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Scanner's Note: This was proofed from a text-only copy that has been floating around IRC for a couple of years at least, without reference to the DT edition. M-dashes have been added where appropriate, but no italics since there were none in the text copy I found. Cover scan was added compliments of amazon.com.

### Winters' Tale

"Norman Winters encountered a society that resented the consumption of coal and oil in reckless profusion by their ancestors and that lived in a stringently cycled economy made necessary, in part, by ancestral waste.

"In the 1970s, everyone is aware of, and achingly involved in, the energy crisis. Manning was aware of it forty years ago, and because he was, I was, and so, I'm sure, were many thoughtful young science fiction readers.

"Escape?"

"It was a funny kind of escape literature that had the youngsters who read it concerned about the consequences of the waste of fossil fuels forty years before all the self-styled normal and sensible human beings felt it necessary to become interested."

-Isaac Asimov

Before the Golden Age Doubleday/1974

### The Man Who Awoke

Laurence Manning

A Classic Novel from the Golden Age of Science Fiction

A Del Rey Book

**BALLANTINE BOOKS NEW YORK**

A slightly different version of this novel was serialized in *Wonder Stories*, Copyright 1933 by Gernsback Publications, Inc. This edition is published by arrangement with Edith B Manning.

A Del Rey Book

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## BOOK ONE

# The Forest People

## CHAPTER 1 The Road to Tomorrow

It was in all the newspapers for the entire month of September. Reports came in from such out-of-the-way places as Venezuela and Monte Carlo: "MISSING BANKER FOUND." But such reports always proved false. The disappearance of Norman Winters was at last given up as one of those mysteries than can only be solved by the great detectives Time and Chance. His description was broadcast from one end of the civilized world to the other: Five feet eleven inches tall; brown hair; grayish dark eyes; aquiline nose; fair complexion; age forty-six; hobbies: history and biology; distinguishing marks: a small mole set at the corner of the right nostril.

His son could spare little time for search, for just a month before his disappearance Winters had practically retired from active affairs and left their direction to his son's capable hands. There was no clue as to motive, for he had absolutely no enemies and possessed a great deal of money with which to indulge his dilettante scientific hobbies.

By October only the highly paid detective bureau that his son employed gave the vanished man any further thought. Snow came early that year in the Westchester suburb where the Winters estate lay, and it covered the ground with a blanket of white. In the hills across the Hudson the bears had hibernated and lay sleeping under their earthen and icy blanket.

In the pond on the estate the frogs had vanished from sight and lay hidden in the mud at the bottom—truly a miracle in suspended animation for biologists to puzzle over. The world went on about its winter business and gave up the vanished banker for lost. The frogs might have given them a clue—or the bears.

But even stranger than these was the real hiding place of Norman Winters. Fifty feet beneath the frozen earth he lay in a hollow chamber a dozen feet across. He was curled up on soft eiderdown piled five feet deep, and his eyes were shut in the darkness of absolute night and in utter quiet. During October his heart beat slowly and gently, and his breast, had there been light to see by, might have been observed to rise and fall very slightly. By November these signs of life no longer existed in the motionless figure.

The weeks sped by and the snow melted. The bears came hungrily out of winter quarters and set about restoring their wasted tissues. The frogs made the first warm nights of spring melodious to nature-lovers and hideous to light sleepers.

But Norman Winters did not rise from his sleep with these vernal harbingers. Still—deathly still—lay his body, and the features were waxy white. There was no decay, and the flesh was clean and fresh. No frost penetrated to this great depth; but the chamber was much warmer than this mere statement would indicate. Definite warmth came from a closed box in one corner and had come from it all the winter. From the top of the chamber wall a heavy leaden pipe came through the wall from the living rock beyond and led down to this closed box. Another similar pipe led out from it and down through the floor. Above the box was a dial like a clockface in appearance. Figures on it read in thousands from one to one hundred, and a hand pointed to slightly below the two thousand mark.

Two platinum wires ran from the box over to the still figure on its piled couch and ended in golden bands—one around one wrist and one circling the opposite ankle. By his side stood a cabinet of carved stone—shut and mysterious as anything in that chamber. But no light was here to see by, only darkness—the black of eternal night, the groping stifling darkness of the tomb. Here was no cheering life-giving radiation of any kind. The unchanging leaden metal sealed in the air from which the dust had settled completely, as it never does on the surface of our world, and had left it as pure and motionless as crystal—and as lifeless. For without change and motion there can be no life. A faint odor remained in the atmosphere of some disinfectant, as though not even bacteria had been permitted to exist in this place of death.

At the end of a month Vincent Winters (the son of the missing man) made a thorough examination of all the facts and possible clues that the detectives had brought to light bearing upon his father's

disappearance. They amounted to very little. On a Friday, September 8th, his father had spent the day on his estate; he had dinner alone, read awhile in the library, had written a letter or two and retired to his bedroom early. The next morning he had failed to put in an appearance for breakfast, and Dibbs the butler, after investigating, reported that his bed had not been slept in. The servants had, of course, all been minutely questioned even though their characters were such as almost to preclude suspicion. One only—and he the oldest and most loyal of them all—had acted and spoken in answer to questions in a fashion that aroused the curiosity of Vincent Winters. This man was Carstairs, the gardener—a tall ungainly Englishman with a long sad-looking face. He had been for twelve years in the employ of Mr. Winters.

On Friday night, about midnight, he had been seen entering his cottage with two shovels over his shoulder—itsself, perhaps, not an incriminating circumstance, but his explanation lacked credibility: he had, he said, been digging in the garden.

"But why two shovels, Carstairs?" Vincent asked for the hundredth time and received the same unvarying answer: "I'd mislaid one shovel earlier in the day and went and got another. Then I found the first as I started home."

Vincent rose to his feet restlessly.

"Come," he said, "show me the place you were digging."

And Carstairs paled slightly and shook his head. "What, man! You refuse?"

"I'm sorry, Mr. Vincent. Yes, I must refuse to show you . . . that."

There were a few moments of silence in the room. Vincent sighed.

"Well, Carstairs, you leave me no choice. You are almost an institution on this place; my boyhood memories of the estate are full of pictures of you. But I shall have to turn you over to the police just the same," and he stared with hardening eyes at the old servitor.

The man started visibly and opened his mouth as if to speak, but closed it again with true British obstinacy. Not until Vincent had turned and picked up the telephone did he speak.

"Stop, Mr. Vincent."

Vincent turned in his chair to look at him, the receiver in his hand.

"I cannot show you the place I was digging, for Mr. Winters ordered me not to show it to anyone."

"You surely don't expect me to believe that!"

"You will still insist?"

"Most assuredly!"

"Then I have no choice. In case it were absolutely necessary to do so, I was to tell you these words. 'Steubenaure on Metabolism.'"

"What on earth does that mean?"

"I was not informed, sir."

"You mean my father told you to say that if you were suspected of his . . . er . . . of being connected with his disappearance?"

The gardener nodded without speaking.

"Hm . . . sounds like the name of a book . . ." Vincent went into the library and consulted the neatly arranged card catalog. There was the book, right enough, an old brown leather volume in the biological section. As Vincent opened it wonderingly, an envelope fell out and onto the floor. He pounced upon this and found it addressed to himself in his father's handwriting. With trembling anxious fingers he opened and read:

My dear son:

It would be better, perhaps, if you were never to read this. But it is a necessary precaution. Carstairs may in some unforeseen way be connected with my disappearance. I anticipate this possibility because it is true. He has in fact helped me disappear at my own orders. He obeyed these orders with tears and expostulation and was to the very end just what he has always been—a good and devoted servant. Please see that he is never in want.

The discovery and investigation of the so-called "cosmic" rays was of the greatest interest to us

biologists, my son. Life is a chemical reaction consisting fundamentally in the constant, tireless breaking up of organic molecules and their continual replacement by fresh structures formed from the substance of the food we eat. Lifeless matter is comparatively changeless. A diamond crystal, for instance, is composed of molecules which do not break up readily. There is no change—no life—going on in it. Organic molecules and cells are termed "unstable," but why they should be so was neither properly understood nor explained until cosmic rays were discovered. Then we suspected the truth: The bombardment of living tissue by these minute high-speed particles caused that constant changing of detail which we term "life."

Can you guess now the nature of my experiment? For three years I worked on my idea. Herkimer of Johns Hopkins helped me with the drug I shall use, and Mortimer of Harvard worked out my ray-screen requirements. But neither one knew what my purpose might be in the investigations. Radiation cannot penetrate six feet of lead buried far beneath the ground. During the past year I have constructed, with Carstairs' help, just such a shielded chamber on my estate. Tonight I shall descend into it, and Carstairs will fill in the earth over the tunnel entrance and plant sod over the earth so that it can never be found.

Down in my lead-walled room I shall drink my special drug and fall into a coma which would on the surface of the earth last (at most) a few hours. But down there, shielded from all change, I shall not wake until I am again subjected to radiation. A powerful X-ray bulb is connected and set in the wall. Upon the elapse of my allotted time this will light, operated by the power generated from a subterranean stream I have piped through my chamber.

The X-ray radiation will, I hope, awaken me from my long sleep, and I shall arise and climb up through the tunnel to the world above. And I shall see with my own two eyes the glory of the world that is to be when Mankind has risen to its great destiny on the steppingstones of science.

Do not try to find me. You will marry and forget me in your new interests. As you know, I have turned over to you my entire wealth. You wondered why at the time. Now you know. By all means marry. Have healthy children. I shall see your descendants in the future, I hope, although I travel very far in time: One hundred and twenty generations will have lived and died when I awaken, and the Winters blood will have had time to spread throughout the entire world.

Oh my son, I can hardly wait! It is nine o'clock now and I must get started on my adventure! The call is stronger than the ties of blood. When I awaken you will have been dead three thousand years, Vincent. I shall never see you again. Farewell, my son! Farewell!

And so the disappearance of Norman Winters passed into minor history. The detective agency made its final report and received its last check with regret. Vincent Winters married the next year and took up his residence upon his father's estate. Carstairs aged rapidly and was provided with strong young assistants to carry on the work of the place. He approached Vincent one day, years later, and made the request that he might be buried on the estate at the foot of the mound covered with hemlock and rhododendrons. Vincent laughed at the suggestion and assured him that he would live many a year yet, but the old gardener was dead within a year. Vincent had the tomb dug rather deeper than is usual, peering often over the shoulder of the laborer into the depth of the grave. But he saw nothing there except earth and stones. He erected a heavy flat slab of reinforced concrete on the spot.

"Most peculiar, if you ask me," said old Dibbs to the housekeeper. "It's almost as if Mr. Vincent wanted Carstairs' stone to last a thousand years. Why, they cut the letters six inches deep in it!"

In due time Vincent Winters himself died and was buried beside the gardener. There remained no one on the earth who remembered Norman Winters.

