He has not fallen into the dreadful distortion of values which places making a living above living itself. He has much to teach the world from which he is so completely isolated—more to teach, perhaps, than he has to learn.

We used to teach our children that the building of strong bodies was a sacred duty and that, to this high end, sense indulgence must be rigidly disciplined. We have long since departed from this Spartan teaching. But the Navajo has not. The little Indian boy learns early his responsibility before a moral law. He is taught that if he is to have a lithe, symmetrical body, supple and swift, he must exercise strenuously and constantly, and that if he is to be a worthy link in the generations he must keep his blood pure.

When we think with tolerant superiority of the Indian's primitive reliance on his medicine man, it would be well for us to keep in mind also that the Indian and not the white man has retained his emphasis on the disciplined living which is the basis for health. And perhaps, too, we need not be quite so sure of our superiority over the medicine man! Those whom I met seemed to me men of dignity and character. No man who has given his whole life to the practice of surgery could agree, of course, that the sum total of the healing art is to be found in the mysticism, the sand paintings, the superstitions, the incantations of these practitioners. But anyone who reads aright the story of our day's discovery of the importance of psychotherapy must grant the medicine man his place in the brotherhood of healers. He cannot do the whole job. And that is where the white man's hospitals and medical men and surgeons and nurses are needed.

I visited the hospital in Ganado in the region of the Canyon de Chelly and have no praise adequate for the work being done there. I know that there is need for more such work. I hope that my people in the world outside the Canyon region will meet that need. We have a double duty to provide the best of medical care for our government's wards; to the duty of alleviating human suffering wherever it is found in this broad land is added the duty of undoing, insofar as we can, the harm which we ourselves

have done to these people. For, in a very large measure, we have ourselves created the necessity for hospitals and medical services. The Navajo had small need of such services when he was free, before the white man made him a prisoner at Bosque Rodondo, uprooted his life, broke his spirit, forced him to live on insufficient food and impure water. Among our most significant—if not most creditable—gifts to our Indian brothers have been such diseases as syphilis, trachoma, tuberculosis.

Too much of our attitude toward our Indian brothers is based on the sheerest of ignorance. Perhaps that ignorance is lessening in this our day. I hope so. We are willing to recognize the Navajo's important contribution to American art. Those blankets which combine beauty and utility are regarded by the most sophisticated of our present-day art lovers, not as curiosities, but as authentic products of artistic genius. We are less willing to recognize the story told by trails built over high canyon walls of an engineering genius in this ancient people.

Some day our notion that the Navajo has no religion because he builds no churches and does not pray aloud may give way before an understanding of the deep spiritual life lived by this truly reverent people. To the Navajo, Father Sun and Mother Earth and the spirits that ride upon the clouds cannot be brought within temples made with hands. Their religious past is recorded in a rich heritage of songs, legends, and sacred rites, in which allegory and symbolism speak the eternal yearning of the human soul toward God. And their religious present—its fruits, at least, are evident in the uprightness of their lives.

I was not so very proud of the civilization of which I am a part on that day when I moved in the world of the Navajos. I thought of the Indian's rigid code of honesty. And then I thought of the high repute in which deception is held in the white man's world. What about the very honorable custom in merchandising of studying optical illusions in order to make packages appear larger than they are? What about the complacent amusements which come to us when we read that the pay phone in one of the best of our women's colleges has yielded a rich harvest of slugs and pennies instead of nickels and dimes; or when we hear the complaints of railroads and hotels that linen supplies are being constantly depleted because honest men and women just will carry off towels?

I should like to have our ideas of the education of youth overhauled in the light of the things which the Navajo can teach us. It seems to me, though this may be wishful thinking, that the pendulum is swinging back somewhat, away from the soft and sloppy coddling of youth which produces irresponsibles, and neurotics, and drones, toward an education based once more on simple moral values. I hope this is true. I hope that we are ready again to train our youth in plain living and high thinking. When, a few years ago, I went into the Tennessee Mountains to receive an honorary degree from Lincoln Memorial University, it seemed to me that I was seeing my dream fulfilled before my eyes. For, under the able guidance of its president, Dr. Stewart W. McClelland, Lincoln Memorial University inspired by the Great Emancipator is teaching its students from mountain homes, not only the rich tradition of human thought, but the dignity of work. There is much in that program which deserves the attention of educators and philanthropists all over our land.

Leaving Ganado, Canyon de Chelly, and the hospitality of Dr. Salsbury and his devoted wife, and going back to my own world was not easy. I find my thoughts returning there when the strident voices of our mechanized day grate too harshly on my ears. And some day I shall, I trust, return in body, to listen again to the chirping of the birds, to breathe again the perfumed air, to watch again the lithe and graceful braves and maidens, and to find again the peace which banishes, as the sun banishes the dew in the Canyon de Chelly, the greed and sham and injustice and ignominy and cheapness of a world which hurries without purpose and grasps with little understanding of values and worth.

NOTHING BUT THE TRUTH?

THE service of science is the service of truth. I subscribe, with all my heart, to that tenet, and I hope that I have measured up to that standard insofar as my capacities have permitted me to do so. But is it quibbling to raise the question: are "truth" and "truth-telling" synonymous? Isn't there Scriptural warrant for the assertion that "the truth is not to be spoken at all times?"

There's a puzzle which most medical men have tried at one time or another in their careers to solve to their own satisfaction! And most of us, having so struggled, are less sure of the answer than are the stern moralists who insist that the doctor must always tell the truth, the whole truth, and nothing but the truth. What, I often wonder, would such moralists do if they were confronted just once with a dilemma such as any doctor faces hundreds of times in his practice? When the alternative clearly is the telling of a merciful non-truth or the brutal blurting out of a truth whose consequences may be self-destruction for the listener and surely will be despair and desolation—how can any man hesitate?

I have known cases where men and women killed themselves merely because of the lift of the surgeon's eyebrows or the shrug of the surgeon's shoulders. Does the surgeon then have no responsibility for the tragedy? I believe he has. And I try always to remember the words of a great doctor: "*Der Arzt kann nicht immer Hilfe bringen, doch immer Trost.*" Truth-telling or no truth-telling, it seems to me that the duty of the medical man is clear—to bring help where he can, but to bring consolation always—even if the consolation has to be brought by means of a shading, a twisting, a softening of hard truth.

To confess the whole long total of the "non-truths" which I have told since I began the service of medicine and surgery would be both boring and impossible. Some of the lies have been almost lily-white; and some, I fear, have been downright "whoppers." I think of these often, with a most unregenerate ease of conscience and satisfaction over deeds well done.

When Mrs. B— was rushed to our hospital by ambulance for an emergency operation, I was suspicious, as soon as I had examined her, that her case was not one of acute appendicitis but of ectopic pregnancy. Impossible! she assured me vigorously when I had a moment alone with her. She ought to know, I said to myself as I prepared to operate on the offending appendix. But my fears and not her denials were confirmed when the operation got under way. The woman was pregnant in the right Fallopian tube.

Normally, the child develops within the uterus (womb). At times, however, extra-uterine pregnancy, also known as ectopic gestation, occurs in the development of the fertilized ovum in any part of the generative tract outside of the cavity of the uterus—usually in one of the two Fallopian tubes, or in one ovary (ovarian pregnancy, rare). Since the Fallopian tube is about the thickness of a lead pencil and the products of conception grow rather rapidly, the tube accommodates itself to the increasing size and the burden thrown upon its walls, which become stretched. The patient's life is comparatively safe during the early days, but when the walls of the Fallopian tube can no longer withstand the pressure from the increased size of the growing embryo it ruptures. We then speak of rupture of an "extra-uterine pregnancy." The onset is sudden and hemorrhage often is very profuse, threatening the patient's life if not promptly checked, spontaneously or by an operation. In other words, an extra-uterine pregnancy is always a serious situation and is constantly subject to the watchful eye of the surgeon. The Arabian physician, Albucasis, probably reported the first case of this sort in the eleventh century. It is supposed that Jacob Nufer, in 1500, operated on his wife for an extra-uterine pregnancy. Riolanus, in 1604, and Mauriceau, in 1669, were the first to depict extra-uterine pregnancy. Dionis, in 1689, also reported a case. Biancte, in 1741, gave to the medical profession a classification of the vari-

ous forms of this condition, as did Josephi at a later date, but, in 1836, Dezmeiris made a classification which is used to this day.

At the present time, modern surgeons are fully acquainted with the symptoms of ectopic gestation, as it is often called, and are on the alert for its occurrence, thereby saving many lives.

My hand was steady as I finished the operation, but my brain was in a whirl. What in the name of Heaven was a surgeon's duty in a situation like this?

Outside in the corridor the young husband paced to and fro in an agony of suspense. I knew the boy well, just as I knew his wife who was now on the operating table. They had been my friends for many years. I had rejoiced in their marriage. They were so well matched, so devoted to each other. If marriages were really made in heaven this was the brand that would result! I should have been sorry to have to tell these two the bad news of an ectopic pregnancy, but I should hardly have hesitated to do so if I had not remembered, as I worked, some other very pertinent facts about the marriage. I recalled that Mr. B—, during the year just ended, had not been in Chicago at all. He had been obliged, in the interest of the firm with which he was affiliated, to make a long and difficult tour of the Orient. He had had to go into inaccessible places neither safe nor suitable for a gently-bred woman, and had wisely decided to leave his wife at home. Only a few days before this emergency, I had learned that he had returned from his travels. The journey had bronzed him and toughened him—but it was being home again which brought that light into his eyes.

Well, that light wouldn't last long, I thought, if I just stepped out of the operating room and told him the simple truth. What would happen then? I had no desire to find out!

I pulled myself together and faced him with all the confidence and matter-of-factness I could muster.

"Doctor," he said, his voice shaking with emotion, and his dark face drawn with anxious love, "is she all right? Was the appendix very bad? Will she get well?"

"She is fine," I assured him. "The appendix was *very* bad. There is nothing to prevent her making a fine recovery."

I prevaricated. And I am proud of it. The young husband never knew of my fall from grace, I hope and believe. But the wife knew. When, a couple of years later, she became normally

pregnant and came to me to be delivered, we had a heart-to-heart talk.

"Doctor, I owe all my happiness to you," she said, the tears streaming down her face. "I love my husband so much. How could I ever have betrayed his trust in me? And how, but for your help, could I have ever built with him the perfect relationship we possess? I hope the baby will be a boy. I hope he will look like his father."

Rather a rich reward for wrong-doing—if the telling of a merciful lie is such a sin!

I was very glad to hear that Miss DeL— was, according to rumor, engaged again. I had been much interested in her career as an accomplished pianist and I had been puzzled a few years before when a most promising engagement had gone on the rocks for no reason that any one of Miss DeL—'s friends could discover. They had been so obviously and so devotedly in love, those two. And I had heard that Miss DeL— had taken the break hard, that she had withdrawn from social life, become listless in the pursuit of her art, and developed an attitude of scorn for men which was strangely incongruous with her loveliness and feminine charm. It was indeed good news that the period of frustration was over, that she had found another man who could make her forget and look forward again.

I said as much to her the afternoon when she called in my office. To my complete bewilderment, she burst into tears.

"Oh, I am in such trouble," she wailed. "You must help me! But no, you can't help me! There is no way out!"

"My dear child," I said gently, "tell me about this trouble from which there is no way out. I have found many ways out for many people just as distressed as you are. Perhaps I can help you, too."

Between her sobs she told me a story as old as mankind—the same old story of a woman's instinct to give and a man's instinct to take. The roots of the old trouble were revealed. Just one more case of a man who, satisfying his passion out of wedlock, had lost interest, become indifferent, cold, and finally cruel. The hurt of the experience had lost its sting. It was a very practical and very hard biological fact that was torturing the girl now. She had found a man whom she loved even more deeply than

she had ever loved the other. And she felt that she could never marry him.

"He would have to know then that I am no longer a virgin," she said. "He would hate me if he knew. His love would turn to contempt . . ."