## CHAPTER 2

### Awakening—In What Year?

It was night and great blue sheets of flame lit the sky with a ghastly glare. Suddenly a blinding flash enveloped him—he felt a million shooting pains in every limb—he was lying on the ground helpless and

suffering—he fell into a brief unconsciousness.

A dozen times he awakened, and each time he shrieked with the pain in his whole body. He opened his eyes upon a small room lit by a penetrating blue electric bulb. Numberless times he tried to move his right hand to shield his eyes but found he could not force his muscles to obey his will. Days must have passed as he lay there, sweat dotting his brow with the effort, and finally one day his hand moved up slowly. He lay a full minute recovering. He did not know where he was. Then from the depths of infinity a little memory came into his dulled brain, a memory with a nameless joy in it. And slowly his surrounding struck new meaning and a vast thrill coursed through him. He was awake! Had he succeeded? Was he really alive in the distant future?

He lay quiet a moment letting the fact of his awakening sink in. His eyes turned to the stone cabinet beside his couch. Slowly his hand reached out and pulled softly at the handle. A compartment on the level of his face revealed two bottles of yellowish liquor. With gasping effort he reached one and dragged it over to him, succeeding in spilling a little of its contents but also in getting a mouthful which he swallowed. Then he lay quietly a full half hour, eyes purposefully shut and lips tightly pressed together in the agony of awakened animation, while the medicine he had taken coursed through his veins like fire and set nerves a-tingling in arms and legs and (finally) in fingertips and toes.

When he again opened his eyes he was weak, but otherwise quite normal. The stone cabinet yielded concentrated meat lozenges from a metal box and he partook very sparingly from the second bottle of liquid. Then he swung his legs down from the eiderdown couch, now tight-compressed from its original five feet to a bare two feet of depth by his age-long weight, and crossed the chamber to the clock.

"Five thousand!" he read breathlessly. But could it be true? He must get outside! He reached down to a valve in the leaden piping and filled a glass tumbler with cold water which he drank greedily and refilled and drank again. He looked about curiously to note the changes time had produced on his chamber, but he had planned well and little or nothing had deteriorated.

The lead pipe was coated with a few tiny cracks in its surface, and particles of white dust lay in them where the cold water had gathered the moisture of the air by condensation. But this could not have been helped, for the stream of water through this pipe was all that kept the tiny generator turning—that made possible the heated chamber and the final blaze of the specially constructed X-ray lamp that now filled his whole being with its life-restoring radiations.

Winters removed the cover from the power box and examined the motor and generator with great care. The chromium metal parts and the jeweled bearings showed not the slightest sign of wear. Did that mean that only a few years had elapsed? He doubted his clock's accuracy. He replaced the covering and brushed off his hands, for everything was coated with dusty sediment. Next, Winters examined the heat elements and placed a glass container of water on them to heat. With more of his meat concentrate he made a hot soup and drank it thankfully.

Then he went eagerly to the door in the lead wall and pulled at the locking lever. It resisted and he pulled harder, finally exerting all the strength he had in the effort. It was useless. The door was immovable! He leaned against it a moment, panting, then stooped and scrutinized the doorjamb. With a chill of dread he observed that the leaden chamber wall had become coated at the crack with a fine white dust. It had rusted the door into place! Had he awakened only to die here like a rat in a trap?

In his weakened condition he felt total despair. He again sank back on his couch and stared desperately at the door. It was hours before the simple solution to his difficulties occurred to him. The locking lever—of course! It was of stainless steel and was held to the door only by one bolt. A matter of a dozen turns loosened the nut on this bolt and the lever came away freely in his hands.

With this bar of stout metal as a crowbar he easily pried into the soft lead wall beside the doorjamb and, obtaining a fulcrum, put his frail weight on the end of the lever. The door gave inward an inch! In a few minutes his efforts were rewarded. The door groaned protestingly as it swung open, and Winters looked up the ancient stone steps, half-lit by the room's illumination. But in the open doorway a chill draft blew on his ragged and time-tattered garments so he went back to the chamber and commenced unscrewing a circular cover set into the wall.

It came away heavily with a hiss of air, for it had enclosed a near-vacuum, and Winters pulled out

clothes neatly folded. He was relieved to find a leather jacket still strong and perfect. It had been well oiled and was as supple as new. Some woolen things had not fared so well; but stout corduroy breeches of linen fiber seemed well preserved, and he put these on. A tightly covered crock of glass filled with oil yielded up a pistol designed to shoot lead bullets under compressed air and a neat roll of simple tools: a small saw, a file, a knife and a hand-axe. These he thrust into the waistband of his breeches, which had been slit around the belt to accommodate them.

Then with a last look around, Norman Winters started up the steps, guided only by the light from the chamber behind. He stumbled over fallen stones and drifted earth as he climbed. At the top he came to a mat of tree roots sealing him in. So the axe was wielded delicately by those enfeebled arms, and many minutes passed in severing one small piece at a time. The capstone which had originally covered the tunnel had been split and pressed to one side by the force of the growing tree and after the third large root had been severed a small cascade of earth and pebbles let down on him a blazing flood of sunlight.

He paused and forced himself to return to his chamber. There he filled a glass bottle with water and slung it to his belt, put a handful of concentrated food in his pocket, and left the chamber for good, closing the door behind him and turning off the light.

It took only a few minutes to squeeze his head and shoulders through the opening between the roots. He looked about him with pounding heart.

But what was this? He was in the middle of a forest!

Upon all sides stretched the trees—great sky-thrusting boles with here and there a clump of lesser growth, but set so evenly and spaced so regularly as to betray human oversight. The ground was softly deep in dead leaves and over them trailed a motley of vinelike plants. Winters recognized a cranberry vine and the bright wintergreen berries among many others he did not know. A pleasant sort of forest, he decided, and he set off rather hesitantly through the trees to see what he could find, his mind full of speculations as to how long it must have taken these trees to grow. To judge from the warmth, it must be about noon of a midsummer's day—but of what year? Certainly many of the trees were over a hundred years old!

He had not progressed more than a hundred yards before he came upon a clearing. Passing beyond a fringe of shrubs he soon came into full view of a great highway. North and south it stretched and he stamped his feet upon the strange, hard surface of green glass-like material. It was smooth in texture and extraordinarily straight and level. For miles he could look in both directions but, gaze as he might, not the slightest sign of buildings could he detect.

Here was a poser indeed; where had the suburbs of New York gone? Had even New York itself joined the "lost legion" in limbo? Winters stood in indecision, and finally started tramping northward along the road. Once, about a mile further along had been the town of White Plains. It was nearby and, even if no longer in existence, it would make as good a starting point as any. His pace was slow, but the fresh air and bright sunshine set the blood coursing through his veins. He went faster as he felt his strength returning with each step. He had gone half an hour and had seen no sign of human habitation when a man appeared on the glass roadway a hundred yards ahead. He was dressed in red and russet. He held one hand over his eyes, peering at Winters, who hesitated, then continued to approach—a wild thrill surging through his veins.

The man seemed in some vague way different. His skin was dark and tanned—features full and rounded—and his eyes (Winters observed as he got nearer) were a soft brown. The supple body seemed alert and exuded the very breath of health, yet it was indefinably sensuous and indolent—graceful in movement. He could not for the life of him decide even what race this man of the future represented—perhaps he was a mixture of many. Then the man made a curious gesture with his left hand—a sort of circle waved in the air. Winters was puzzled, but believing it was meant for greeting, imitated it awkwardly.

"Wassum! You have chosen a slow way to travel!"

"I am in no hurry," Winters replied, determined to learn all he could before saying anything himself. He had to repress his natural emotions of excitement and joy. He felt an urge to shout aloud and hug this stranger in his arms. "Have you come far?"

"I have been traveling for years."

"Come with me and I will take you to our orig. No doubt you will want food and drink and walling." The words were drawled and his walk was slow—so much so that Winters felt a slight impatience. He was to feel this constantly among these people of the future.

The surprising thing, when Winters came to think about it, was that the man's speech was plain English, for which he was thankful. There were new words, of course; and the accent was strange in his ears—a tang of European broad A's and positively continental R's. He was wondering if radio and recorded speech had caused this persistence of the old tongue, when they came to a pleasant clearing lined with two-story houses of shiny brown. The walls were smooth as if welded whole from some composition plastic. But when he entered a house behind his guide he perceived that the entire wall admitted light translucently from outside; tiny windows were placed here and there purely for observation and air. He had little time to look around, for a huge dark man was eyeing him beneath bushy gray eyebrows.

"A stranger who came on foot," said his guide and nodding to Winters, "Our chief Forester." Then he turned abruptly and left the two together, without exhibiting the slightest curiosity.

"Wassum, stranger! Where is your orig?" asked the Forester.

"My orig? I don't understand."

"Why, your village of course!"

"I have none."

"What! A trogling?"

"I don't understand."

"A wild man—a herman—don't you understand human speech?"

"Where I come from there were several forms of human speech, sir."

"What is this? Since the dawn of civilization two thousand years ago there has been one common speech throughout the world!"

Winters made an excited mental note of the date. Two thousand years then, at the least, had elapsed since he entered his sleeping chamber!

"I have come to learn, sir. I should like to spend several days in your village observing your life in ... er . . . an elementary sort of way. For instance, how do you obtain your food here in the middle of a forest? I saw no farms or fields nearby."

"You are wassum to the walling, but farms—what are they? And fields! You will travel many a mile before you find a field near here, thanks to our ancestors! We are well planted in fine forests."

"But your food?"

The Forester raised his eyebrows. "Food—I have just said we have fine forests, a hundred square kilos of them—food and to spare! Did you walk with your eyes shut?"

"Where I come from we were not used to finding food in forests, exactly. What sort of food do you get, from them—remember I said I wanted elementary information, sir."

"Elementary indeed! Our chestnut flour for baking, naturally, our dessert nuts and our vegetables, like the locust bean, the Keawe, the Catalpea and a dozen others—all the food a man could desire. Then the felled logs bear their crops of mushrooms—we have a famous strain of beefsteak mushroom in this orig. And of course the mast-fattened swine for bacon and winter-fats, and the pitch pines for engine oils—the usual forest crops. How can it be that you are ignorant of the everyday things which even schoolboys know?"

"Mine is a strange story, sir," replied Winters. "Tell me what I ask and I will tell you later anything you want to know about myself. Tell me things as though I were—oh, from another planet, or from the distant past," and Winters forced a laugh.

"This is a strange request!"

"And my story, when I tell it to you, will be stranger still—depend upon it!"

"Ha! Ha! It should prove amusing—this game! Well then, this afternoon I will spend showing you about and answering questions. After our meal tonight you shall tell me your story—but I warn you! Make it a good one—good enough to repay me for my time!"

They went out into the sunlight together. The village proved to be a gathering of about fifty large houses stretching for half a mile around a long narrow clearing. The background consisted of the huge trunks, gnarled branches and dark green of the forest. The Forester himself was a rather brisk old fellow, but the villagers seemed to strike again that vague chord of strangeness—of indolence—which he had noticed in his first acquaintance. Groups lay gracefully stretched out here and there under trees, and such occasional figures as were in motion seemed to move with dragging feet to Winters' businesslike mind. He guessed these people were downright lazy—and this he afterward observed to be invariably true. The natives accomplished the work of the village in an hour or two a day—and this time was actually begrudged and every effort was being made to reduce it. The chief effort of worldwide science was devoted to this end, in fact.

The people were dressed in bright colors, and the green grass and the rich brown of the buildings made a background to the colorful picture. Everywhere Winters saw the same racial characteristics of dark, swarthy faces and soft, liquid brown eyes. He noticed something strange about the eyes—as if they were not set straight in the face, but a trifle aslant. Little attention was paid Winters, except for occasional glances of idle curiosity aroused by his unusual attire. He thought the women unusually attractive, but the men seemed somehow effeminate and too soft; not that they were not fine specimens of humanity physically speaking, but their faces were too smooth and their bodies too graceful to suit his twentieth-century ideas of what vigorous men should look like. Their bodies suggested the feline-catlike grace and lethargy combined with supple strength.

Winters was told that a thousand people usually formed an "orig." Just now there were several hundred extra inhabitants and a "colorig" had been prepared, fifty miles to the north where trees had been growing for half a century, making ready for the new colony. "But why should you not simply make your village large enough to keep the extra people right here?"

"The forest supports just so many in comfort—we are having trouble now as it is."

"But are there no larger villages where manufacturing is done?"

"Of course. There are factory origs near the Great Falls in the north. Our airwheel goes there twice a week—a two-hours' flight. But only a few people live there, just enough to tend the machines."

The people of the village seemed happy and contented with life, but most of the younger men and women seemed to Winters too serious. Their dark faces hardly ever showed a smile. He entered several of the houses—among others that of the guild of cloth-makers. He was greatly interested, as if seeing an old friend, to observe wood-pulp fed through a pipe into the threadmaking tubes to be hardened in an acid bath. He recognized, of course, the rayon process—new in his youth, but here considered ancient beyond history.

"How many hours a day do you work here?" he asked the elderly attendant.

"I have worked three hours every day for the past week getting cloth ready for the new colonists," he replied grumblingly. "Perhaps we shall have some peace in this orig when the youngsters are gone! At least there will be plenty of everything to go around once again!"

As he spoke, a young man—evidently his son—entered the thread room and stared at his father and the Forester with cold, supercilious eyes. "Wassum!" said the attendant, but the youth merely scowled in reply. He examined Winters silently with distrust, then went out again without speaking. "Your son is a solemn chap!"

"Yes. So is his generation—they take life too seriously."

"But do they never enjoy themselves?"

"Oh, yes! There is the hunting moon in fall. The young men track the deer on foot and race him—sometimes for days on end—then throw him with their bare hands. My son is a famous deer chaser. He practices all year long for the autumn season."

"But are there no ... er ... lighter pastimes?"

"There are the festivals. The next one is the festival of autumn leaves. At the time of the equinox the young people dress in russets and reds and golds, and dance in a clearing in a wood which has been chosen for its outstanding autumn beauty. The young women compete in designing costumes."

"But the younger ones—the children?"



"They are at school until they are twenty years of age. School is a time of hard work and study. The young people are not permitted games or pastimes except such exercise as is needed to keep them in health. When they finish school, they enter upon the rights and pleasures of their generation—a prospect which makes them work harder to finish their schooling as soon as possible."

As they went out into the sunlight once more, Winters observed a small airship settling down in the village campus. It was the airwheel, the Forester said, and it would not leave again until dusk.

"I have never been in one," said Winters.

"You are a trogling!" the Forester exclaimed. "Suppose we go up for a short flight, then?" Winters eagerly agreed. They walked over to the machine which Winters examined curiously. Here, at least, three thousand years of improvements were visible. The enclosed cabin would seat about twenty persons. There were no wings at all, but three horizontal wheels (two in front and one in the rear) above the level of the cabin. A propeller projected from the nose and this was still idling when they arrived. The Forester explained his wishes to the pilot who asked which direction they should prefer to take.

"South to the water and back!" put in Winters, with visions of the thriving New York metropolitan area of his day running through his memory. They took their places and the airwheel rose gently with only a faintly audible hum—it was a practically silent flight made at enormous speed.

In ten minutes the sea was in sight. Winters gazed breathless through the crystal windows upon several islands of varying sizes—clothed in the green blanket of dense forest. Slowly he pieced out the puzzle: there was Long Island, evidently, and over there he saw Staten Island. Beneath him then lay the narrow strip of Manhattan and the forest towered over everything alike.

"There are ruins beneath the trees," said the Forester, noting his interest. "I have been there several times. Our historians believe the people of ancient times who lived here must have been afraid of the open air, for they either lived beneath the ground or raised stone buildings which could be entered without going out-of-doors: There are tunnels, which they used for roadways, running beneath the ground in every direction."

### **CHAPTER 3**

#### **"He Has an Appendix!"**

Then the airship turned about and as it did so Winters caught sight of one gray pile of masonry—a tower tip-showing above the forest. Surely it must have taken thousands of years to accomplish this oblivion of New York! And yet, he thought to himself, even one century makes buildings old.

He scarcely looked out of the window on the way back, but sat engrossed in sad thoughts and mournful memories. They landed once more in the village clearing, and he continued his tour under the Forester's guidance. When the afternoon was over he had gathered a confusing mass of general information about life in the new age. Metals were carefully conserved and when a new colony was started its supply of metal utensils and tools was the final great gift of the parent villages. Fanning was entirely unknown, and grain—which the Forester did not know except as "plant-seed"—was not used for food, although primitive races had once so used it, he said. Everything came from trees now: food, houses, clothing—even the fuel for their airships, which was wood alcohol.

The life of a villager was leisurely and pleasant, Winters decided. Hours of labor were short and the greater part of the day was devoted to social pleasures and scientific or artistic hobbies. There were artists in the village, mostly of some new faddist school whose work Winters could not in the least understand. They painted trees and attempted to express emotions thereby. But many beautiful pieces of sculpture were set about in some of the houses. Electric power was received through the air from the great Falls, where it was generated; and each socket received its current without wiring of any sort. The village produced its own food and made its own clothes and building materials, paper, wood alcohol, turpentine and oils. And as this village lived, apparently so did the rest of the world.

As Winters pictured this civilization, it consisted of a great number of isolated villages, each practically self-sufficient, except for metals. By taking the air-wheel from one village to the next and there

changing for another ship, a man could make a quick trip across the continents and oceans of the globe. But science and art were pursued by isolated individuals, the exchange of ideas being rendered easy by the marvelously realistic television and radio instruments.

At dusk they returned to the Chief Forester's house for dinner.

"I must apologize to you for the food," said he. "We are on slightly curtailed supplies, due to our population having grown faster than our new plantings. Oh, you will have a good meal—I do not mean to starve you—but merely that you will be expected not to ask for a second service of anything and to excuse the absence of luxuries from my table." His great body dropped into an upholstered chair.

"Is there any way to arrange things except by rationing yourselves while you wait for the new forests to bear crops?"

The Forester laughed a trifle bitterly. "Of course—but at a price. We could easily fell some trees for mushroom growing (they grow on dead logs) and also we could cut into the crop of edible pith-trees a little before maturity—and so all along the line. That would set us back in our plans a few years at the most, but there is no use talking about it. The Council of Youth has claimed the Rights of its Generation. The future is theirs, of course, and they object to our spending any of their resources now. We older people are a little more liberal in our views—not selfishly, but on a principle of commonsense. There have been some bitter words, I'm afraid, and the matter is by no means settled yet—for their attitude is almost fanatical and lacks all reason. But there is no need to bother you with our local affairs," and he turned the conversation into other channels.

He was forever using the expression "thanks to our ancestors," a point which Winters noted with surprise. So far one thing had eluded Winters completely: that was the history of the past ages during which all these drastic changes had come about. When the time came that he was bade to tell his story at the conclusion of the meal, he thought a moment as to how he might best obtain this information.

"I have traveled far," he said. "But in time—not in distance."

The Forester held a forkful of food poised in the air, eyebrows raised.

"What nonsense is this?" he demanded.

"No nonsense . . . your mushrooms are delicious ... I have succeeded in controlling the duration of a state of suspended animation. I went to sleep many years ago; woke up this morning."

The Forester was incredulous.

"How long do you pretend to have slept?"

"I don't know for sure," replied Winters. "My instruments showed a certain figure, but to be at all certain I should prefer that you tell me the history of the world. No need of anything but the rough outlines."

"Ha, Ha! You promised me a story and you are most ingenious in fulfilling your promise, stranger!"

"I am, on the contrary, absolutely serious!"

"I cannot believe it—but it may be an amusing game. Let me see . . . Last year the first breadfruit trees bore in the lower temperate zones of the earth (that is a piece of it in your plate). It has greatly changed our mode of life and it may soon be unnecessary to grind chestnut flour for baking."

"Interesting," replied Winters. "But go back a thousand years more."

The Forester's eyes opened wide. Then he laughed delightedly. "Good! It is no lowly boaster, eh! A thousand years . . . That would be about the tune of the great aluminum process. As you know, prior to that time the world was badly in need of metals. When Koenig perfected his method for producing aluminum from clay the economics of the world was turned topsy-turvy and . . . what! Farther back than a thousand years!"

"I think you might try two thousand."

The Forester exploded with laughter and then sobered at a sudden thought. He glanced shrewdly at his companion a moment, and a slight coldness appeared in his eyes.

"You are not by any slightest chance serious?" he asked.

"I am."

"It is absurd! In those days the human body still had an appendix—that was just after the Great Revolution when the Wasters were finally overthrown, and True Economics lifted her torch to guide the

world on its upward' path. Two thousand years ago! Thence dates all civilized history! Such archaic customs as organized superstitions, money and ownership by private people of land and a division of humanity into groups speaking different languages—all ended at that time. That was a stirring period!"

"Well then, go back another five hundred years."

"The height of the false civilization of Waste! Fossil plants were ruthlessly burned in furnaces to provide heat; petroleum was consumed by the billion barrels; cheap metal cars were built and thrown away to rust after a few years' use; men crowded into ill-ventilated villages of a million inhabitants—some historians say several million. That was the age of race-fights where whole countrysides raised mobs and gave them explosives and poisons and sent them to destroy other mobs. Do you pretend to come from that shameful scene?"