"Do you really love him?" I asked. And she convinced me that she truly did.

"I have tried to keep him from thinking of marriage," she told me. "But he won't be put off any longer. I must decide now, he says. If I refuse to marry him, he will go away. I can't give him up. And I can't marry him!"

She was weeping again and I sat for a few moments watching her and thinking of the injustice of the world which lets a cad and a bounder go scot free and leaves a woman to shoulder a double burden of guilt and shame. If I were not above deception, I thought, I could redress that balance of justice . . . And then, suddenly, I decided that I wasn't above deception at all! Why should I be, when such smug virtue would only harm two innocent people!

"Miss DeL—," I said, "we cannot undo the past, but we can make the future different. If you will submit to a simple operation, I will replace the lost anatomic part . . ."

Amazement, incredulity, then an almost dazzling light of hope swept across her tear-stained face! Any punishment reserved for doctors who wilfully deceive prospective husbands is more than offset by the memory of that gratitude and relief. And in addition I have the thought of the happy home which my deception helped to make possible. I am afraid that I exclaim "*Mea Culpa*," when I recall the incident, with most unbecoming pride and joy.

What on earth is a surgeon or a physician to do about those scores of rebellious pregnant women from every stratum of society and every walk of life who dog his footsteps begging to be relieved of approaching motherhood?

When I started in on my practice, I usually tried to reason with them. I have recorded in another chapter some of the harrowing experiences I went through as I poured out energy and strength to convince these reluctant mothers-to-be that any course except the right one would mean danger to life and health, a lifetime of remorse, the missing of life's best gift. I know that I convinced

some. But I knew too, and it troubles my conscience at times, that others went away unconvinced to seek the dangerous help which lead so often to ill health and not infrequently to death.

And so, since I am confessing, let me confess that in my maturer years I have been wont to approach this recurring problem with duplicity. No longer do I argue. I merely ask questions and give the desired prescription. The method, let me say, is not entirely my own invention. I culled it from my notebook on the lectures Dr. Lewis gave at Rush Medical College.

The prescription which I find so valuable in such cases is no secret. I offer it here for any who would use it. It consists of peppermint water—one tablespoon three times a day in water, to be continued for one month. I tell my patient that, if this does not bring the desired result—I know, of course, that it will not—she must then return to me and report. I give a second equally innocuous potion, of different taste and color, for the second month. By the time that too has proved of no avail, my patient, more often than not, has become reconciled to her condition. The good old maternal instinct has begun to work. It needs very little persuasion on my part, then, to convince her that it is best just to let nature take its course.

Handling of the truth becomes a most delicate matter for the medical man confronted with a patient whose ailment exists in his own mind.

"You don't feel what I feel, Doctor! I tell you my stomach does quiver every little while!" says a haggard young man. He is obviously in distress, but every test, the most meticulous examination, reveals that he is organically sound. We recognize a functional condition, more common than the layman realizes, induced by some form of nerve-exhaustion. We can do one of two things—we can clap the boy heartily on the shoulder and say, "There's not a thing wrong with you! Forget it!" Or, we can accept with him the reality of his suffering, and use whatever psychological skill we possess to help him.

If we pursue the first course of action, we will tell him the unvarnished truth—and we may send him from our office into one of the traps which charlatans bait for the unfortunate who think that regular doctors "don't understand" their cases. If we

choose the second course, we must obviously seem to accept as real symptoms we know to be "functional," color the truth to serve the patient's needs, and use in the treatment the amazing suggestibility of the human mind.

Charlatans through all the ages have made good use of that suggestibility. I think of Valentine Greatrakes, whose meteoric career during the reign of Charles the Second was based on the "miraculous" cures he wrought by the laying on of hands. He was an Irish magistrate, whom the Restoration left without office, but his imagination and his own faith in the powers of his touch, coupled with the faith a gullible people had in him, brought him fame and fortune, made him the darling of the great in London from Wapping to Soho.

I think of Dr. Frederick Mesmer of Vienna. There are amazing stories which illustrate the infinite conceit of this man and, since people tend to value a man as he values himself, explain in part his power over his patients.

He is said to have replied to a query from a fellow physician as to why he recommended that his patients bathe in river water rather than in spring water: "Dear Doctor, water which is exposed to the rays of the sun is superior to all other water because it is magnetized. I myself magnetized the sun some years ago!"

Such audacity has a power of its own which cannot be readily gainsaid! But even Mesmer had to resort to some subterfuges in order to keep up the record of his "cures." Mme. Campan of Paris told one amusing story of what happened when Mesmer was called in to treat her husband for a pulmonary inflammation. One of three things, said the expert, should be at once placed in the bed with the suffering man: a young woman of brown complexion, an old bottle, or a black hen. "If it is all the same to you," said Madame Campan, "let's use the old bottle!" It did not work, and Mesmer was ignominiously forced to resort to the standard medical practices of his day. He bled and blistered his patient and the man got well. Whereupon, Mesmer amazingly requested and received from him a written statement that the cure had been effected by mesmerism!

The amusement one feels in reading of the antics of incredible men like Greatrakes and Mesmer and others, should not, however, blind one to the fact that they somehow touched upon a secret of healing which modern psychotherapists are beginning

to understand and use with real scientific skill. Hypnosis can be a rather dangerous parlor game, a vaudeville act liberally mixed with fraud. But it can also be a tool of utmost value to the doctor and the surgeon. Its full possibilities have by no means yet been explored.

Even those of us who seem to possess no hypnotic powers, who are not even trained psychotherapists, sometimes find ourselves almost unexpectedly using this tool to good effect.

I had used every means in my power, I thought, to overcome the insomnia which was seriously interfering with the progress of one of my patients. He was suffering from a nervous breakdown, the aftermath of too steady work and worry. He needed sleep and he could not get it. At last I said to him:

"You must have sleep. I do not believe in giving morphine usually, but I am going to give you a quarter of a grain. It will relax you and give you the rest you so much need just now."

He acquiesced with some reluctance. I stood beside him after the hypodermic had been given.

"My tongue is dry, Doctor," he said to me. "There's a queer taste in my mouth. I suppose that's the morphine."

I nodded. Soon, his eyelids got heavy. One could see a deep drowsiness creeping over him. Shortly he was fast asleep.

He did not wake for twelve hours. When he did, he was refreshed and quiet. Only one thing bothered him.

"Doctor," he said to me anxiously, "I won't get in the habit of taking that stuff, will I? I am terribly afraid of it."

"You certainly ought not to develop a habit from that hypodermic," I told him—and now for the first time I was speaking the exact unvarnished truth—"because there wasn't a thing in it but water!"

His own mind had done the trick.

And this is by no means an unusual case. Most medical men and surgeons can match it. I recall one story told by a colleague of a woman suffering from hysterical palsy of her right arm. She had not been able to move it for six months. Her physician could have told her that it was "all in her mind." He did not. Instead he recommended a special electrical treatment, impressing it upon the mind of the sufferer that the treatment could not fail, that when it was over her troubles would at once disappear. The "treatment" was given. The woman joyfully discovered that she

could again move her arm. She never knew that it was her own mind, not the electricity, which had cured her.

The longer I live the more convinced I am that the truth needs deft and skillful handling. In clumsy hands it may prove disastrous.

My career of handling the truth on occasions "in reverse" causes me no sleepless nights. I have told patients suffering from incurable disease that they would recover. I have kept from my patients knowledge of the nature of their maladies in certain cases of tuberculosis, cancer, and the like. I have done this when it seemed to me that these sufferers could not bear the dreadful knowledge. I have a firm conviction that to kill hope in the heart of a man or woman is first degree murder. It has, of course, been my practice in such cases, to tell the whole hard truth to some member of the family and to receive from that person acquiescence with my policy of deception.

Many of my non-truths have had to do with the disease of syphilis. It is not a commonly known fact, but it is a fact, that syphilis, in its late stages, is *not* contagious. And so completely has the policy of hush-hush surrounded the treatment and discovery of the disease, which is regarded as a disgrace as well as malady, that almost no layman has any conception of its prevalence. In our hospital, as in every good hospital, the Wassermann test is given as part of the routine. We know from the results of this test that syphilis is no respecter of persons. It strikes at prince and pauper, at great and small. We find it, in a surprising number of cases, in one partner or the other of happy, wholesome marriages. When there is no danger of contagion, I am accustomed to prevaricate unreservedly in such cases to the unaffected mate. I do not lie to the victim of the disease. There I tell the whole truth and insist on immediate medical care. But what purpose would I accomplish were I to sow seeds of distrust and shame in homes like those?

This is a most unregenerate confession. And it carries not the slightest touch of repentance. I cheerfully admit that I have spoken non-truths innumerable times. And as long as I practise my profession in a world where hearts ache with fear and anguish, I shall go right on speaking what I believe is best for the interest of my patients. My conscience acquits me.

WHEN THE NEW DAY DAWNS

ALL of us knew, subconsciously at least, that our nation was moving inevitably into the maelstrom of war. We told ourselves and each other, during the year of the "phony war," during the terrible days when the flood burst its dykes and poured over the European continent to lap angrily at the shores of the island outpost of Britain, that we were confident that America could "stay out." We did not really believe it. A great diverse nation of many national strains, a people compounded of peoples of many bloods, many traditions, we watched the inexorable march of war with emotions so conflicting as to threaten the foundations of American unity.

I was keenly aware of this. And I recall one incident in particular which brought the internal divisions and dissensions forcibly to my mind.

The time was Good Friday, 1941. The setting, the Cliff Dwellers' Club in Chicago, mecca for the literati, favorite haunt of musicians and writers and poets, and a spot around which cluster many personal memories of good friendship and good fellowship.

The Thursday preceding Good Friday at the Club is traditionally a time when members bring their wives, sweethearts, friends and acquaintances to dinner and the concert program of the Chicago Symphony Orchestra. The dining room had a gala air. Matthew was there as usual. Matthew has presided over the cuisine for more than thirty years. He and his blue-coated helpers, shining black faces above shining white aprons, are as much a part of the structure of the place as its furniture, the pillars, the chairs, the tables. In a shaking, quaking world, they seemed symbols of stability and security and seclusion.

We left the dining room to assemble again downstairs for the concert. I remember the program well. Brahms' *Tragic Overture* was the first number. Listening to it, we heard an ominous undertone, the crashing tread of marching feet. The Nazi hordes were smashing through Jugoslavia. A "tragic overture" of doom was moving to crescendo across the seas. We could not escape its notes even in music.

Other numbers in the first section of the program brought mixed feelings to me at least. Bach's chorale prelude, *O Mensch, Beweine Dein Sünde Gross*, noble and satisfying, made me think sadly how far from that nobility were Hitler and his clique. I winced, as I always do, at the selections chosen to represent the modernists—the concerto for viola and orchestra by a modernist, for example, which the composer conducted with pride and which some of the audience pretended to admire. I can see nothing in such cacophonous clap-trap which justifies its defiance of all the discipline of rhythm, harmony, and form which science and art alike have recognized for centuries. I think that it comes into the same category as the fad for swallowing goldfish and live mice which swept through our halls of learning not so many years ago. The performer, an acknowledged authority on the viola, could conjure much beauty from this noble instrument. Why does he torture it to bring forth hideous noise?

In this connection, it is well to recall what Ravel said in his Credo (*The Etude*, 1933):

"Music, I feel, must be emotional first and intellectual second. That is why in my composing I have never been tempted by the radical style of the young and very interesting composers. I agree that there is some fascination in their music; I agree, too, that it does contain power and a considerable amount of originality. But their music has no heart nor feeling. We react to it intellectually, not emotionally. And so, although as experiments there may be something to say in defense of all this music, it is, without doubt, an artistic failure. Then, besides being cerebral, 'modern music' is for the most part very ugly music. And music, I insist, must, in spite of everything, be beautiful."

I was relieved when Arne Oldberg rose to conduct his symphonic poem, *The Sea*. Here was music, inspirational, sane, beautiful, and I joined with grateful heart in the jubilant applause which greeted it.