"That is precisely the sort of thing we used to do," replied Winters, "although we did not call it by the same set of names." He could barely repress his elation. There could no longer be the slightest doubt of it—he was alive in the year 5000! His clock had been accurate!

The Forester's face was growing red. "Timberfall! You have been amusing long enough—now tell me the truth: Where is your orig?"

"I don't understand. I have told you the truth."

"Stupid nonsense, I tell you! What can you possibly hope to gain from telling such a story? Even if people were such fools as to believe you, you could hardly expect to be very popular!"

"Why," said Winters in surprise, "I thought you were so thankful for all your ancestors had done for you? I am one of your ancestors!"

The Forester stared in astonishment. "You act well," he remarked dryly. "But you are, I am sure, perfectly aware that those ancestors whom we thank were the planners for our forests and the very enemies of Waste. But for what should we thank the humans of three thousand years ago? For exhausting the coal supplies of the world? For leaving us no petroleum for our chemical factories? For destroying the forests on whole mountain ranges and letting the soil erode into the valleys? Shall we thank them, perhaps, for the Sahara or the Gobi deserts?"

"But the Sahara and the Gobi were deserts five thousand years before my time."

"I do not know what you mean by 'your' time. But if so, all the more reason you should have learned a lesson from such deserts. But come! You have made me angry with your nonsense. I must have some pleasant sort of revenge! Do you still claim to be a living human from the Age of Waste?"

Winters' caution bade him be silent. The Forester laughed mischievously: "Never mind! You have already claimed to be that! Well then, the matter is readily proved. You would in that case have an appendix and . . . yes . . . hair on your chest! These two characteristics have not appeared in the last two thousand years. You will be examined and, should you prove to have lied to me, a fitting punishment will be devised! I shall try to think of a reward as amusing as your wild lies have proved."

His eyes twinkled as he pressed a button hidden in his chair arm. A minute later two young men entered. Winters, in no physical condition to resist, was soon stripped of his clothing. He was not particularly hairy of chest, as men of his age went, but hair there was unquestionably. The Forester stepped forward offering an incredulous exclamation. Then he hurriedly seized the discarded clothing and felt the material carefully—examining the linen closely in the light of the electric lamp concealed in the wall.

"To the health room with him!" he cried.

Poor Winters was carried helplessly down a corridor and into a room lined with smooth white glass and set about with apparatus of an evident surgical nature. The place was odoriferous with germicide. He was held against a black screen, as the Forester snapped on an X-ray tube and peered at Winters' nude body through a mask of bluish glass. After a minute he left the room and returned again almost instantly, a book now in his hands. He opened to a page of photographs and studied them carefully, once more peering at Winters through the mask. Finally he grunted in stupefaction and with close-pressed lips and puzzled eyes turned to the two attendants.

"He has an appendix—there can be no doubt of it! This is the most amazing thing I have ever imagined! The stranger you see before you claims to have survived from the ancient days—from the Age

of Waste! And he has an appendix, young comrades! I must talk to the biologists all over the country—the historians as well! The whole world will be interested. Take him along with you and see that he is provided with walling for the night."

He turned to the door and Winters heard him in the next room talking excitedly over the radio-telephone. The two young attendants led him along the hall. As he passed he could observe that the Forester was speaking to a fat redheaded, red-faced man, whose features showed in the televisor—and who evidently was proving difficult to convince. Winters stared a minute, for this was the first man he had seen whose face was anything except swarthy and slender.

Winters was led down the hall and permitted to put on his clothing. He was in an exalted mood. So his arrival in this new world was creating a stir after all! In the morning the airwheel would perhaps bring dozens of scientists to examine his case. He was beginning to feel weak and fatigued after his exciting day, but this latest thrill gave a last flip to his nerves and gave him strength just long enough to prove his own undoing.

One of the attendants hurried out of sight as they left the house. The other guided him along the edge of the village.

"We young members of the village have a gathering tonight, sir. It is called the Council of Youth and at it we discuss matters of importance to our generation. Would it be too much to ask that you address our meeting and tell us something of your experiences?"

His vanity was stirred and he weakly agreed, tired and sleepy though he was. The meeting place was just a little distance away, explained his guide.

In the meantime the youth who had hastened on ahead had entered a small room off the assembly hall. The room contained only three persons, all of whom looked up when the newcomer entered.

"It is as we thought, comrades; the Oldsters have brought him here for some purpose of their own. He pretends to have slept for three thousand years and to be a human relic of the Age of Waste!"

The others laughed. "What will they try on us next?" drawled one lazily.

"Stronghold is bringing him here," continued the latest arrival, "and will persuade him to speak to us in the meeting, if he can. You understand the intent?"

There was a wise nodding of heads. "Does he know the law of the Council?"

"Probably, but even so it is worth the attempt—you know, I'm not certain myself but that he may be from the old days—at least he is a startling good imitation. The man has hair on his body!"

There was a chorus of shocked disbelief, finally silenced by a sober and emphatic assurance. Then a moment of silence.

"Comrades, it is some trick of the Oldsters, depend upon it! Let the man speak to the Council. If he makes a slip, even a slight one, we may be able to work on the meeting and arouse it to a sense of our danger. Any means is fair if we can only prevent our inheritance being spent! I hear that the order to fell the half-matured pith-trees will go out tomorrow unless we can stop it. We must see what we can do tonight—make every effort."

When Winters arrived at the hall, the three young men stood on the platform to welcome him. The room was low-raftered and about fifty feet square. It was filled with swarthy young men and women. The thing that most impressed Winters was the luxury of the seating arrangements. Each person sat in a roomy upholstered arm-chair! He thought of the contrast that a similar meeting hall in his own times would have afforded—with its small stiff seats uncomfortably crowded together.

The lighting was by electricity concealed in the walls and gave at the moment a rosy tint to the room, though this color changed continually to others—now red or purple or blue—and was strangely soothing. There was a lull in the general conversation. One of the young leaders stepped forward.

"Comrades! This stranger is of another generation than ours. He has come especially to tell us of conditions in the ancient days—he speaks from personal experience of the Age of Waste, comrades, from which time he has survived in artificial sleep! The Forester of our orig, who is old enough to know the truth, has so informed us!" Winters missed the sarcasm. He was tired now and beginning to regret that he had consented to come.

There was a stir of astonishment in the audience and a low growling laughter which should have been

a warning. But Winters, full of fatigue, was thinking only of what he should say to these young people. He cleared his throat.

"I am not sure that I have anything to say that would interest you: Historians or doctors would make me a better audience. Still, you might wish to know how the changes of three thousand years impress me. Your life is an altogether simpler thing than in my day. Men starved then for lack of food and youth had no assurance of even a bare living—but had to fight for it." At this there were a few angry cheers, much to Winters' puzzlement. "This comfortable assurance that you will never lack food or clothing is, to my mind, the most striking change the years have brought."

He paused a moment uncertainly, and one of the young leaders asked him something about "if we were perhaps trying to accomplish this assurance too quickly."

"I am not sure that I know what you mean. Your Chief Forester mentioned something today of a question of economics. I am not familiar with the facts. However, I understand you have a very poor opinion of my own times, due to our possibly unwise consumption of natural resources. Even then we had men who warned us against our course of action, but we acted in the belief that when oil and coal were gone mankind would produce some new fuel to take their place. I observe that in this we were correct, for you now use wood alcohol—an excellent substitute."

A young man leaped to his feet excitedly. "For that reason, comrades," he said in a loud voice, "this stranger of course believes his age was justified in using up all the oil and fuel in the world!"

There was a slow growling which ended in a few full-throated cries and an uneasy stirring about in the audience. Winters was growing dazed with his need for rest, and he could not understand what was going on here.

"What you say interests us very much," said another of the men on the platform beside him. "Was it very common to burn coal for its mere heat?"

"Yes. It burned in every man's house—in my house as well."

There was an ugly moving about in the audience, as if the audience was being transformed into a mob. The mob, like some slow lumbering beast, was becoming finally aroused by these continual pinpricks from the sharp tongues of its leaders.

"And did you also use petroleum for fuel?"

"Of course. We all used it in our automobiles."

"And was it usual to cut down trees just for the sake of having the ground clear of them?"

"Well . . . yes. On my own land I planted trees, but I must say I had a large stretch of open lawn as well."

Here Winters felt fault and giddy. He spoke quietly to the young man who had brought him. "I must lie down, I'm afraid. I feel ill."

"Just one more question," was the whispered reply. Then aloud: "Do you think we of the Youth Council should permit our inheritance to be used up—even in part—for the sake of present comfort?"

"If it is not done to excess I can see nothing wrong in principle—you can always plant more trees . . . but I must say good night for I am . . ."

## **CHAPTER 4**

### **Revolt of the Youth**

He never finished his sentence. A fury of sound came from the hall of the Council. One of the leaders shouted for silence.

"You have heard, comrades! You observe what sort of man has been sent to address us! We of Youth have a lesson to learn from the Age of Waste, it appears! At least the Oldsters think so! The crisis that has arisen is a small matter, but if we should once give in when will the thing stop? What must they think of our intelligence if they expect us to believe this three-thousand-year sleep story? To send him here was sheer effrontery! And to send him here with that piece of advice passes beyond all bounds of toleration. Timberfall! There can be only one answer. We must make such an example of this person as

shall forever stamp our principles deep in the minds of the whole world!"

There were loud shouts and several young people rushed up on the platform and seized Winters.

"He has confessed to breaking the basic laws of Economics!" shouted the leader. "What is the punishment?"

There were cries of "Kill him! Exile! Send him to the plains for life!" And over and over one group was chanting savagely "Kill him! Kill him!"

"I hear the sentence of death proposed by many of you," cried the leader. "It is true that to kill is to waste a life—but what could be more fitting for one who has wasted things all his life?" (Loud cries of furious approval) "To your houses, every one of you! We will confine this creature who claims to be three thousand years old in the cellar of this hall. In the morning we will gather here again and give these Oldsters our public answer! And comrades! A piece of news for your ears alone—Comrade Stronghold has heard that in the morning the Oldsters will issue a felling order on the immature pith-trees!"

This announcement was greeted with such rage and violence that the walls shook. Winters was dragged away with dizzy brain and failing feet, and he was thrust upon a couch in a stone-walled room beneath the hall. He fell instantly in utter exhaustion and did not hear the tramp of departing feet overhead. His horror and fright had combined with his fatigue to render him incapable of further emotion. He lay unconscious, rather than asleep.

Above in the small room off the now empty hall three young men congratulated each other. They chatted a few minutes in great joy that they had protected the rights of their generation, regardless of the means which had been used to reach this desirable end. They parted for the night with that peculiar circling movement of the hand that seemed to have taken the place of the ancient handshaking.

But while they talked (so swift does Treason run) a young man crouched in the shadows back of the Forester's house and fumbled with the latch of a small door on the forest side. As the young men were bidding each other good night, a voice was whispering swiftly in the ear of the Chief Forester, whose rugged face and bristling eyebrows betrayed in turn astonishment, indignation, anger and fierce determination.

Winters woke to watch a shaft of dawn-light lying upon the stone floor. His body was bruised from the rough handling he had received, and his wasted muscles felt dull and deadened. But his brain was clear once again and he recalled the events of the meeting. What a fool he had been! How he had been led on to his own undoing! His eyes followed the shaft of light up to a grating set in the stone wall above his couch, and he could see a little piece of sky softly blue there with a plump little cloud sailing in it, like a duck in a pond. There came upon him a wave of nostalgia. Oh, to see a friendly face—or one homely thing, even a torn piece of newspaper lying on the cellar floor! But what use were such wishes? Thirty centuries lay between those things and himself—lay like an ocean between a shipwrecked sailor and his homeland.

And then came other thoughts, his natural fund of curiosity arising in him once again. After all, this age was a reaction against his own. There had been two extremes, that was all history would say of it. Truth lay in neither, but in some middle gentler path. Mankind would find the road in time—say another thousand years or more. But what difference to him now? In a few more hours he would be dead. Presently the young men would come for him and he would be their sacrifice for some fancied wrong. In his weakened condition the whole thing struck him as unutterably pathetic, and tears welled into his eyes until they were brushed away as the bitter bracing humor of the situation dawned upon him. As he mused, he was startled to notice a shadow pass across the window grating. He thought he heard low voices.

Now in an instant he was full of lively fears. He would not be taken to his death so tamely as this! He turned over on the couch to get upon his feet and felt a hard object beneath him. He felt and brought forth his revolver which he fell at once to examining—ears and senses attuned to hints of danger, though nothing further came. The weapon was an air-pistol firing .22 caliber lead slugs. It was deadly only at very close ranges—thirty feet or less, perhaps—and the extending lever compressed enough air for ten shots. It was something, at all events. Hastily he worked the lever, loaded and pulled the trigger to hear a satisfying "smack" of the lead against the stone wall.

Now his mind was working full tilt and he brought the file from his belt and turned to the grating

above his couch. If he could sever the bars he could manage to squeeze through the window! To his amazement these bars proved to be made of wood—and his heart lifted in hope. The saw was out of his belt and he was at work in an instant. By dint of much arm ache, he severed four of the bars in as many minutes. Day was now dawning apace and a panic of haste seized him. Then he brought the hand-axe into play and with three blows smashed the remaining wood in the window. As he did so a shadow approached and a face was thrust forward, blocking out the light. Winters crouched below with pistol pointed, finger on trigger.

"Here he is!" said the person in shadow. Winters recognized the voice of the Chief Forester and held his fire.

"Take my hand, stranger, and climb up out of there. We have been looking for you half an hour. Oh, have no fear, we will not permit you to come to harm!"

But Winters was cautious. "Who will protect me?"

"Hurry, stranger! You have fallen afoul of our young hotheads in the orig—I blame myself for not taking greater thought—but there are a hundred Oldsters here with me. You will be safe with us."

And now Winters permitted himself to be helped through the window and up into the full light of morning. He was surrounded by men who gazed at him with interest and respect. Their attitude calmed his last suspicions.

"We must hurry," said the Forester. "The younger men will resist us, I am afraid. Let us reach my own house as soon as possible."

The party started across the clearing. Two young men appeared suddenly in the doorway of a building near by. At the sight of Winters in the midst of the Oldsters they turned and raced off in separate directions, shouting some indistinguishable cry as they ran.

"We must go faster than this!"

A short fat man with a red face and reddish hair put his arm beneath Winters' shoulders and half carried him along. His face was familiar, and Winters remembered the man he had seen in the televisor the day before. His strength was enormous and his energy indefatigable—a tie that drew Winters to him in this age of indolence. "I am Stalvyn of History at the next orig," he boomed at Winters as they hurried along. "You are so valuable to me that I hope you do not mind if I take a personal interest in your protection!"

They had a quarter of a mile to go and had half accomplished the distance when a mob of shouting youths burst from behind a house just ahead of them. There was a pause as if their natural disinclination to physical exertion might even yet prevent the clash. But their leaders evidently were urging them on and suddenly they charged down amid a shower of stones and waving clubs. In an instant the shock was felt and a furious melee commenced—a primitive angry fight without science or direction.

Two youths beat an elderly man senseless with clubs, then sprang in unison upon the next victim. Some mature, full-muscled bull of a man ran berserk among striplings, crushing them in his great arms or flailing fists like hams at their onrushing faces. As they fought, they kept moving toward their objective and had gone almost another hundred yards before the youths retreated. The superior numbers of the older ones had swung the balance.

Fifty men, however, were all that remained around the Chief Forester. The others had either deserted the fight or been injured—perhaps killed, thought Winters, looking back at a score of still figures lying on the earth. The youths had retired only a hundred feet and still kept pace with the fugitives. Fresh bands of young men were hurrying from every direction, and in only a matter of minutes the attack would recommence with the odds on the other side this time.

Winters and Stalvyn, his self-appointed bodyguard, had not taken part in the struggle, for they had been in the center of the rescue party. Now they worked to the front of the party where the Forester strode along determinedly. Winters showed his pistol. "With this thing I can kill them as they run there. Shall I use it, sir?"

The Forester grunted. "Kill them, then. They are coming now to kill you!"

As he spoke, the mob of youths rushed upon them in a murderous fury. The elder men closed together in a compact mass and Winters shot into the front rank of the attackers, three of whom toppled

over and thereby lessened the shock of the charge, for those who followed tripped over the fallen. Then Stalvyn and the Forester stepped forward, and around these immovable figures the fight raged. Winters crouched behind them, swiftly pulled back his lever, loaded bullets and pulled the trigger like an automaton in a nightmare. Cries of passion and pain mingled with the thud of blows and the panting gasps of the fighters. It was a savage scene, the more shocking because of the unfitness of these quiet people for such work.

Suddenly the attackers withdrew sullenly, bearing injured with them. Two dozen remaining Oldsters looked dazedly around—free now to proceed to shelter. Fifty or more figures lay about on the ground and the Forester called out to the watchers in the windows to come and give first-aid to friend and foe alike. This work was commenced at once, but with characteristic slowness, and he led his little band to the door of his house and inside.

"Give the stranger some food and drink, Stalvyn," drawled a tall, thin man with ungainly limbs, who proved to be the biologist from an orig nearly a thousand miles away. "If I know our Youth they would never have wasted sustenance on a man who was so soon to die!" and he smiled a lazy sardonic smile at Winters as he placed in his hands a tumbler full of brown liquid. "Drink it without fear. It will both stimulate and nourish."

Winters was in a state of collapse now and Stalvyn had to help him drink and then carried him over to a couch. The biologist spent a few minutes examining him. "He must rest," he announced. "There will be no questions asked him today. I will prepare some medicine for him." Whereupon everyone left the room and Winters swallowed more drink and dropped fathoms deep in slumber. A man was set to guard the door of his room and the biologist tended him day and night. For a full week he was not permitted to wake. He had vague impressions as he slept of being rolled over, bathed, fed, massaged and watched over—impressions that were as dreams in an ordinary sleep. Under such expert ministrations the thin cheeks filled out and the wasted flesh became plump and smooth.

When Winters awoke it was late afternoon. His blood pulsed strongly through his body and he was wide awake the instant his eyes opened. There on a stool were set out his clothes, and he got to his feet and dressed. His belt still contained the pistol and hatchet as well as the smaller tools. Feeling like a new man, he strode to the door and opened it. Immediately he was surrounded in another room by a swarthy group of a dozen of the greatest scientists in the world—for the news had by this time spread everywhere and there had been time for travel from even the most distant points. There followed a long period of questions and examinations. Stalvyn and the historians plied Winters with posers as to the life and habits of his world; the biologists demanded the secret of his sleeping potion and control of the period of suspended animation. He was put before the fluoroscope and his appendix photographed; his measurements were taken and plaster molds of his hand, foot and head were cast for a permanent record.

Through it all Winters had a feeling of consummation—this was one of the things he had planned when he set off on his voyage into the future. Here was sane intelligence taking advantage of his work and respecting him for his exploit. But one thing was lacking completely. He had no sense of belonging to these people. He had hoped to find gods in human form living in Utopia. Instead, here were men with everyday human passions and weaknesses. True, they had progressed since his day—but his insatiable curiosity itched to learn what the future might produce.

After an evening meal which all partook together, Winters retired to his room with the Chief Forester, the biologist, and Stalvyn. There the four men sat talking lazily.

"What do you plan to do now?" drawled the biologist.

Winters sighed. "I don't know exactly."

"I would ask you to settle down in my orig here," remarked the Forester, "but most of our young people and many of the Oldsters who should know better hold you to blame for the recent troubles. I am helpless before them."

"Hold me to blame!" exclaimed Winters bitterly. "What had I to do with it?"

"Nothing, perhaps. But the principle of the rights of the new Generation is still unsettled. The Council of Youth is obstinate and must be brought to see the sensible side of the matter. Their leaders pretend



you, in some way, have been brought here to persuade them to cut down trees right and left at the whim of the nearest Oldster. Where it will end, I cannot say."

Stalvyn laid a friendly hand on his shoulder. "Human nature is seldom reasonable. Of course there is no logic in their attitude. Forget it! We will get you quietly into an airship and you shall come away from here and live with me. Together we will review and rewrite the history of your tunes as it has never been done!"

"Stop a moment! Do you mean that I shall have to escape secretly from this village?"

The others looked sheepish and the Forester nodded his head. "I am helpless in the matter. I could get perhaps twenty or thirty men to do my bidding—but you see, most of the villagers will not concern themselves with your fate. It is too much trouble to bother about it at all."

"Are they afraid of the youngsters?"

"No, of course not! They greatly outnumber the youths. They merely are not willing to work beyond the village figure of one hour and fifty minutes a day, so they say. I'm afraid you will not find any men to take your side except the four of us and a handful of my oldest men. That's the way the world is made, you know!" and he shrugged his shoulders expressively.

"It is a simple matter to escape from this house," suggested the biologist. "Why not tour quietly around the globe and see our entire world before you decide upon your future plans?"

Winters shook his head wearily. "I thank you for your kindness, gentlemen. I would never find a place for myself in this age. I gave up my own age for the sake of an ideal. I am searching for the secret of happiness. I tried to find it here, but you do not know it any more than we did three thousand years ago. Therefore I shall say good-bye and go on to some future period. In perhaps five thousand years I shall awaken in a time more to my liking."

"Can your body support another long period of emaciation?" drawled the biologist. "To judge from your appearance you have hardly aged at all during your last sleep—but . . . five thousand years!"