Intermission came, and I sought a breath of air in the lobby of Orchestra Hall. Even the roar of traffic and the scream of sirens seemed harmonious after some of the music which had tortured my eardrums. Absent-mindedly I looked out at the city lights. In a near-by building, I saw a man in a night shirt raise a window carefully, and, with a vehement gesture, throw a shoe at two cats facing each other silently on a high fence. "Unfair to felines!" I thought, and I smiled.

Then I noticed that Mr. S. B.— was standing beside me. He is a long-time member of the Cliff Dwellers, and a man whom I had always thought of as the personification of Americanism. He was, I knew, bitter about Hitler. I recalled how furiously he had pounded the table at a luncheon with Irwin Pond and me at this same club one day when the paperhanger's name was mentioned. Conversation this evening could have only one topic. I asked him what he thought of the situation in the world. I was not prepared for his response.

"These damned war-mongers!" he shouted, and his face took on a hue of purple and the veins of his neck and forehead stood out like ropes. "Why don't they get together and stop the war?"

"At whose terms?" I inquired.

"At Hitler's terms!" he bellowed. "The man is not understood! Eighty million Germans can't be wrong!"

"Would you like to have Hitlerism here?" I asked mildly.

I was almost swept off my feet by a torrent of words in which anathema of England, exasperation against American leadership, mingled with the absurd, all too familiar, pro-German phrases about the injustice of Versailles, the enslavement of Germans, "haves" and "have-nots."

"If Germans so detest slavery," I remarked, "why are they imposing it on all countries under their domination now? Why are they, when they never felt the destruction of war in their own land, adding to oppression the terrors of ruthless destruction? Why . . . ?"

But I could not check the diatribe . . . The lid had blown off the man's inner feelings. I would have said that he was "steeped in Americanism"—and I would have been wrong. Underneath his surface conformity to the attitudes, demanded of him by his fellows, was this seething hatred, this fierce championship of the greatest bandit of all times.

He was not a German. He was a Nazi!

I slipped away, somewhat fearful that the man would work himself into a state of apoplexy. Dr. Rudolph P. Zaletel met me as I walked through the foyer. He grasped my hand and I noticed that he was pale and sad-faced.

"The Jugoslavs will win!" he cried. "They are a brave people. They will never submit to Hitlerism!"

"The odds against them are heavy," I said.

"They will fight to the last man," he declared. "They will die as martyrs to freedom."

Zaletel is a Yugoslav.

An Italian physician joined us then. Without prelude, he began on an elaborate apologia for Mussolini . . . A great man, a benefactor to his country, acting now, according to his lights, for the best good of his beloved Italy . . .

Dr. George P. Gavaris, tall, dignified, handsome, added his word. It was an echo of old Greek faith in freedom. Force could never ultimately succeed in destroying, even by bloodshed and inhumanity, the innate rights of free peoples.

"It's in the blood," says the old adage. And in America that summer, the blood of many nations was speaking in many tongues.

Very soberly I went back to listen to the Good Friday Parsifal music, under the baton of Frederick Stock. Ironical, I thought, that Adolf Hitler should have put his stamp of approval on this music. The audience was very quiet. There was no applause. Over the gathering hung a pall of apprehension, fear, foreboding. It was a tense and solemn hour.

A full moon illuminated the world as we stepped out into Michigan Boulevard. Here also the dread and the foreboding followed. Two careless urchins passed me, their voices sharp with the heartlessness of youth.

"What a fine night for bombing!" they said with evident relish. "I shudder at the thought," said Isobel MacEachern . . .

Was any unity possible in a people whose blood beat to so many conflicting impulses? It seemed impossible. Perhaps it was impossible. Until Pearl Harbor! America went to war—undivided.

Old memories stirred of another war. And I, along with everyone whose span of life was destined to embrace two great world

conflicts, had at once the strange sense of having seen all this before and the equally strange sense of looking for the first time at unimagined things.

The same story on the draft reports of American youth's unfitness for the altar of Mars. But this time a government awake to the need for rehabilitation.

The same story of human destruction on far-flung battlefields and the forces of medicine and surgery marshaled to rebuild and save. But new techniques, new drugs, new discoveries being used.

The same story of the public's becoming conscious, often with only half-knowledge, of new doors opened by medical and surgical men, doors leading to hope for humanity when the war is finally ended. But this time, I am optimistic to believe, though the 1940's before they end may prove me mistaken, there is greater soundness in this public interest, less hysterical fad.

It is all to the good, I believe, that, through the heroic work of the Red Cross, the possibilities of blood transfusions, for instance, have become so commonly understood, that hundreds of thousands of people in America and in all the warring nations are making their "deposits" in blood banks as matter-of-factly as they take their savings to the teller's wicket.

Direct transfusion of blood from a healthy individual into the body of one suffering from dangerous hemorrhage, shock, anemia, or other disability has been recognized for some time. And the public is quite familiar with the tests used to establish the all-important facts of blood "type" and healthiness which have been used in such transfusion.

But the discovery that blood for transfusion could be safely stored, under certain conditions, for a period of weeks, opened the way for new advances.

In the *Journal of the American Medical Association*, under date of March 21, 1936, appeared a much commented upon article by Professor Serge Judin of Moscow, dealing with the transfusion of cadaver blood. The researches of Professor Judin in this and allied fields are saving Russian lives at this moment. The thought of the use of cadaver blood is a bit macabre to American taste. But no such repulsiveness attaches to the use of stored-up blood plasma from living human beings. Yankee horse sense could immediately grasp the fact that, if one could store up blood, already

tested and catalogued, before it was needed, precious time might be saved when the emergency calling for its use actually came.

Years before the beginning of the war, hospitals in large cities were maintaining blood banks. Living blood for transfusion was catalogued and shelved in the physician's pharmacy as matter-of-factly as quinine, castor oil, or saline solution. And some people of both sexes were adding nice little sums to their income by becoming almost professional blood-donors. They could hardly rely on this for a complete livelihood, of course, for blood-giving, like wet-nursing, cannot be continuous or constant even for the most robust individual.

A bulletin issued by the Cook County Hospital in May, 1937, described the extensive use which that hospital was making of preserved or refrigerated blood and stated that "the use of properly preserved blood is safe and efficient." In such blood banks, the greatest care is taken regarding temperature. Before storage, the intern who draws the blood into chilled 500 cc. flasks containing 70 cc. of 2.5 per cent sodium citrate solution, sends along to the laboratory technician the date, the name of the donor, his address, his race or color, and his own name. The technician puts the blood into the refrigerator at once and removes two test tubes from the flask, each containing 5 cc. of the blood withdrawn so that it can be tested for disease and analysed for type. The temperature at which the stored blood is kept is constantly maintained between 4 and 6 degrees Centigrade, or about 39.2 to 42.8 degrees Fahrenheit. The qualities of stored blood, kept under such conditions, remain unchanged during a storage period that does not exceed three or four weeks. After that time the corpuscles can no longer stand the strain. What is called lysis or the dissolution and destruction through decay caused by a lysis or antibody or a cell-revolt against conditions, sets up the hemolysis or the destruction by dissolution of the red corpuscles.

My direct service in this war is vicarious—but it is none the less real, and I am very proud of it.

As soon as my family and I began to find our footing in the new world of America, we had quite naturally remembered our friends and relatives left behind across the ocean. We had done what we could to help some of them come to the land of promise. I well remember one who came. Little Adolph was puny, undernourished, nervous. His thin little legs were bowed from rickets.

He needed rebuilding spiritually and physically. He justified every effort put into the rebuilding. We saw him through school and medical school. He made a brilliant record. Just the other day he stood before me, wearing the uniform of his adopted homeland. On his shoulders was the insignia which marked him as a Captain.

"Uncle Max," he said, and his voice had the familiar softness of reticence and modesty, "I soon hope to be addressed as 'Major Maller.'"

The war is increasing in fury as I write. Perhaps it has not yet even reached its crisis, though I devoutly hope that we have, as our leaders assure us, turned the corner which brings us into the long road to victory. But already, all over the world, men and women who have suffered much have their eyes fixed on the world beyond that victory. What is it to be? Clear and unmistakable the answer comes back. Millions of just plain people are resolved—and let the great ones of the world beware how they thwart that resolve—that we shall move out of the chaos of war into a newly conceived world.

There are complications here so vast and so overwhelming that books and more books and yet more books pile up as men of many minds try to analyze them. In the world of medicine and surgery, of which I am a proud citizen, a whisper runs—hopeful sometimes but more often charged with apprehension—will the new world bring with it "socialized medicine"?

I am not one of those who cower with fear at the very mention of this fearful bogeyman. But I do see clearly, with insight born of years of experience with human beings, some dangers which some social theorists too often overlook.

The man who stands in my office, trembling as he waits for me to pronounce the sentence which dooms him to death, to the ordeal of the operating table, or gives him the reprieve he dares not hope for to go out into the sunshine again with a consciousness of health, is not a social being at that instant. He is the center of the universe. And he expects me, expects any physician, to join with him in recognizing his unique importance of the scheme of things. If he can feel—even against the promptings of his common sense—that I regard him as all-important, that I will give to his problem, swollen to blot out the suns and stars, as much at-

tention and skill as I would were he and I truly, as we seem to him to be, alone in the universe, the battle I undertake to fight on his behalf is already half won. He trusts me. It is significant that the one point on which all practitioners of the healing art from the dawn of history have been in complete agreement is this; from the tribal medicine man to the Great Physician revered by Christendom, from the most arrant quack to the most coldly and competently scientific medical expert, all of us say to those who seek our help, "First, *believe in me!*"

It seems to me a mistake, however, for us of the medical and surgical profession to content ourselves with gestures of horror and protest. King Canute stood on the shore and made such gestures at the rising tide. The tide is rising for us also. Medical, surgical, hospital help for all people, for the poor as well as the dweller in the palace—this is one of the demands which the builders of the future make—and rightly make—upon society. It is for us, who understand the dangers and pitfalls into which these builders may fall, to help them to a true realization of the dream which we must fully share.

The dream of a society in which the right to health belongs to all people has been my dream since the days when I struggled with the cruel problems of my neighbors in Chicago's old West Side. And I have always realized that one of the most difficult problems to be solved before that dream can come true is the problem of hospital care. People of means can buy such care freely, as they can buy other commodities, both necessities and luxuries. They can demand the best, and get it. For the moderately well off an emergency necessitating a sojourn in a hospital can be a severe blow to the family purse. And what about the family whose income, stretched to its utmost limits, barely covers the day-to-day expenses involved in merely subsisting? When serious illness strikes such people, our society has hitherto offered them no alternative except to seek the free aid of eleemosynary institutions, the hospitals supported by the city or the state.

No words of mine can do justice to the excellent work done by many of these institutions. Their standards often compare favorably with privately operated or endowed hospitals whose services are primarily directed to the "paying" patient. But the excellence of the work they do cannot wholly remove from the mind

of the sufferer the shame he feels at being compelled to accept "charity!" There are psychic shocks to be reckoned with.

Recent years have seen the development of many plans designed to solve this problem by group insurance and similar devices. Some of the plans are good. Some are thoroughly pernicious. The Plan for Hospital Care approved by the American Hospital Association is one of the good ones; it has already demonstrated its worth in countless cases.

Since the doors of the American Hospital were opened, my colleagues and I have striven earnestly to work out our own solution to this problem. We have been handicapped because our hospital has, as yet, no endowment. We have never had at our command the financial resources which endowed institutions have to aid the less fortunate. What we could do with adequate endowment is something I like to dream about, but I have never been content merely to dream! We have proved, in the quarter century since we began to work in this institution in which my professional life is centered, the truth of the old adage: Where there's a will, there's a way. The value of the "free" services we have dispensed within our walls during this period may be reckoned in millions of dollars. And we have never once allowed the stigma of "charity" to mar such service for men and women who need it.