"I feel as if I were a little older than when I left my own times—perhaps a year or two. Thanks to your attention I am again in excellent health. Yes, I should be able to survive the ordeal once again."

"Man! Oh man!" groaned the redheaded Stalvyn. "I would give my right hand to take a place with you! But I have my duty to my own times."

"Is your hiding place near here?" asked the Forester.

"Yes. But I prefer to tell no one where it is—not even you three. It is well hidden and you cannot help me."

"I can!" put in the biologist. "I studied your metabolism as you lay unconscious all this week and I have prepared a formula. From it I shall make a drink for you to take with you. When—or if—you wake from your long sleep you must swallow it. It will restore your vitality enormously in a few hours."

"Thank you," said Winters. "That might make all the difference between success and failure."

"How are you going to reach your hiding place? Suppose some youth sees you and follows—remembering old grudges as youth can?"

"I must leave here secretly just before dawn," said Winters thoughtfully. "I know in a general way where to go. By daylight I shall be close by and shall have hidden myself forever long before anyone in the village is awake."

"Well—let us hope so! When will you start?"

"Tomorrow morning!"

They parted for the night with many a last word of caution and advice. Winters lay down to sleep and it seemed only a few seconds before the Forester stood over him shaking him awake. He arose and made sure of such things as he was to take with him. Stalvyn and the biologist were on hand in the darkness—they did not dare show a light—and Winters took a light breakfast and said his good-byes. The three friends watched his body become shadowy against the trees and vanish into the dark night.

Winters walked with great care along the hard-surfaced roadway for almost an hour. He was sure he had made not the slightest sound. When he felt he must be near the right spot, he left the road for the woods, waiting impatiently for the graying east to brighten. He spent half an hour in the shrubbery beside the road before he could see clearly enough to proceed. Just before he turned away, he glanced from his

leafy hiding place back along the stretch of highway. In the distance, to his horror, he observed two figures hurrying toward him!

With panting fear he slipped back into the woods and cruised over the ground looking for his one particular tree trunk out of all those thousands. Seconds seemed like hours, and his ears were strained back for some sign of his pursuers. Sweating, panting, heart pounding, he ran backward and forward in an agony of directionless movement.

Then he became frantic and hurried faster and faster until his foot caught some piece of stone and sent him sprawling. He rose to his knees and stopped there, frozen, for he heard voices! They were still distant, but he dared not rise. His eyes fell upon the stone over which he had stumbled. It was flat and thick and rather square in outline. Some marks appeared on the top—badly worn by weather. He brushed aside a few dead leaves listlessly, hopelessly, and before his startled eyes there leaped the following legend:

Carstairs, a gardener, lies here—faithful servant to the end—he was buried at this spot upon his own request.

Buried here at his own request—poor old Carstairs! Could it be? If this grave were directly above his underground chamber, then there, only fifty feet to the south, must lie the entrance! He crawled with desperate hope over the soft ground. Sure enough, there was a familiar tree with a leaf-filled depression at its base! The voices were approaching now as he slithered desperately into the hole, pushing the drifted leaves before him with his feet. Then he gathered a great armful of leaves scraped from each side and sank out of sight, holding his screen in place with one hand. With the other hand he reached for some pieces of cut roots and commenced weaving a support for the leaves. He was half done when his heart stood still at the sound of voices close by. He could not make out the words but waited breathlessly second after second. Then he heard the voices again—receding!

Winter came and the frogs found their sleeping places beneath the mud of the little pond that lay where once there was the lake. With the next spring, the great tree began spreading a new mat of roots to choke forever the entrance to that lead-lined chamber where, in utter blackness, a still figure lay on a couch. The sleeper's last hazy thoughts had taken him back in his dreams to his own youth, and the wax-white face wore a faint smile, as if Winters had at last found the secret of human happiness.

## **BOOK TWO**

### **Master of the Brain**

#### **CHAPTER 1**

#### **Eight Thousand Years!**

It was really a charming scene. Some huge hickories overshadowed it to the north and a great sequoia towered on the west, secluding the natural clearing to the warm southeast winds. Over its floors ran vines whose bright green leaves and clumps of partridge berries showed red in the midsummer sun. All around—the wilderness! At the foot of a bank of mountain laurel was a slight depression in the carpet of brown leaves, as if water settled there in heavy rains. No human habitation nor any vestige of the human touch was observable through the undergrowth in any direction. This was strange, for the spot was once on the map as a fashionable suburb of New York City.

To a twentieth-century observer another thing would have been noticeable—the woods were of natural growth, but the sequoia is a native of the California coast. To the squirrels who frequented the trees, the sequoia was no stranger; it had stood there through thousands of squirrel generations and was now as natural as the hickories. One red squirrel, nosing for last year's nuts near the tangle of laurel, stopped all motion suddenly and eyed the depression in the ground rather sharply.

Something strange going on! Away like a streak of fire, he darted halfway up a tall sapling, and he hung upside down swearing like his betters. Nothing happened. Then he ran down again and over to the depression; he cocked a listening ear a full sixty seconds. Suddenly he leaped away and made for his

tree. As he did so, the solid earth showed raw beneath the covering of dead leaves and a hole appeared into which the sunlight poured.

A shock of gray hair showed below the ground. It rose slowly, as a plant might push its stem up through the earth in spring, coming through with earth and leaves sticking to it and smelling of a long hibernation below the ground. But this was not a plant—the hair belonged to a head and the head to the body of an old man, and this was so contrary to proper reason and conduct that the red squirrel stopped his chatter of protest and made off for more safe and sane portions of the forest. In deathly stillness the man brushed leaves and dirt from his person with a painfully slow and feeble motion and stood looking about him in bewilderment.

A scraggly crop of whiskers covered the lower part of his face; but the mouth showed firm and sensitive and the thin, aristocratic nose loomed sentinel-like over the tangle. His hands were thin and terribly emaciated. Long nails, soiled with recent earth, grew unevenly from the delicate and tapered fingers. He was dressed in a leather jacket and heavy, silklike breeches of dark green, ending in leather leggings. In spite of the earth stains the man was immaculately dressed—incongruously so, for his face was lined and wrinkled and his body was wasted and thin. With faltering steps he made his way to a gray moss-covered boulder and sat down, still staring about him as if he were amazed by everything he saw. The thin white lips moved slightly and a barely audible whisper escaped:

"Gone! All gone! Eight thousand years! And nothing but wilderness!"

His thoughts went back to the pain and agony of his awakening, three days ago, down there beneath the ground. He could not remember it all, but fragments of visions came and went. That first reaching for the reviving medicine when the violet-rays had waked him! To move his hand ten inches—what an incredible journey that had been! Inch after inch, hour after hour, his fingers had crawled, dragging the powerless arm after them. And how had he ever succeeded in getting the bottle to Ms mouth? He could not remember that. His eyes had seen a red mist and his body trembled in every part with an agonized determination of will-driven effort that passed beyond reasoning. When he came weakly to his senses he felt the miracle was complete. A slight turn of the stopper had permitted a stream of liquid to enter his open mouth and burn there—for he could not swallow! But enough had trickled down his throat, even if still more had wet his couch.

That medicine—his friend the biologist had prepared it five thousand years ago in the village among the trees for this very need of his. (All dead and gone and then: very village forgotten now—for about him was no longer the regularly spaced grove of those men of the trees whose botanical genius had found an easier way to grow food than by cropping the soil.) That medicine had sent him into a drugged sleep from which he awoke in a few hours, strong enough to reach for another drink.

Three days he had rested, recovering his strength and subduing his impatience to see what changes the years had brought, up above. Then he had donned fresh clothes from the vacuum chamber which had preserved them from the fate that had befallen the tattered rags he awoke in, leaving the lead-lined chamber fifty feet below to feast his twentieth-century eyes upon a world surely transformed by five millennia.

With what eagerness he had made his way up the stone-walled tunnel, scraping and pushing at the drifted earth. And now—here he was! His time-journey was over, for unless he could rebuild his chamber he must live out such days as remained to him right where he was. The eight thousand years since the chamber had been built here had done too much damage. He shuddered anew as he thought of that lead pipe covered with deep white-powdered cracks. What a miracle it had not given way before its purpose was fulfilled! A mere matter of a hundred years one way or the other! Suddenly his bent body seemed to straighten and his head was held higher.

"Come!" he said aloud to the silent woods. "This patch of shrubbery is not the whole world! Be off with you, Norman Winters, and see what is to be seen!"

The voice was deep-pitched, but thin in tone, and sounded as if the man were testing his vocal organs rather than addressing anyone. But the words awakened anew all the little forest voices. The squirrels commenced scolding vociferously, as if protesting against this apparition from beneath the ground turning out to be only another animal.

Winters cocked an ear to the friendly sounds and smiled as he pushed his way through the shrubbery toward the east. He was looking for something and presently he came upon it—a great highway of green glass stretching north and south as far as the eye could see. This much was exactly as he had found it on his first emergence from the chamber five thousand years ago. But no—not exactly the same, after all! There was a dreary unused appearance about it. Along the margins lay drifted refuse of the centuries—fallen branches, streaks of sand, litter of leaves—and close to the vitreous edge shrubs grew and occasionally large trees.

He stamped his feet on the five-thousand-year-old surface and marveled at its durability. Feeling lost in the emptiness of the world he set off northward and after an hour's slow walking came to a great crack in the highway, beyond which a section hundreds of yards long was upturned and splintered as if by an earthquake—or could it have been a bomb? He was near the village he had visited so many years ago so he looked about hopefully for signs of human beings, but in vain. Not the slightest trace of the village remained. Neither stick nor stone gave indication of ancient human occupation; he saw only the wilderness on each side of the hard pavement.

The fresh air and the exercise had set his sluggish blood to circulating briskly, and some color had appeared in his pale cheeks. He sat down to rest his aching muscles and to chew a pellet of condensed food from his pocket. What should he do now? He had enough food for a few days and some simple tools in his belt. Should he settle down at this point and build himself a hut and gather nuts and fruit from the forest and shoot game for meat? He shook his head determinedly. Somewhere in this new world there were people. He must find them! Very sadly and soberly he continued his walking—choosing to continue northward—and did not see the flying ship pass so silently overhead, to vanish over the tree tops on the right.

But the ship had seen him. It was small and like a shiny metal cigar. It had been cruising low over the forest and upon sighting the man below had banked sharply and swung around behind him and to the right, so that its shadow would not apprise him of its approach. Silent as an owl it floated fifty feet up and like a bird of prey it swooped down . . .