It has been with us a matter of seeing a need and devising the means to meet that need. We have developed no blueprints, no theories.

We have long had agreements with organizations of various kinds to provide hospital care for their members. In our methods of procedure, we insist that the physician-patient relationship must remain inviolate. Sometimes we are able to help that physician by putting the resources of the hospital at his command. But we never step between him and the man or woman in whom he has built up the relation of trust and confidence which is the very foundation of healing.

When the time comes that our municipalities begin to think as seriously of the health of their citizens as they do of bridges, ornamentations, civic improvements, monuments, much will be accomplished. Why should not these municipalities allocate funds to existing hospitals for the sole purpose of providing for the care, within their walls, of needy persons who cannot find ac-

commodations in public institutions? The answer seems to be coöperation.

More and more people, in many fields of human organization, come to recognize that here may be a golden key to unlock some of the future's knottiest problems.

For myself, I can think of no happening which could so fully crown a long career in humanity's service than to see the hospital in which I have so earnestly labored become the harbor of the underprivileged and a place in which the democratic voice of such people would be heard in harmony with the scientific voice of the most highly trained and fully competent medical and surgical experts.

A GOODLY COMPANY

FRIENDS and companions have enriched and strengthened me at every turn in life's road. I have been fortunate in the men and women I have known and worked with, the men and women I have been privileged to serve, the men and women whose countless services to me I cherish with deep gratitude. It is my hope that this gratitude is clearly written on each page of this record of my memories of a surgeon's life. It is my hope that many who read these pages will understand, perhaps for the first time, the part they have played in my life. But there are many friends and companions who will not read what I am writing. They are the goodly company of the heroes and saints and martyrs of my profession who traveled the road I travel now hundreds and even thousands of years ago.

They are very real to me, these invisible friends. From the medicine-man of the Stone Age to the modern physician of the Machine Age, they are my comrades-in-arms in the battle against suffering, in which, though checked and defeated, driven back at times for centuries by forces of superstition and reaction, they have nevertheless kept steadily, persistently, courageously pushing forward, keeping the science of medicine and healing forever on the march.

In the pages they have written, in the volumes others have written about them, I come close to them. My most fascinating diversion has always been the study of medical history. I have read numerous volumes, frequently the complete works of men regarded as the leaders of their day. Wherever possible, even though it tended to slow up my reading, I have read those works in the language in which they were written. In my travels abroad,

I have spent long days and nights in old libraries, browsing among the books not generally circulated. I have gathered such books into my own library—the medical codex, the incunabulum, the first edition, which seem to bring me more closely in touch with the personalities who helped to write the great history of medicine. With the books are autographs, some obtained at much sacrifice. I pore over the scripts on those rare days when time affords, and I come into the presence of these great spirits.

Let me assure you that there is no condescension in my heart as I meet those who have gone before me. The curious amusement over the quaint methods, the primitive beliefs, the fantastic remedies of these ancient men of medicine comes quickly and easily as one turns yellowed pages; it vanishes just as quickly. And humility comes to take its place. For the records show, to one who reads with honesty, how old is our newest knowledge, how painfully and proudly we struggle to discoveries which, instead of being new truth, are only rediscoveries of lost knowledge.

Newest of our new healing sciences is psychotherapy . . . Nonsense! The first cry of pain in the primitive jungle drew to answer it the magic of the medicine-man, directed, as the latest psychotherapy is directed, toward effecting a cure by working on the mind of the sufferer. Our new recognition of the place of mental health in the total scheme of well-being is, in its best manifestations, acknowledgment that the primitive healer had an instinctive hold on a part of truth. In its worst manifestations, of course—those cults and fads and various forms of faith cures against which scientific medicine has battled vigilantly for ages—it is merely testimony of the eternal gullibility of the human race.

One cannot be too superior as one cons the pages which record the superstitions of the dawn of history when one realizes that all the knowledge we have gained since then, all the struggles we have made, have netted us only the negative victory of preventing some of these fallacious and pernicious superstitions from gaining general legal entrenchment in our own day. One cannot feel too arrogant about the ignorance of a by-gone age which read in the stars the causes of human ills when one remembers how large and faithful, in 1943, is the multitude of those who trust in astrology, in mystic "sciences" of numbers and colors and what not, as guides for their living in sickness and in health.

Very striking, very humbling, is it to find, in the oddest and

most outlandish of the ancient prescriptions, some germs of most up-to-date truths. The ancients, we learn with amusement, swallowed the genitals of animals to increase the potency of man. Modern organotherapy would have little faith in that procedure, and yet modern organotherapy is learning to treat deficiencies in the body with substances from animal organs to effect chemical balance. What an odd notion, we say, that burnt sponge could dispel goitre! And we hail as a triumph of discovery a goitre treatment based on the use of iodine, forgetting that the burnt sponge of the ancients contained the very iodides we have just learned to use today. The ignorant practitioners of old prescribed boiled toads to strengthen the heart. How quaint! Until one remembers that toad skins contain an element akin to digitalis. How funny to think that the bones of dinosaurs, ground up, could have anything to do with relieving convulsions—unless one knows something of the newer forms of calcium therapy.

Our forefathers put great store in cod-liver oil to increase strength; so do we, though we learnedly explain that faith by saying that the oil contains rich stores of vitamins. The pancreas of the goat was regarded as a potent medicine to "spiritualize" the patient; ages later Fred Banting isolated the insulin of the pancreas to offer diabetic patients an approach to normal living. Raw meat, said the old-timers, particularly the liver, granted great power. The rediscovery by American physicians of the value of liver in the treatment of pernicious anemia deservedly brought to these discoverers the Nobel prize.

Even delicate and difficult operations, which modern surgeons perform with pride in the skill of their hands and in the instruments and techniques which their confrères have devised, were known and performed centuries and centuries ago by men working with the crudest of tools. Removal of cataract, trepaning of the skull, limb amputations, even Caesarean sections—operations like that were not first performed in modern hospitals by modern surgeons. The primitive practitioners led the way.

Where did the march of medicine begin? Who can say? Slowly developing out of ancient rites, certain principles of medical practice became known to Assyrian, Babylonian, and Indian civilizations. The Hebrews, with their strong social sense, gave a precious contribution to the world in their early work toward public health, which underlies much of the most modern ad-

vances in this important field. They stressed individual cleanliness and purity for society's sake as well as for personal virtue, and they pioneered in the realm of sanitary legislation, taking the first steps toward the limitation of the rights of the individual in the interests of communal welfare.

Medical jurisprudence goes back to the Code of Hammurabi, carved on a block of black diorite. It belongs to a Babylonia so ancient that we may consider it the oldest code of laws in the world. And the most modern medical man is impressed with the modern ring of some of the twelve precise laws of this code which deal with the rights, obligations, and exact fees of physicians.

Other documents—on papyrus this time rather than on stone—bring to the light of day the amazing modernity of the old, old land of Egypt. The American, Edwin Smith, discovered and gave his name to one whose comments on surgery contain much which is as modern as tonight's broadcast. George Ebers rescued another from a long-silent mummy, and medical men were astonished to read descriptions of some seven hundred drugs used by the Egyptians in their therapeutic treatments. Some of those drugs have been discarded or forgotten—just as many modern remedies are popular for a time and then lose their therapeutic reputation—but very many of the old Egyptian remedies are serving mankind today. Even more striking was the revelation in this record of the progress in diagnosis which the Egyptians had made. They knew that the pulse was important: "If a physician place his hand on head, neck, hands, arms, feet, or trunk, everywhere he will find the heart, for its vessels go to all parts." Amazing to find that statement in so old a document. "If you find diseases of fat in any part whatsoever of the body of a person and find it moves hither and thither under your fingers and trembles when your hand is at rest, you must say of it: 'It is a fatty tumor, it pains; I will treat it.' Treat it as an open wound; dress it as one dresses open wounds." The modern physician can add comparatively much to the analysis of tumors. Another papyrus, the Brugsch papyrus, refers to fumigations, vermifuges, and treatments of ulcers. The Egyptians mastered the art of embalming, with a protective antiseptis which we cannot imitate.

A "primitive" people? Perhaps. They had, like other "primitive" peoples, their God of Healing—Imhotep, once physician and prime minister of King Zoser. But can you think of any descrip-

tion of twentieth-century medical practice which would be more pat than these words which Herodotus, father of history, wrote of the specialists of old Egypt? "Medicine is practised among them on a plan of separation; each physician treats a single disorder and no more; thus the country swarms with medical practitioners, some undertaking to cure diseases of the eye, others of the head; others again of the teeth; others of the intestines; and some of which are not local."

After Egypt, Greece. And Greek physicians too make good companions for the medical man of 1943. In the ancient days of Hellas, Aesculapius was the god of medicine. To him were erected temples where the sick were brought for healing, as in our days sufferers and pilgrims journey to Lourdes, to Ste. Anne de Beaupré, and to other holy shrines. Nothing has changed in the methods used. To the priests who managed the shrines, fees and offerings were paid—quite substantial ones at times—but these priests took no responsibility for the cures. Only the god, assisted by his daughters Hygeia and Panacea, could bring the touch of healing to the afflicted as they slept. The reign of Aesculapius continued until Constantine, a convert to the new religion of his day, closed the shrines of the pagan god and substituted temples for the Christian worship.

But Greece, like Egypt before her, brought science as well as faith to the service of medicine. Hippocrates is generally regarded as the pioneer, as the title "Father of Medicine," bestowed upon him by a later age, attests. He stripped away superstitions and began to study maladies in the light of symptoms, diagnosis, and prognosis. Even today we recognize that as a master of prognosis he has no peer. He kept a record of his cases and that record has a clarity which is the envy of us all. He was the first physician to correlate observed facts into organized knowledge, and medicine owes him a deep debt because of that. The Oath of Hippocrates may itself have originated, as most students believe today, even before the day of the sage of Cos, but it faithfully embodies his principles, principles just as valid in the twentieth century as they were when he lived and worked. How much of the Corpus Hippocraticum actually came from the hand of Hippocrates himself is a moot question. That the best of these writings represent his teachings cannot be doubted. They used to be required reading for all medical students up to the middle of the

nineteenth century. They no longer are. But I can assure the medical men of today who do not know Hippocrates that their loss is great indeed.

Sharing Hippocrates' position in the limelight of history, but far below him in soundness of scientific method, was Galen of Pergamum who, long after the Sage of Cos lived, became the recognized leader of the medical world. Loquacious, arrogant, brilliant, Galen practised his profession in Rome, in the day when Rome had become the capital of the world. He was erudite and industrious, daring and dynamic. He became physician to emperors and he himself assumed, with full consciousness of his greatness and infallibility, the position of Emperor of Medicine. Therein lies his tragedy—if the regard of posterity is of importance. For today we men of medicine remember Galen, not so much for his contributions to the sum of medical knowledge—though they were considerable—as for his obstructing the progress of that knowledge in the centuries which followed his life and death. He was so sure of himself! And the people around him, and the sons and daughters and grandchildren of these people, were blinded by that immense conceit. They swallowed his teachings whole, the egregious errors along with the truth. Not until the Renaissance were men free again from the hand of Galen which had checked their movement toward new truth.

How very much of the present day that man is, in spite of his errors! I read of him in the quiet of my library. And then I go out into the hospitals and medical societies—and there he is, incarnated in twentieth-century flesh! Galens of today—men who know how to cast a glamor about themselves which blinds the eye to the fallacies of their theories, the weaknesses of their works, men who climb to high positions with the use of intrigue, men whose presence in societies and institutions casts into disrepute the dignity of the whole profession. I console myself with the thought that our world is a more questioning world than Galen's was. It is quicker to find out and dethrone the impostors. I hope that is true.

Hippocrates and Galen—great names in the history of Greece. But they are not the only ones who wrote medical history for this land. There was Alcmaeon, even before Hippocrates, who taught that the brain was the seat of mental activity and stressed the importance of bodily harmony. There was Democritus, who held

that all things are composed of small indivisible particles called atoms. There was Pythagoras, known to history as the mentor of philosophers and physicians; and Empedocles, who first thought of the four elements—fire, water, earth, and air—and of man's close relation to the universe. Said Empedocles: "Living beings are composed of single organs that successively unite and can be maintained alive and reproducing only when perfectly combined."