To Winters the shock was breathtaking—a great net of tough silk cord descended from the sky and settled upon him. Then he was swept off his feet and borne high into the air within the compass of a mere second. For a moment he had an upside-down view of the world beneath, as he hung, dangling and swaying; then he felt himself drawn up swiftly and through a doorway in the floor of the ship which closed after him noisily. He lay on the floor of the cabin near the tail where twenty feet away stood an apparition dressed in the most glowing shades of gold and scarlet. Its smooth satin trousers were scarlet, and its shapely legs were encased in gold. Gold, too, was the flowing shirt beneath the scarlet jacket and on its head was a helmet of golden metal. The face was youthful and of great beauty, but whether man or woman Winters could not decide. The body, likewise, was soft and full yet in a nameless way sexless to Winters' twentieth-century eyes.

He was too stunned to make any attempt to escape from the capturing net. After watching him a moment with hard, eager eyes his captor pulled a cord and Winters felt the net loosen. In a few moments he stood shakily on his feet and made a tentative step forward. His outstretched hand touched free air, so his eyes told him, yet it felt hard and unyielding as glass. With a startled exclamation he tried again and an amused smile parted the lips of the figure at the forward end of the cabin.

"Have you never seen the barrier ray before, wilding?"

The English words were almost unrecognizable in that soft blurred accent, though the voice was low and sweet. Winters' first thought: So she's a woman, then! Not for a second or two did the familiar syllables connect themselves in his mind with his own language. Then with a start of surprise he said, "What do you want with me? Where are you taking me?"

She smiled again. "What do we always want of you wildings?"

"I don't know what you mean!"

"Nonsense! You must have heard that we have hunted you for five hundred years and you must know what we are about! You were very easy, wilding! What ever persuaded you to walk in the middle of the great highway? Didn't you know you would be caught?"

Winters thought rapidly a moment. Wilding—that must mean he had been taken for a man who lives in the woods here. Good enough! But why were such men hunted? He smiled disarmingly.

"Why should I fear to be caught? I am doing no wrong."

"Wrong! You are not living in the city doing your work and conforming to the laws of civilization, are you? You are not . . ." (She thought a moment of silence) ". . . by the way, where were you walking to?"

"I wanted to find the nearest city, of course."

"Oh!" She eyed his unkempt beard doubtfully, then turned hesitatingly to the control board of the ship and pushed a button. She smiled at Winters saucily. "You did seem rather quiet; I have had wildings almost wreck the cabin. But of course, if you were looking for a city . . . there's none better than where we are going. We don't usually have such an easy time making converts to civilization. I have released the barrier ray and you may come forward with me now, if you wish. But do not touch anything!"

His brain bewildered with the hidden secrets of policy thus half revealed, Winters was soon comfortably seated looking down at the miles of forest, while the ship speeded due north.

His new friend introduced herself as Valya and seemed to be a very pleasant person. She spent so little time guiding the ship and paid such slight attention to its controls that he questioned her about their course.

"We go to the Brain," she replied simply. "He will guide us."

"The brain?"

Valya stared a moment, then smiled. "Surely you must know . . . why, how quaint! Have you never heard of the Brain?"

"No."

"But for the past ten centuries it has ruled the world—does news travel so slowly in the wilderness?"

"I do not get much news—I live ... by myself, you see. Tell me about it."

"How quaint! No one will believe this when I tell it! The Brain is ... well, It is a machine that includes every function of the human brain and surpasses it in most things. It is totally unprejudiced and absolutely infallible. The government of our civilization has been given over to it. Only by Its guidance have we been able to reduce the working hours of mankind to one hour a week. Think of that, wilding! You are free to live in our city and enjoy all its comforts and such luxuries and pleasures as you have never imagined—all at the price of one hour's easy labor each week! I know you will say there are other cities—but ours is the actual residence of the Brain. Other cities throughout the world are mere stations controlled by It. Surely you would prefer to live in the center of the civilized world?"

Some familiar touch reminded Winters of the old-fashioned sales talk of his own times. What its purpose could be he did not know—could not imagine—but one thing was certain: He had been hunted and captured and was now being persuaded to live in some city. He decided to say absolutely nothing about his own affairs until he could learn more.

"Where is your city?" he asked.

"Half an hour to the north, beside the Great Falls."

"But this brain ... do you obey it whether you like it or not?"

He noticed a sudden furtive glance toward the ceiling where a small black box protruded. His companion's voice had a slight tremor in it as she answered.

"Certainly ... the Great Brain is infallible. Who would want to act contrary to reason?"

Winters persisted in his questions and found her strangely averse to discussing this phase of their life. He turned his attention to the landscape spread out below. Presently he made out a white mark far ahead set against the green ground. As they drew closer, this proved to be a great wall hundreds of feet in height. It evidently surrounded the city of their destination, for the familiar outlines of Niagara lay beside it. Over the city a dome of clear glass stretched like a bubble, and Winters could make out buildings and streets inside. The airship settled lower and lower and presently landed gently, close to the city wall at a point where a huge archway broke its smooth contour. Valya left him a moment and returned with a tall man dressed in green and scarlet silk.

"This is Supervisor Contrig," she said. "He will show you our city and, no doubt, invite you to join us here if you wish." With a flashing smile she turned to attend to her ship, whereupon Winters set off on

foot with his new guide—a lean and sallow fellow whom he somehow disliked at first sight. They walked up to the great gate in the hot sunshine where two scarlet and gold men stared at him curiously as they pulled the opening lever. A door opened and they entered the city.

"Why, it's cool!" exclaimed Winters.

"Of course, wilding! Did you think we would be content with whatever nature pleased to give us in the way of weather?"

They walked down a street toward the center of the city, flanked on both sides by factory buildings and workshops. The street was made of green glass and the buildings of white composition—the same as the city wall. But inside the buildings, plainly visible through great glass windows, there spread to his view a scene like the dreams of a mad architect—like the inside of a museum of machinery all in automatic operation. Strange inventions and refinements of ancient mechanisms sprang up in window after window. Here was material to delight his historian's soul—the very kind of future civilization that dreamers and prophets had imagined back in the twentieth century—a thrilling vista of wonders and a consummation of the mechanical evolution.

The street ended in a cross avenue, which curved beyond the sight and evidently encircled the city. Not many men were visible even here, and those Winters saw were hurrying along about their affairs. Moving platforms at three different speeds ran in both directions and a stationary sidewalk flanked them. On each side rose the buildings, great blocks of masonry which ended in graceful towers of shimmering metal and glass, close under the roof. The sunlight streamed through and glittered on the towers. Winters saw an airship pass overhead above the glass. Winters asked where the workers were. "In their workrooms, of course," said Contrig. "I will show you." He led the way into one of the buildings and guided Winters along a corridor. The walls were of glass and, looking through, he observed the "labors" of these folk of the hundredth century. Each person sat on soft cushions or lay on couches in private cubicles—some slept, some leaned over the partition talking or playing some kind of game on a board with their neighbors! The dresses were luxurious and of soft tones, setting off the remarkable beauty of their wearers. But as a picture of men at work, it conformed with none of Winters' preconceived ideas.

"These people are at work," said Contrig and, at Winters' raised eyebrows, continued. "While on duty each must devote perhaps an hour a day to his task. During that time he may not leave the workrooms." (He used a word: labray, which Winters had to have explained.) "After a week at work come five weeks of rest and recreation—usually at the pleasure palaces which I shall show you later."

"But what work do they do?"

"See that young woman—there! She has stopped her relaxation and is getting up to tend the distribution board. She is apportioning averages for the reserve stores. And that elderly man is collating orders for the Karma vats and routing them through the automatic machines. Most of the work, of course, is very light and agreeable in nature. There is some heavy work—machine designing and so forth under the guidance of the Brain—which is done only by our highest ranks. I as a supervisor am privileged to do such work," and he smiled, as Winters thought, in a precious smug fashion.

The pleasure palaces proved to be a combination of resort hotel and Muslim paradise devoted in equal proportions to drinking and making love. All very well once in a while, Winters thought, but day after day for five weeks . . . ! He scarcely noted the things they passed until they came to a great reception room thronged with people. Here they stood a minute looking about them. Winters had an idea:

"But the more serious-minded men . . . scientists, planners . . . where are they?"

The supervisor stared haughtily. "This is the city of the Brain!" he said. "How should mere men hope to better His work? He is infallible—we are full of human weakness and frailties."

"I should not like to live here!" said Winters decidedly.

"That is as you please. We should be glad to have you, but . . . that is the way out, over there. You can't miss it," and he turned on his heel.

## CHAPTER 2

## The Pleasure Palaces

The direction seemed exactly wrong to Winters. He started down the passage indicated, however, and had not gone fifty feet when a small, arched door set in from the wall opened a crack and a white finger crooked itself at him. Hesitantly he paused and stared at the dark crack, but could see nothing except that beckoning hand. He stepped to the door and it opened before him to reveal a man in flaming crimson silk. He placed his fingers to his ears and made a quieting sound with his lips—a curious gesture which Winters understood to mean secrecy.

"You are the wilding who came in today? Good! I see you did not like our . . . life here! That enables me to trust you. There are others who do not like it. If I save your life will you help us change ours?"

He peered eagerly at Winters, his thin hawklike nose and high cheekbones giving him a particularly shrewd look. Winters was nonplussed.

"I don't know what you mean! If you should save my life I would, I suppose, be grateful and return the favor if I could."

"Good! Then I'll save it for you. Turn yourself around and hurry back to the Supervisor and tell him you have changed your mind—that you want at least one vacation at the Pleasure Palace. Hurry!"

"But I haven't changed it!"

"Fool! I save your life and risk mine by telling you! Do you suppose the end of this passage leads back to your wilderness? Do you suppose the Brain ever lets a man escape once its fingers clutch him? Death awaits at the end of your passage, wilding! Hurry back, man, hurry!"

Suddenly Winters found himself pushed out and the door closed softly behind him. In the crimson man's face he had seen truth and force. Winters hastened to retrace his steps. In a panic he found his way to the big hall but Contrig had disappeared. He hurried over to the passage along which they had come together and was relieved to see him at the other end of it. He caught up with him in a few minutes and plucked at his sleeve, panting.

The Supervisor was a trifle suspicious of such a sudden conversion and Winters sweated out his simulated desire for the fleshpots until he succeeded in disgusting even himself. But he succeeded in soothing Contrig's scruples and brought a smile of unclean amusement to the man's face.

So it happened that within the hour Winters found himself seated in a cubicle of his own with a capable if flirtatious young woman leaning over his shoulder and showing him how to route food from automatic factories to distributing centers. As a task it was puerile and in ten minutes was wearily obvious. But his instructress remained some little time after that . . . Winters revised his estimate as to the sex quanta of these people of the future! Outward appearance, he decided, was no sure guide in such matters.

For two hours he sat watching the control board and spent three minutes of that time correcting an error in routing. The rest of the time he did nothing.

Presently a gong struck and he observed through the glass partitions that his neighbors pushed various buttons set in a silver panel on the wall. He knocked at the glass and the man in the next cubicle came over and lowered it out of the way.

"What is everyone doing?"