It took considerably more than two thousand years for that statement of Empedocles to develop into the theory of evolution which electrified the world when Charles Darwin published his *Origin of Species*. Almost none of the persons who read and bickered over that book were conscious of Darwin's debt to the ancients. But Darwin himself was. He did not think of Empedocles, so far as we know, but he did acknowledge the Greek thinker who was heir to Empedocles' philosophy and who incorporated it into his own unparalleled observations on the world and the people in it. Modern biologists, Darwin remarked, are but pupils of Aristotle, mere children in comparison with him. Aristotle's "tree of nature" in which he traced the progression of life from molluscs, arthropods, crustacea, reptiles, and mammals to man, is amazingly prophetic to Darwin. Separated by centuries the two scientists worked together, the one framing a hypothesis, the other working it out in years of patient exploration and experiment. Thomas Huxley, who came to be known as the bulldog of Darwin, so tenaciously did he defend his fellow-scientist from the assaults of the skeptics, also must have felt the touch of Aristotle across the ages.

The death of Aristotle, the death not long after of his pupil Theophrastus, the father of botany, mark the end of the great period of Greek medicine. Galen, whom we have already mentioned, came later, but, though a Greek, he already had identified himself with the new center of the world and of medical science—Rome.

Even before Galen arrived in the city of the seven hills, Roman medicine had developed its leaders. Celsus is perhaps greatest of them all. Reading the books of this Latin writer would, no doubt, comfort modern anti-vivisectionists. They would feel that the world, which is so discouraging to them at times, has moved forward somewhat since the time when a man could write in all

calmness—and with the callousness which they attribute to the medical tribe—that Herophilus and Erasistratus “procured prisoners out of prison, by royal permission, and dissecting them alive, contemplated while they were still breathing parts which nature had before concealed, considering their position, color, figure, size, order, hardness, softness, smoothness and asperity!”

Rome in its day of glory did much to further the march of public hygiene. Health was safeguarded through pure water, clean streets, and sewage disposal with a scientific thoroughness which has been equaled only in our own times. But the gains were lost as Rome declined and decayed. Plague and pestilence took their toll of life. Earthquakes and the sweep of barbarian hordes completed the destruction. Rome died. And medical knowledge, like most other branches of human culture, passed into the hands of the monks, hidden away in the monasteries of a Europe on the brink of the Dark Ages.

Before Rome fell, however, she had added to the development of medical science a touch of the lore of the East, as her conquests spread through Eastern Europe, Spain, Egypt, Africa. Even Arabian medicine, whose chief exponent was Rhazes; Persian medicine, with its Canon of Avicenna, which coördinated the doctrines of Hippocrates and Galen and the biology of Aristotle—these touched and influenced the world which Rome ruled.

From the false splendor of the Byzantine period came Alexander de Tralle's work (525-605) on pathology and internal diseases which recently attracted much attention. And Paul of Aegina added his bit to the sum total by his observations that the seat of cancer was most frequently in the breast or in the uterus.

Out of the synthesis which Rome effected was born the first medical school in Europe—Salerno, near Naples. Greek, Latin, Hebrew and Arabian medicine were built into the cornerstones of this institution. Several of its teachers are remembered in medical history, but the fame of the school is chiefly due to the most celebrated of all medical poems—*Regimen Sanitatis Salernitanum*.

The Dark Ages closed in over a suffering Europe whose social and economic structures had all but collapsed and whose people were all too often sick in body and in mind. The Black Plague took its toll of some 60,000,000 lives, and psychical epidemics raged with almost as devastating violence. Most pitiful of these

psychic plagues was the ghastly crusade in which nearly all of thirty thousand children, sent forth to regain the Holy Sepulchre, met death through disease, privation, and exhaustion.

The service of surgery in those centuries of tragic need rested in the hands of barbers and of monks. In the universities, students watched while the barbers did the actual dissecting, usually on a pig, as the human cadaver was almost never available. And when the student became a full-fledged scholastic physician, he still disdained to use his hands, leaving the degrading work to despised barbers who were, as a rule, itinerants. They had to be. When their operations resulted in failure, they had the alternative of forfeiting their lives or moving on as quickly as they could!

Pharmacy was the one branch of medical science which held its own and even moved forward in these years. The search for drugs and spices led to long voyages of exploration, in one of which America was incidentally found. And, when Constantinople fell, scholarly refugees poured into Italy to begin the revitalization later to flower in the Renaissance.

Once more the human spirit proved itself able to burst its shackles. And medicine as well as art felt the power of the awakened giant. It is interesting to note that, in some cases at least, the pioneers of the new age in art were pioneers in the medical field as well. There was that incredible genius, Leonardo da Vinci. He was a great painter, as the world knows. But he also devoted his tireless energy to dissection, and the consummate skill of his anatomical drawings, in beauty and fidelity, have never been surpassed.

With the work of Andreas Vesalius, the impetuous Belgian and youthful professor at Padua, anatomy came into its own as a science. In his *Fabric of the Human Body*, the text and illustrations depart from Galen's teachings by indirection rather than by open attack.

Paracelsus, who like Vesalius had a quarrel with old Galen, was, unlike Vesalius, a man who could take unlimited abuse almost with gusto. This blustering Swiss physician swept over the medical world like a cyclone, leveling old structures and clearing the way for new and better building. He left an impression on medical history which time will never erase. With fiery zeal, he kindled a public bonfire of the works of Galen and Avicenna. And having thus disposed of the ancients, he moved out toward

new knowledge. He advanced our understanding of a then new disease, syphilis. He was the first to point out the connection between goitre in the parent and cretinism in the offspring. He wrote an admirable description of hospital gangrene and insisted that wounds can heal—and should heal—without suppuration.

Another luminous name from the Renaissance is Ambroise Paré. He rose from a barber's apprentice to become the father of French surgery. For more than thirty years he followed the soldiers of his country, working day and night for their comfort. "We shall not die—Paré is among us!" shouted the wounded men as they caught sight of him. Gunshot wounds in Paré's day were rather dreadfully treated with boiling oil, which was poured liberally over the affected part. The story goes that one night the supply of precious oil ran short. There was enough to treat only some of the wounded. The others were left without treatment. And the next day, Ambroise Paré was astonished to discover that those left untreated were in better condition than those to whom the boiling oil had been faithfully administered. He had made his first discovery. Paré revived the ligature, a thin thread for tying blood vessels, and thus did away with the red-hot iron which had hitherto been used to sear the flesh after an amputation. The old Frenchman is one of my heroes and most valued friends. Seldom do I permit a month to pass without dipping into my old edition of his works.

In the century after Paré lived and worked, medical knowledge took an immense step forward when the Padua-trained Englishman, William Harvey, demonstrated the circulation of the blood. He had solved a riddle which had puzzled men of his profession for centuries. Some of them had come close to solving it, Vesalius among them, whose skepticism concerning the openings in the ventricular septum had pointed the way toward the answer. At least one other man seems to have reached a solution before Harvey. He was the brilliant Spaniard, Michael Servetus, whom John Calvin burned slowly at the stake, using faggots of green wood to prolong the torture. His description of pulmonary circulation was hidden within the covers of a theological book and the book was burned so effectively that only a few copies escaped the flames. Harvey knew nothing of the ideas of Servetus; his discovery was his own.

He had, however, access to the work of Realdo Columbo, who

had announced that those who considered the septum of the heart a route for the blood were on the wrong road. Columbo had unfortunately taken a wrong road himself by persisting in the error that the veins carried purified blood. Insight and years of careful experimentation at last put Harvey right and showed him that the veins carried the blood back to the heart. He recognized that, through successive pulsations, the heart pumps more blood into the great artery in thirty minutes than the actual content in the body; thus mathematics entered medicine and measurements began to be applied to vital phenomena. One last link, the capillaries, eluded Harvey. Malpighi put them in their place in the system later, through microscopic study.

Three other important steps carried the march of medicine forward. And the men who carry the banners are Giovanni Battista Morgagni, Marie-François-Xavier Bichat, and Rudolph Virchow. Morgagni established pathological anatomy as a science, publishing in his old age a masterpiece which roots back to Hippocrates and which is as modern as the new day. Bichat postulated that the tissues rather than the organs are the important biological units, and thus established himself as the father of modern histology. When he died, a victim to his dissecting-room labors, he was only thirty-one years old. Corvisart wrote to Napoleon: "Bichat has just fallen on a battlefield which numbers more than one victim. No one has done so much and so well in so short a time." And Napoleon ordered that a bust of the young Bichat should be placed in the Hotel Dieu. Virchow held that the cell is the seat of all diseases and on this discovery rests his reputation as one of the very greatest of German medical scientists. His work is based, of course, on the cell theories of Schleiden and Schwann. He is full of curious contradictions. And his works are a strange blend of brilliant and profound discoveries and the most stubbornly held errors. Why so profound a student of the cell should have contended against Darwin may be answered perhaps by those who understand such vagaries of human thinking. I cannot explain it. But Virchow comes to stand at my side in the goodly company of medical pathfinders, cheering me with the knowledge that Germany once was a land where men had freedom to speak. "It is absolutely impossible," he says, "that any one man could ever be infallible in judgment or knowledge." And then he adds a sentence which echoes the thoughts in the hearts of thousands

living today, "The Prussians are not a Germanic race, but a barbarous, destructive, Mongol remnant."

So many friends! Would that I could name them all, set each in his rightful place in the steady forward march of our profession.

There was Thomas Sydenham, known as the English Hippocrates, who was independent and scornful of the accepted findings of his day, who urged that physicians specialize in their studies, devoting their time and thought to the mastery of the knowledge of one disease instead of scattering themselves all over the field, and who, in his steadfast devotion to fact, has a message for all who follow him.

There was John Hunter, biologic Titan of his time, the most important of British surgeons before Lister, who disregarded law and convention in his lifetime by his continuous study of human cadavers, and who ultimately came to rest in Westminster Abbey, though his own generation had sternly denied his right to such an honored place in death.

There was Edward Jenner, Hunter's favorite pupil, who learned in the dairy country that cowpox can give immunity from smallpox and who built on this homely knowledge the theory of vaccination which supplanted the more dangerous inoculation method Europe had borrowed from the Orient and which gave us the power—if we use it with persistent faithfulness—to banish the curse of smallpox from the earth.

There was Philippe Pinel, who risked his reputation and life to unchain dramatically the insane sufferers of his day, to champion these unfortunates against the barbarous cruelty which society meted out to them, and who became the recognized forerunner of modern psychiatry.

There were Lister and Semmelweis, battling to lift the terror of death which hung over the hospitals of their day. There was America's own Ephraim McDowell, removing an ovarian tumor in the backwoods of Kentucky, and gaining slow recognition as the father of ovariectomy, and James Marion Sims, also of the American South, who became so great a figure in modern gynecology.

These and many more come to my mind as I sit and dream and read. And as I go about my daily work, using the best and most effective instruments which modern science has devised, I think of them all with something akin to awe. They did so much, and

often with so little. They worked, so many of them, when the microscope, the eye of medicine, and the stethoscope, the ear of medicine, had not reached their present perfection. That Athanasius Kircher, a Jesuit priest, with his crude instruments, could find justification for declaring that disease is caused by living parasites, will never cease to amaze me. Our eyes sometimes seem blinder than his, though we can supplement the power of those eyes with instruments which magnify five thousand times! And our ears are sometimes duller than those of the physicians who lived and worked before René-Théophile-Hyacinthe Laennec gave us the stethoscope to reinforce their acuteness.

I am continually impressed also with the immense resourcefulness of these colleagues of mine through all the ages. I am struck with the fact that, however often the battle turns against us, we move forward steadily in gaining knowledge of our enemy and the weapons he uses to confound us. That is the best promise of our ultimate victory. Time was, and there are records in my library which reflect that day, when men who fought disease and suffering saw as their foe only the angry gods or the malicious devils of beyond the human world. What a hopeless fight! What chance of triumph if the enemy is a supernatural being, to be exorcised with charms or placated with offerings? And how far we have come since that dawn of history!

The history of hospitals and their contribution to human welfare forms a fascinating chapter of evolution. In our times, the pages of hospital progress are emblazoned by the name of Malcolm T. MacEachern of the American College of Surgeons.

And since I have mentioned MacEachern, let me digress further to record my sincere admiration for the man and for his truly enormous work toward the betterment of standards and conditions in the hospitals of our land. He has devoted his whole life to this noble task. Thanks to him, steady improvement has been attained in our institutions of healing, improvement in the skill of doctors, in the regulations governing scientific evaluation of case records, and, above all, in the excellence of care given to patients. It is the patient, after all, who is the sufferer in hospitals poorly supervised, where laxity is condoned. MacEachern has done much to reduce the number of such hospitals in our land.

Think of the discoveries so close behind us as almost to fall

within our memory. Think of the various and dramatic discoveries which followed upon the heels of Louis Pasteur's work on microbes. Joined to spy out the secret weapons of this newly detected enemy, legions of investigators worked with daring and devotion. Robert Koch isolated the bacillus of tuberculosis. A commission headed by an American army surgeon, Walter Reed, indicted the mosquito as the cause of yellow fever. Scientists were able to fasten blame for bubonic plague on the flea; for typhus on the louse, for typhoid on the common household fly which had hitherto buzzed about our homes in undisturbed treachery. Schaudinn found the parasite of syphilis; Wassermann developed the test; Paul Ehrlich announced salvarsan for its cure. No longer do we fight a losing battle with gods. Our foes are known to us. They are the tiny microbes, the parasites, the insects. And knowing them, we know better how to fight them, using the herbs and barks and leaves to which the earliest medicine man almost instinctively turned; using also the newest compounds of chemical science, among which looms important the all-but-magic sulfanilamide and its derivatives; using the new-old art of psychiatry, the therapeutic skills which have developed through centuries, the keen and merciful surgeon's knife; using preventive measures as well as curative as we learn with ever-increasing skill to meet the enemy on his home base and cripple him before he has time to attack. A backward look over the past is thrilling; a forward look toward the possible achievements of tomorrow is almost breathtaking.

How could one help being at once humble and proud to count himself a part of this goodly company? And yet, proud as I am, I sometimes feel my face redden with something akin to shame as I read these records of great lives. I find myself wishing that the pages of medical history were not so often blotted and marred with persecution. I wish there were not so many medical martyrs!

I do not refer here to the many brave men who have fallen and will continue to fall on the battlefields where they fight disease and misery. There are many of these and their stories uplift my spirit and quicken my courage. I think of the men who died in the battle which ultimately brought yellow fever to defeat—Jesse William Lazear, Adrian Stokes, Hideyo Noguchi, and others. I think of Daniel Carrion, the Peruvian medical student who,

with full knowledge of his danger, inoculated himself with blood from a verrugal nodule and died to give to those who lived after him a better knowledge of aroya fever, called in his honor Carrión's disease. I think of Alexander Yersin who dared to give battle to bubonic plague and fell a victim to this dread foe. I think of Howard Taylor Ricketts and Thomas McClintic and their supreme sacrifice made in the study of Rocky Mountain fever. I think of the early workers with the X-ray, who bore atrocious suffering and mutilating operations, as heroic soldiers of science.

The service of healing is no easy calling. It calls again and again on men and women for the heroic selflessness which places humanity above personal safety. And in the lives of the men who are willing, even eager, to lay down their lives for their fellow men is the great glory and crown of our profession.

There is no such glory in the medical martyrdoms to which I refer. Instead there is shame in the spectacle of little men, men who belong to our profession as well as the heroes, reviling and stoning those among them who would be their leaders out of darkness into light.

The medical world has, of course, no monopoly on such behavior. The present year should serve as reminder of one example of it in the world of science. It is just four hundred years ago since a Flemish physician reconstructed our knowledge of man. Copernicus was on his death-bed when *De revolutionibus orbium coelestium* came from the press. He did not know that a cunning ecclesiastic had inserted an anonymous introduction affirming that the whole work was merely an hypothesis. The introduction may have kept the Inquisition from hastening Copernicus' funeral, but it did not soften the ferocity which moved the great man's enemies to attack his memory. Even Martin Luther, who had himself broken the bonds which held the human mind in slavery, said scornfully, "The fool wants to upset the whole science of astronomy, but, as Holy Scriptures show, Joshua commanded the sun to stand still and not the earth." The followers of Copernicus bore the brunt of the fanatical attacks which could no longer harm their dead master. One of them, Giordano Bruno, was imprisoned for seven years in the dungeons of the Inquisition, excommunicated, and burned at the stake. Not for nearly three

hundred years, not until 1835 to be exact, was the work of Copernicus removed from the Index of Prohibited Books.

Copernicus had finished his life and work when his book was published, but Andreas Vesalius was only twenty-eight and was looking forward to a long career when he had the temerity to publish his *De humani corporis fabrica libri septum* in Basel. When his critics got through with him, when they had heaped upon the head which deserved the greenest laurels the vilest abuse they could devise, when they had made fun of him by parodying his name into *Vesanus* which means "madman," the young man's spirit was broken. His bitterest humiliation came when his beloved teacher Sylvius joined his attackers. Vesalius lived on, but the unborn children of his brain were murdered. He destroyed his unpublished documents. He ceased to be an anatomist. He became court-physician to the bigoted kings of Spain, and sometimes complained, pathetically enough, that in Spain he could not lay his hands even on a dried skull to aid his medical studies. When he was fifty he undertook a penitential voyage to Palestine. On the Island of Zante, whose laurels and myrtles were sung by Homer and Virgil, the reformer of anatomy was cast up by the sea which had wrecked his boat. A wandering goldsmith entered a wretched hut and was startled to see a corpse on the floor—a corpse that Andreas Vesalius would never dissect. That shipwreck is almost symbolic. The real shipwreck of Vesalius' life had come more than twenty years earlier—he had been little better than a derelict since then.

The seventeenth century, medical historians tell us today, brought forth no event more important than William Harvey's demonstration of the circulation of the blood. But cocky James Primrose, with the ink scarcely dry on his license to practise medicine, had no such idea of the verdict of history. He fully intended that the muse should write the century down as significant for the David-Goliath fight in which one Primrose brought to shame and disgrace a giant in the profession, one of the men, incidentally, who had less than a year before examined him on his qualifications to practise. The young fighting cock did not need much time to prepare. His opponent had spent years on the book which Primrose intended to demolish. But Primrose was well schooled in the methods of the Paris faculty taught to him by his old master, Riolan. He just locked himself in his room

and started digging for quotations in the ancient authorities. Within two weeks he finished a much bigger book than Harvey's. And he had done it without looking at a heart or taking a scalpel in his hand.

"This is the end of little Dr. Harvey," thought Primrose, as he emerged pale but triumphant from his labors. And others thought so too, as they took up the cry, fastening upon Harvey the name of *Circulator* (which, in the Latin sense of the word, means quack), and using every means fair and foul to destroy the work of the greatest man among them.

But Harvey was tough. He said nothing. He showed a patience which today is almost as much admired as his discovery. He went steadily on with his work though his practice suffered and his reputation waned. John Aubrey, first biographer of Harvey, has this to say of the fight: "I have heard him say, that after his book of the Circulation of the Blood came out, that he fell mightily in his practice, and that 'twas beleaved by the vulgar that he was crack-brained; and all the physitians were against his opinion, and envyed him . . ."

"The vulgar" and "physitians (who) . . . envyed him" took a similar whack in the next century at the uncouth and ungrammatical Scotchman John Hunter, who was gathering in his Museum the material whose study was to make its collector the pioneer biologist of his time. Spiteful colleagues made fun of him, told him flatly that a surgeon had no business to engage in physiological investigation, but the stubborn collector went right on collecting until he saw form and function spread before him and was able to deduce fundamental principles by which he not only solved many riddles himself but mapped out enough problems to keep future generations very busy. He tried to keep calm in the midst of the vituperations of his enemies. He knew that he had angina pectoris and he used to say quite frankly that his life was in the hands of any rascal who chose to tease him. Very smart, in their own minds, were the contemporaries of Hunter who used to say, "His museum is as much use as so many pig's pettitoes." History has dropped that verdict from its page, replacing it with the findings of the profession since Hunter's day that, "the road to medical education is through the Hunterian Museum, and not through an apothecary's shop."

Wouldn't it seem almost a foregone conclusion that any man

who could offer human beings relief from the terror of smallpox would have a grateful populace kneeling at his feet? Even today, when science has moved so far, the word smallpox has a sinister ring in our ears. And our conception of the dread disease is pale compared to that of the people of Edward Jenner's day, when young men sighed, "Oh, for a mistress who is not pock-marked," when no mother dared count her children with confidence until they had passed through smallpox, when the lowliest and the mightiest alike knew that the horrible disfiguring plague might strike into their lives at any moment. And yet, when Jenner set out to conquer the monster which had taken a toll of millions of human lives during the eighteenth century, he was almost expelled from his local medical society because he bored his fellow members with his talk. And when he had actually devised the vaccine treatment which was ultimately to remove the menace, he suffered even greater persecutions.

And wouldn't it seem, too, that any humane person, man or woman, would turn in gratitude toward a physician who discovered how to ease the pangs of childbirth? Yet, when James Young Simpson brought the blessing of chloroform into the lying-in chamber, his action almost cost him his own life, to say nothing of his reputation. What a hue and cry went up from the preachers and laity! Had not God said clearly in Genesis III:16: "I will greatly multiply thy sorrow and thy conception; in sorrow thou shalt bring forth children." Who was this upstart Simpson who dared nullify a decree of Almighty God? Simpson was fortunate. To the Britons of his day, Queen Victoria stood only a little lower than Jehovah in public esteem, and there was even, perhaps, an unspoken but genuine conviction that she just possibly might know more about being a mother . . . And so when the Queen insisted on the boon of chloroform for herself, public opinion swung into line. Simpson, the baker's son, was knighted. All was forgiven. Would that all the tales of persecution had so felicitous an ending!

Simpson was greatly concerned over the shocking mortality rate in the hospitals of his day where, as he said, "a man laid on the operating table . . . is exposed to more chances of death than the English soldier on the field of Waterloo." He had reason to be shocked. In those hospitals septic poisoning was an ever-present horror; the stench of infection filled every ward; Phagedena was

rarely absent; pestilence followed in the footsteps of even the most careful surgeon; and all too often the number of coffins carried out of the hospital corresponded to the number of patients brought in.

Simpson did not contribute very much to the solution of the problem which he so clearly saw. The only remedy he could think of was the abolition of the hospital system altogether, or possibly a revolution in hospital construction so that such buildings would be made of iron, frequently taken down, renovated, and rebuilt. But he set his fellow surgeons arguing and working on the problem. It is tragic to remember that, when one of these men whose efforts he had thus inspired came through to a solution, Simpson himself joined the ranks of the persecutors.

Young Joseph Lister, a Quaker teaching at Scotch universities, was that man. When Lister came to London, Simpson made fun of the "mythical fungi" in which Lister was supposed to believe. He was part of the suspicious hostile company who greeted the visitor, who were resentful of his carbolic spray, who were shocked at his sacrilege of changing dressings on the Sabbath. Among the spectators on that occasion were the Sisters of St. John, lined up in solid opposition to this man, and seeming, with their stiff white headdress held high and haughtily, to symbolize the starched and unrelenting spirit of the whole world.

All these are men of other lands. But our own country is far from blameless. We, too, in this land of the free and the home of the brave, have stoned our prophets. We like to think that we have left far behind us in our forward march the days when men who dared contradict popular opinion were burned at the stake, when the prophets were stoned and the pioneers tortured. And we have indeed done much. Even the recrudescence of the dark ages in the modern totalitarian states serves to make clear to our eyes how far we have traveled from the days when thumbscrew and rack were not the hated instruments of a few but the general tools of power almost everywhere. We would be blind and foolishly arrogant, however, did we not realize how far we still are from our goal of freedom and tolerance. The spirit which led conscientious medical leaders to persecute men like Vesalius, and Harvey, and Hunter, and Lister, and all the others, still lives. And those men, who harbor that spirit in their breasts, are just as unworthy to be numbered among the goodly company

of the saints of medicine as were their predecessors throughout the ages.

Instances of major persecutions still mar the pages in which medical history is being written in our twentieth century. Let us hope that, in the freer interchange of ideas which we boast about today, injustices are more quickly righted. Such injustices, however brief, impede the forward march of any profession. And the wheels of progress are slowed also, slowed perhaps in the long run even more, by the pettier persecutions born of professional jealousy which so often prevent able and earnest men from making to the science and practice of medicine the contribution which they might make. Let any medical man climb by merit a little above his erstwhile fellows and the pack is on him in full cry. He is at once set upon both by the many below him who wish to pull him back to their level and by some above him who fear that his upward progress menaces their cherished prestige. We use modern methods, of course. We do not resort to the Inquisition. We do not even, as a rule, find it necessary to pillory the offender in long and learned published refutations of his ideas and work. We use subtler methods. It is so easy. Just an insinuation, a shrewd phrase uttered at the right time and in the right place, an artful smile and a shrug of the shoulders. That's all we need often to blast completely and well-nigh irrevocably an innocent colleague's reputation. And every time the thing happens, the great profession which we serve is weakened and smirched.

When will men learn to make an end of bickering and scandal-mongering and back-biting? When will we learn that medicine no longer needs martyrs, but needs instead builders and yet more builders? There is work ahead for the children of Hippocrates to fashion their part of the new world. Can we not find a way to let all members of this goodly company work freely in the full light of day, untroubled and unhampered by the jealous ghosts which in the past have haunted the halls of science?

SURGEON'S CREDO

"DOCTOR, this can't be the end! Tell me this loved one of mine isn't really dead. You believe he goes on living somewhere, don't you, Doctor! You know I'll see him again! Doctor! What do you believe?"

The anguished cry of the bereaved echoes again and again in a surgeon's ears. He would be insensible indeed if he failed to hear in the heartbroken words a ringing challenge to his best thinking. And he would be strangely sodden, too, if, waging his constant battle against an adversary he knows he can never finally defeat, though he may hold him long at bay, he never experienced a fierce compulsion to snatch the mask from the adversary's face, to look Death straight in the eye and know him for what he is.

Philosophical speculation may be a luxury for some men. It comes close to being a necessity for those of us who follow the profession of medicine and surgery. I have followed strange paths in my own quest, found dusty answers often, inclined at times to echo the Tentmaker:

Myself when young did eagerly frequent
 Doctor and Saint, and heard great argument
 About it and about—but evermore
 Came out by the same door where in I went.

But I have managed, I believe, to hammer out on the anvil of living, convictions strong enough to cut through, unblunted, the scientific facts which turn aside and dull untempered blades.

That faith is a faith for doing, not for talking, and I have rarely tried to put it into words. I did once, however. At least I tried to set down, in Socratic dialogue, some of the questions

millling through my brain. The circumstances will be understood by anyone who has ever experienced the oddly mingled emotions of finality, loss, and surcease from pain which come after one has had a tooth pulled. A large molar had been painng me. I had, being human, ignored it as long as I could—too long. One does not get over being afraid of the dentist just because one is a surgeon. I came to it at last. A sharp tug, and the tooth was irrevocably gone. I sat that evening at twilight and held in my hand the extracted tooth, once part of my own body, now merely a strange lump of matter unrelated to a living whole. I tried later to write the thoughts that came to me. I called the dissertation—

DISCUSSION AFTER DENTISTRY

I: Well, Tooth, I'm glad to be rid of you. Soon you will be dust, and after that—nothing. You have ceased to exist.

Tooth: Absurd. What has happened to your schooling? Even Anaximedes of Miletus, who is older than your own Hippocrates, knew that matter is eternal. I am matter. Have you forgotten your Aristotle? I was ageless before I was patterned for your use. I cannot be destroyed. Every atom in me is indestructible.

I: But they are splitting atoms nowadays . . .

Tooth: Which gives you no excuse for splitting hairs in this argument. Science pronounces me etheric energy. Science admits my permanence.

I: What is science?

Tooth: That's an odd question, coming from you. Don't you think I know that you have worshipped at the shrine of science all your life, that you have cheated sleep to keep your vigil, that you have even been willing at times to deny your faith, question your intuition, distrust your instinct, at the bidding of this master? You know, and I know you know, that science is related knowledge.

I: Go on. You interest me. You are sure of what you are. Suppose you tell me, What am I?

Tooth: A ray of the Infinite, here for a purpose.

I: Well and good. But don't forget that I am one with the flesh.

I could not survive without it. Body and mind are one entity.

Tooth: Not so fast. Flesh is but an aggregation of elements which a chemist can reduce to oxygen, hydrogen, nitrogen, phosphorus, iron, and so on. Wherein then can you extract such attributes as reason, faith, courage, hope, loyalty, imagination?

William James suggested—you know this because you copied the passage once in one of your notebooks—that very probably the brain, instead of being the condition of spirit's existence, is merely its very imperfect medium.

I: Do you go farther and assert that my soul is immortal?

Tooth: Immortality. That's a word too big for finite mind to comprehend. Can't we speak instead of the soul's survival?

I: As you like. Well, then, Shall I live after death?

Tooth: I don't like the word death, either. What you call death is merely transition. A certain scientist—I know you are familiar with his work—startled the world by the declaration that we can never die because the electrical radiation goes on endlessly, and when set free by death—I mean transition—must find another development to establish equilibrium.

I: Where then are the dead? Or if you still want to quibble over terms, where are those myriads of people who once inhabited this earth and whose bodies have long since mouldered into clay?

Tooth: Why not ask *whence* as well as *whither*? Where are the generations yet unborn? They are not, yet they are, because they shall be.

I: That does not satisfy me. I need proof that my soul will survive.

Tooth: And how can proof be given which the finite instruments of the human mind can apprehend?

I: Don't juggle words. Just answer my question.

Tooth: There is always life after death, just as after life there is death. Life feeds on death, and death on life. The cycle never ends.

I: You are too transcendental. The query is: Shall I survive after my flesh is no longer animate?

Tooth: Would the survival of personality after it leaves the body be more mysterious than its appearance in the body?

I: I don't trust analogies. They prove nothing.

Tooth: You profess to trust science and only science. Don't you realize that science itself must constantly improvise on surmise and inference if it is not to be halted in its tracks? If science waited for the last link of evidence before framing its hypotheses, there would be no science. I thought you knew enough about the history of medicine to know that.

I: You still do not answer me. You insist that the soul survives. On what do you base your belief?

Tooth: On man's very desire for preservation, first of all. Man's environment is so fashioned that his desires have possibility of

fulfillment. That the law of the universe should run counter to the deepest instinct in man's mind would be unthinkable.

I: I accuse you of being ontological. I must see to believe.

Tooth: Behind the seen is ever the unseen. The most intricate inventions built by men from matter first exist as visions of the mind.

I: Perhaps. Yet you still do not lift the veil which separates me from the Unknown.

Tooth: You make me laugh. All your life you deliberately project into the Unknown. You cheat today of hours that would yield joy, to gamble on a hidden tomorrow. You live by hope.

I: Not utterly blindly, though. We know our yesterdays. By them we gauge our tomorrows.

Tooth: Quite willing to forget that unknown quantity of circumstance that wrecks the best laid plans. I still say you are illogical.

I: At least I know that I am, that I do have life.

Tooth: And what is life? You labor ceaselessly to hold it in its mortal frame when death would snatch it away. But what do you know of it? Have you seen it? Do you know from whence it comes? Can you create a speck of protoplasm?

I: I know something of the laws under which life operates in flesh.

Tooth: You see! You who insist that man's five senses must be his only guide, you must fall back at last on law! You who reject belief in the soul's survival because your senses cannot comprehend its reality—you talk of law!

I: But in the realm of which I talk, my senses may at least perceive the manifestation of that law.

Tooth: To a degree, perhaps. But to how small a degree? How much of sound is pitched within range of man's hearing? How far is his stretch to touch a tangible thing? With all the tools and helps which science has given him, how far can his eyes peer into the starry heavens, into the deadly underworld where fatal microbes move?

I: You have a point there. But tell me this. If man is so important that he is to transcend death, why the sweep of unnumbered centuries before man, the highest expression of intelligence, appeared upon this earth? Does not nature abhor waste? And is this not waste?

Tooth: You put too much importance on time. Time itself is timeless. The universe has no chronology, knows no dates. You speak of time as though it were actual and fluent. Actually time alone is stable; all events flow through time. But, to

answer your question, is it not conceivable that the lateness of man's appearance on this planet is creation's scheme? Darwin is somewhat of an idol of yours. You remember he intimates how long was the creative process from cell to soul.

I: Let's get back to survival. It is hard to believe since no one has ever returned to us from that further shore.

Tooth: You're quoting poetry now! What would you do if you met a revenant? You'd make a bee line for the nearest psychiatrist and beg him to test your reason!

I: If I do survive, it must be to some purpose. What is that purpose?

Tooth: That is yet to be revealed. Do you remember a great musician who said that his symphonies were but mumbled whisperings to the music that swept through his soul? Beethoven said that. And he spoke for all genius baffled by the limitations of flesh and time in the full expression of its inspiration. Does that suggest no purpose to you?

I: Unless I go into the beyond with my memory and my identity, I do not consider that I shall in truth survive.

Tooth: You are right. Why be you, if you are not to be? And yet, you have stood beside the dying. You know, more than many men, how often, as death's door opens, those about to enter seem to be given a vision of the new state into which they move. Will you not grant that this vision may be the clearest evidence vouchsafed to us that the soul does live and that individuality is not destroyed? While you ponder that, I bid you farewell.

I: You are leaving me still in doubt!

Tooth: You haven't been deceiving me, you know. You have never for a moment doubted. As instinctively as a babe knows its mother, you know that you are a unit of an Eternal Power that holds you in its keeping. Instinct keeps faith with its trust. It leads the winging bird in a course as true as that which holds the polar star. You know full well that the Intelligence that formed the pattern of your flesh to serve your mind will preserve your spirit long after the mould has been broken and discarded.

Sheer fantasy that. And I should hate to have my readers think that, in my search for philosophical truth, I have had no other guide than my own extracted molar! Philosophers have led me, too, and great religious thinkers, and great mystics. And in these times when popular chatter glibly prates of the "fourth dimen-

sion" I have dug somewhat deeply into the fascinating time-space theories advanced by such diverse minds as Einstein and Bragdon and Blavatsky.

I am intrigued with the thought, so often expressed by the more esoteric among my guides, of certainties gained in ages past and lost again to await rediscovery, of "hermetic secrets" handed down through ages of lost truth by word of mouth or buried in the ciphers of Bacon-Shakespeare drama, the symbols on Egyptian papyrus, or even in the book beloved by children, Charles Kingsley's *Water Babies*! Why not, I ask myself? After all, don't archeological excavations continually disturb our conceit by showing us that our newest scientific notions are often "old stuff," known centuries ago and since forgotten?

My mind shies away, however, from too great credence in such claims. I am content to say, "Yes, it may be," and then to turn to the solider argument which speaks more clearly to my mind.

The idea of a fourth dimension is nothing new. The very name we use is borrowed from Henry More, the Platonist, who coined the term "*Quarta dimensio*" in about 1671. It had no novelty to Immanuel Kant, who calmly stated his unruffled view when he said, "If it is possible that there are other dimensions of space, it is also very probable that God has somewhere produced them. For his works have all the grandeur and variety that can be possibly comprised." Bragdon, whose *Primer of Higher Space* seems anything but a primer to those unused to abstract thinking, goes so far as to say that the higher mathematical idea is so old that "Plato held it in the hollow of his hand."

Old or new, the treatises which try to push the limits of human thought beyond its habit need to be approached with a will to effort and application. Only then do they yield, as I have found they do, fresh light on old problems, new landmarks to guide the pilgrim on his eternal quest.

I have thought much, for instance, of a certain passage from *The Secret Doctrine* written by Blavatsky, the Indianized Russian mystic:

The real person or thing does not consist solely of what is seen at any particular moment, but is composed of the sum of all its various and changing conditions from its appearance in material form to its disappearance from earth. It is these "sum totals" that

exist from eternity in the Future, and pass by degrees through matter, to exist for eternity in the Past. No one would say that a bar of metal dropped into the sea, came into existence as it left the air, and ceased to exist as it entered the water, and that the bar itself consisted only of that cross section thereof which at any given moment coincided with the mathematical plane that separates, and at the same time joins, the atmosphere and the ocean. Even so, persons and things, which dropping out of the "to be" into the "has been," out of the Future into the Past—present momentarily to our senses, a cross section, as it were, of their total selves, as they pass through Time and Space on their way from one eternity to another; and these two eternities constitute that Duration in which alone anything has true existence, were our senses but able to recognize it.

Space and time! How can we think that we can separate them and consider them each one apart? Yet how to stretch our minds to grasp their oneness?

Bragdon, in his *Primer of Higher Space*, recognizes the difficulty, struggles with it, but does not succeed, I think, in making it clear to most readers. He is explaining here his tesseract hypothesis, regarding each individual as "man the perfect square," the cube as his highest three dimensional body, and the God-head as the fourth dimensional body or tesseract.

This relativity of space magnitudes—a difficult thing to understand by minds untrained in philosophy and metaphysics—is apprehended unconsciously by everyone in such a concrete exemplification of it as is afforded by photography, for example. At a moving picture exhibition, we never think of the image on the screen as being essentially different from the photograph from which it is projected though difference in spatial extension is enormous. All that matters is the relation of parts to one another, and these being identical the question of absolute size does not even enter the mind. The small cubes should be thought of as moving about within the limits of the great cube, such motion bringing them repeatedly in contact with the filmy plane which corresponds to the phenomenal world.

They would register their passage through the matter of this film world by tracing in it countless cross sections of themselves. If, as has been assumed, these small cubes correspond to the higher or divine selves of men, identical in form and essence

with the Great Self, or their "Father in Heaven," then each transit of each cube, or individual, through the film square would be for it a physical incarnation and the correlated succession of cross sections which it traced in any one transit would represent one phenomenal life. Attributing consciousness to the individual cube—to its totality and to its every part—that aspect of consciousness stirred from latency to activity by contact with the matter of the film world in passing through it during one phenomenal life, would constitute the personal consciousness.

He tries again in these words:

The grub, working its way upward out of the earth in which it is buried, may be said to inhabit a linear or one-dimensional space; while the winged butterfly attains the space of all three dimensions. Understood in this way—as new powers of new movement in new media—the expression of the fourth dimension of space is sufficiently descriptive of an unfamiliar power of movement in an unknown medium, but related to the movements and the media known to us by an orderly sequence of evolution.

And here is another writer, Du Prel, in his *Philosophy of Mysticism*, trying also to make his mysteries clear:

From the standpoint of every animal organism we can divide external nature into two parts, which are the more unequal as the organic grade is lower—the one includes that part with which the sense apparatus establishes relations; the other is transcendental for the organism in question; that is, the organism lives in no relation to it. In the biological process the boundary line between these two world-halves has been pushed continually forward in the same direction. The number of senses has increased and their functional ability has risen . . . The biological rise and the rise of consciousness thus signify a constant removal of the boundaries between representation and reality at the cost of the transcendental part of the world and in favor of the perceived point.

To which Bragdon would add:

Arguing by analogy, everything which is to us transcendental exists nevertheless in some space. It is therefore possible that by an intention of consciousness we may be able first to apprehend, then to perceive as real, that which is now considered transcendental.

All this is strong meat except for the clearest of minds. To try to follow the argument and to understand its implications is strenuous mental exercise. But what strange twisted roads of hocus-pocus are traveled by those who, taking one small taste of the theories here set forth, immediately gallop off in hot pursuit of some wraith which they label mysticism.

I had an impression when I talked with Dr. Alexis Carrel that in spite of his professed deep devotion to mysticism, he was one of the wraith-chasers. Was his mystic philosophy more than a feeble defense of miracles, of clairvoyance, of psychic power?

He had tried to prove to me that he had good reason to believe in the miracles of Lourdes. He had seen a woman there, he told me, who had long suffered from a triangular bed sore which had resisted all treatment. One day at the holy shrine had reduced the sore to half its size. No, the doctor had not seen the sore when the woman came in. And, he added:

"I regret to say that, when I told her of her progress, the healing process stopped."

He told me instance after instance of healing which had been reported to him by men he "trusted." I was profoundly thankful that, in his contributions to science, Dr. Carrel had been less ready to act upon hearsay!

I am frank to say that I think my good friend Harry Houdini approached the mysteries of the spirit world with far more clarity of vision than does Dr. Carrel.

Houdini was deeply interested in spiritualism because he saw in the demonstrations of the spiritualists close parallels with his own magic—which he never once claimed was anything but mechanistic. He was sincerely grieved when Sir Oliver Lodge and Sir Arthur Conan Doyle attempted to attribute to him psychic capacities in his demonstrations, his programs, and his profession.

"Old Omar was right, Dr. Max," he said to me more than once. "Do you remember that verse that runs

Not one returns to tell us of the road
That to discover we must travel, too?

He had had many close contacts with the spiritualists for they had tried again and again to bring him into their midst. He regarded them as "among the master criminals of civilization,"

and he insisted that "blackmail, theft, seduction, broken homes and broken minds and bodies follow in the wake of the spiritualistic plague."

Only one concession would he make to the claims of these tricksters. If he were wrong, if communication from beyond the grave were truly possible, he promised, he would spare no effort to admit his error once he had reached "the other side." His widow died recently, convinced at last that such a message would never come.

I fully agree with Harry. I have been to séances, readings, demonstrations, and I have seen their results. I have more than once been called in consultation in cases where girls found themselves pregnant or diseased as a result of "High Chamber" sessions of those who mounted "a step toward the light." I cast no doubt on the sincerity of many earnest men and women engaged in psychic research. I believe, however, that the best of them are duped. And I know that the worst of them are unmitigated scoundrels.

Houdini's scepticism of spiritualistic fraud had nothing whatever to do with his attitude to spiritual realities. There his faith ran clear and strong. I remember one of the most serious of all the conversations he and I ever had. It took place in a cemetery on the west side of Chicago.

"I like to go to graves," he said to me, "and make an offering of flowers and stand in silent communion with the souls of my departed friends. I do believe that the soul is immortal, but I am positive that it does not return in table rappings, cotton wool, or any of the indecent liaisons with which spiritualism concerns itself. I have, nevertheless, an assured belief that a holy communion with departed souls will often give the communicant intuitive guidance when he needs it. But that guidance and assistance are as impalpable and intangible as the soul itself."

He knew the only sure refuge from the weariness of abstruse thought and from the temptations of irresponsible experiment—a religious creed. That man is either strong beyond the limits of humanity or hopelessly weak and lost who does not recognize the need to establish for himself the direct and personal relationship with a Supreme Being which it is the mission of religion to make real to him.

But what Supreme Being?

The Greeks said, "Ho Logos"—the Word; the Hindu: OOM; the Christian, the Trinity; the Jew, Yahovah . . . Frank Marshall Davis, Negro poet, expressed it thus in his "Black Man's Verse":

Benny Goldblatt kneels in a synagogue to chant solemn praises
to a frowning Jehovah flanked by Isaac and Abraham.

Ahmed Tagore lifts his hands at midday to a watchful Allah
pointed out by Mohammed.

Samuel Middlebrooks prattles of a Christ Jesus who washed away
his sins . . . Samuel Middlebrooks sings loud hosannas to a
Holy Trinity at the Wednesday night prayer meeting of the
Second Baptist Church.

Wun Chong burns incense to a frozen-faced Buddha who keeps
his eye on the strength and weakness of all mankind.

Four omnipotent, omnipresent gods!

Which one made me? . . . Or was it any?

Yes, which one? Or are they all indeed the same? We have come to accept pretty generally the interrelations and the borrowings among the great creeds of the Earth. It shocks few of us any more to learn that much of the holy ritual and symbolism of the Jewish Passover and the Christian Easter derive from pagan myths and customs—Phrygian, Syrian, Attic. So be it. Such interdependence merely shows that fundamental religious truth is reiterated and coincident in principle though variable in form. Certainly God is great enough not to object to the form if only the kernel is sound.

"Now that we have conquered science, the world is free for religion." Thus spoke a learned Frenchman in the nineteenth century. No man who works with human bodies and who must daily recognize how far we stand from that conquest of science which would leave us free to forget its problems can quite subscribe to that statement. For me, as for many conscientious men of my profession, it is increasingly impossible to bind myself in blind allegiance to the dogmas of any organized creed. I watch with respect, and even a touch of envy, those men and women who are able to take the words of the old hymnal literally and "cast their burdens on the Lord." It is difficult for me to believe, however, that such casting of burdens is any more desired by the Supreme Being than helpless dependence is desired by a human father who, however willing he may be to aid and help his

children, nevertheless does take pride in them as they grow to the maturity of self-reliance.

Assuredly, I believe in God. That is perhaps the sole and single article of my creed. But I do not fear him or dread his wrath. I have no images of Hell to keep me in a straight and narrow path. I have no clear and definite picture of this Supreme Being I revere. Certainly he is not to me, as he was to those underfed students of the Talmud I watched when I was a boy, a fierce, cruel, bearded deity, made in the image of man. Whether, when all the veils are lifted, I shall find the ancient Logos of the Greeks, the Yahweh of the Hebrew people, the God of Chaldea or of Egypt or of Ancient India or of the Totem and Drum cults of darkest Africa; whether I shall then discover that they served him best who followed the queer symbolisms of Easter Island, the fierce rites of the far North, the gentle way of the Nazarene; whether I shall find him Love, or Power, or cold clear Reason—these things I do not know.

But I do know this. No man can love and worship any God who fails to respect himself as a creature of that Infinite Force and who forgets his duties to his neighbor and to himself. In the moral realm, the mandates of the Supreme Being are sharp and inescapable. They bid me live my life as I would have others live theirs. They bid me strive against evil by prophylaxis rather than punishment. They bid me admit no difference in the moral law which binds the peasant from that which binds the king. They lead me into the full life of joyful labor and the constant search for knowledge. They enjoin upon me gentleness to the weak, and forbid my feet to walk in the paths of prejudice and hate. They hold before me the double duty of self-sacrifice and self-respect.

Believing in God, I believe, too, in a soul. I believe in its reality and in its eternal progression. I cannot subscribe to an ancient belief that the soul is mortal. That elusive spark which makes all the difference between the quick and the dead and which no machine seems able to fabricate *must* live on in perpetuity, else Nature herself mocks us with her rotation of the seasons, and all emotion is fallacious with its antithesis of hope and despair, courage and weakness, success and failure.

Nearly forty years of surgical experience have gone to shape this creed. It is not finished. Perhaps before I have finished this

earthly pilgrimage, I may become a convert to the Higher Space theories. Perhaps I shall understand—or think to understand—things shaded in doubt and mystery to me still . . .

This far have I come. On this ground I stand. It is firm rock under my feet, firm enough, I trust and hope, so that the hand I would stretch in comfort and in courage to those who stand in the valley of the shadow of Death does not shake.

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