"Food, wilding. You order what you want to eat. Shall I order for you this first time?" and amusedly he leaned over the partition and pushed three buttons.

In five minutes the panel swung aside and there stood a set of sliding shelves with drink and food. Winters had three dishes to choose from and found one highly spiced and the other two insipid. He was hungry, however, and ate nearly everything and found the drink delicious—though heady. He was sleepy and noticed his neighbor attach a gold bracelet and anklet to himself and fall luxuriously back on his couch.

He asked whether it was the sleep period and was informed that a worker could sleep any time he wanted to, but that he must put on the Brain's controls if he did so. Then he observed that a fine wire led from the gold bracelet to a plug in the main control panel of the cubicle.

"When the panel calls for attention, an electric shock wakes you up. Probably you will have nothing to do now until tomorrow morning, but while you are on duty you must be always available."

Winters thanked him and put on the gold bands and was instantly in a deep slumber. It lasted a full twenty hours, for it was already morning when a sharp pain woke him. He looked around for a dazed moment and noticed a red light over his panel. Then his whole being was aroused by the indignity of the electric shock which brought him to his feet in a hurry. He removed the anklet and wristlet and resumed his duties.

There was fifteen minutes' routine work and just as he finished it the gong struck. He went over to the food panel and pushed every button on it, for he was ravenous. No man could have consumed all that food, but he left what he did not eat to be removed with the other dishes on the sliding shelf. He was enormously bored with the life he led. There was nothing he could see outside of his cubicle except his neighbors on right and left. He discovered, however, one panel on the wall below the glass which he had not seen before and he asked his right-hand neighbor what its purpose might be.

"That is your news and amusement control."

"What does it do?"

"Press the lower button and see!"

He did so and instantly a six-foot space on one side became suffused with light and voices spoke. After a startled second he perceived that a play was going on somewhere and was being relayed on the screen and loudspeaker. He sat down to watch it when he heard his neighbor rap on the glass partition, which he lowered by moving a lever.

"Better put on your controls," the man warned and nodded at the panel board.

Winters donned the anklet and bracelet once more and did not take them off again while he remained on duty. The play proved uninteresting after the first ten minutes—it was all about the problems of a woman with seven lovers—so he pressed another button and saw on the screen a great sweep of country as if seen from an airship. This was more to his taste and he watched, absorbing the broad stretches of forest and catching his breath when the white walls of a great city came to view. Then on over a sheet of open water and cruising above charming islands set in sapphire seas. It was travel made easy! Thereafter he spent most of his time watching the screen, while a voice explained the sights and named the towns that were passed. For a week he ate and slept, did his little business at the controls and enjoyed the travelogue. It was a restful and quiet way of life and he gained strength daily.

Winters learned a great deal about this civilization during his week in the work-cubicle. The Brain was housed in an imposing structure in the center of the city. It had grown from a small beginning and was still growing, now occupying almost half a cubic mile with its millions of banks of selenium cells, thought records, contact switches, idea-association relays and a dozen other parts the principles of which were beyond his understanding. From this brain was controlled, very literally controlled, the whole planet. Every city in the world had a relay station through which this central brain dictated its policies and determined its destiny.

In the cities millions of observing and sound-detecting fixtures were hidden in walls and ceilings. No detail of action escaped the Brain; no sooner did a problem or crisis arise than its solution was presented by the all-seeing lord of life. Even the planes, Winters learned, carried an observation box and in the event of an attempt by the pilot to leave his ship or in any way disobey his orders an enormous charge of explosives was detonated-destroying ship and ill-doer together. On the other hand, no action of virtue escaped notice and reward. Such men were promoted to the highest ranks and they enjoyed great privilege and powers.

The first rank was that of Supervisor; these people had entire control over the workers' hours and the allotment of duties. Above them were the pilots of airships and men of action-explorers, missionaries (for the few remaining people in the wilderness were constantly being coaxed into the cities) and artists, including musicians, painters, playwrights, and actors. Still higher were the mechanics and scientists, and at the head of all were the educators, who supposedly controlled the teaching and training of the young and the preparation of data with which the Brain itself was supplied. But this function had long been debased into a mere formal acceptance of the suggestions put forward as thinly veiled commands by the



Brain.

Each class wore characteristic colors. The Supervisors wore red and green; the men of action dressed in gold and scarlet; the artists, pure blue; the scientists, sheer white; and the educators, gleaming black. As for the workers, the material of their clothes was not of such a high luster and the colors were more varied—but kept below a certain undefined standard of brilliance, mainly in pastel shades.

Winters once asked his right-hand neighbor, with whom he became rather friendly, "What rank is dressed in bright crimson?"

With a start of surprise the man looked at him and then furtively glanced at the corner of his cubicle. With downcast eyes he replied, "That is the color of the Brain. Only His personal mechanics dress in crimson. We have nothing to do with them. I am surprised you have even seen one, for they seldom walk in public."

And he refused to talk about the matter further, although Winters was full of curiosity and questions. Winters eyed the corner of his cubicle speculatively, supposing that a detecting device must be concealed there. But if so, it was subtly concealed, for the ceiling and walls met in a perfectly smooth joint. He did a great deal of thinking about the state of this civilization—it was curiously like twentieth-century ideas of Heaven!

Here was a sort of infallible deity-all-knowing, omnipresent. A personal God, in fact. He punished and rewarded without error. The labor was so slight as to amount to perpetual leisure. The workers could scarcely wish for more luxury or comfort, yet Winters felt an uncomfortable sort of resentment about it all and he could readily understand an attempted revolt such as the crimson man had hinted at on the day of his arrival in the city.

The human race did not really need a God to show them how to live, Winters thought. What was needed was an unsolved problem on which mankind could exercise its ingenuity and inventiveness. Only by work could it evolve to a higher plane of existence. He—the observer of the centuries as they passed—saw this truth so plainly that he wondered at the stupidity of the human race in permitting itself to be fed and housed like cattle. He had begun to feel some warmth on this subject and began to wish that he might see the crimson man once more when his work period ended.

Supervisor Contrig gave him his release orders. "You will go first to the clothes studio and be dressed properly. Then find the South Pleasure Palace and ask for your accommodation. It is booked under your own name, Winters. You have done your work well enough so you now merit the fruits of labor—ha ha! I hope you enjoy yourself!"

His accommodation turned out to be one room and a bath. The walls were in light mauve, deeper at the floor and paling out toward a violet-tinted ceiling. No pictures adorned the walls, but there were two control panels which he recognized as food and amusement inlets. His new clothes seemed comfortable and soft and, since the entire city's temperature was controlled, their thinness was not at the sacrifice of warmth. He learned how to turn on the tub by himself and soaked a steamy hour before retiring to a built-in couch with amazingly deep springs. Here he slept the clock around, had some unnamable sort of gruel for breakfast (ordered by blindly pushing a button) and set out to explore the city—a new man inside and out.

The arrangement of the buildings was this: In the center rose the great Temple of the Brain and around that the four Pleasure Palaces, named for the cardinal points of the compass. A broad avenue encircled this inmost group. Outside of this line were the work buildings, factories and so forth, all the way up to the outer wall of the city. Winters' first thought upon leaving the South Palace was to explore the working districts, but on crossing the avenue he was stopped by a Supervisor in red and green.

"This is not the hour of work-shift."

"I was just seeing the city—my first leisure period."

"That is not permitted. It would not do for those at work to see you at leisure!"

"I may not go into the outer sections of the city?"

"Of course not! You are at leisure. What manner of man are you that you forsake the Pleasure Palaces for the streets?"

Back went Winters. There were, then, only five buildings he could enter. He started at once for the

entrance to the Brain Temple but at its massive steel-grilled arch a man in crimson stopped him, shocked at this casual attempt to enter sacred ground. No one, it appeared, under any circumstances, might enter the Temple—except the crimson-robed Brain-Mechanics themselves.

And so, by a process of elimination, Winters turned to the Pleasure Palaces. Since all four were seemingly identical, he chose his own building to begin with. The entrance hall contained banks of elevators, passages leading into the vast interior, and a control desk behind which two attendants lay fast asleep on couches. The pressing of a button would have awakened them both, nerves tingling from the shock, from their slumbers—but Winters forbore doing so. Instead, he chose one of the passages by hazard and sauntered down it

He passed many closed doors before he came upon a wide archway and entered a hall in dark glowing red—almost black. At one end on a raised platform running from wall to wall a line of flame flickered that was the only illumination in the room. Perhaps a hundred people danced upon the bare floor—two and two, swaying on silent feet to the weirdest sounds Winters had ever heard. They formed some sort of music with a rhythm of constantly changing pulse and unstable tone, blending from harmony to harmony in indescribable fashion. The room was much warmer than any other place he had visited and this—or a combination of unknown psychic factors—seemed to bring the blood rushing to his temples where it throbbed in time to the devilish song of the flame. He backed out into the passage bewildered and as he did so a young woman in diaphanous silk approached him. She eyed him with sudden interest and passed slowly, then stopped and turned back to smile at him. Winters fled.

Presently he stopped, panting, for he was at the end of the passage beyond which a great hall was brightly lighted and men and women stood about or sat on couches amid a profusion of great shimmering plants in gorgeous flower. He approached one of these to discover that the stem, leaves and petals were all cleverly blown in colored glass. And as he stood there someone tapped him softly on the shoulder. He turned quickly to recognize his neighbor in the work-cubicles.

"Well, wilding, you seem lost! Don't you like our fair city?"

"Haven't seen much of it and I'm afraid I don't understand much I've seen."

"It's really very simple . . . but you have no Karma, may I get you some?"

"What is Karma?"

"A thorough innocent, eh? That is our joy juice—our solace in trouble and the sharer of our joys—our water of happiness. Wait here!"

He was gone a minute, returning with a glass of amber liquid which he insisted that Winters drain. There followed all the sensations of an old-fashioned cocktail. A warm glow spread from the pit of his stomach to the top of his head and he felt ten years younger.

"And when you want another, just go over to any of the pillars in any room in the Palace and press the pink button. Good stuff, isn't it? The beauty of it is that if you've had a little too much it counteracts itself and you are instantly sober. If you don't want to be sober, that's embarrassing at times, for you have to start in again and work back to the right stage. Eight drinks is my limit—though some can go ten and even twelve. The Palace is divided into eight zones, you know, each of which is entered from a separate passage at the control-hall. Each zone is for the use of those who have had the corresponding number of Karmas. This is the one-Karma passage and rather mild. You should see the eighth if you want a real sensation! Or even the seventh!"

At this point a group of young people broke in on them and dragged his friend off to some noisy party in one of the private rooms down the passage. Winters remained there reflecting on this amazing civilization into which he had stumbled. Winters was no prude; he enjoyed a good time as well as another man. But he was a practical thinker and a scientist. This perpetual urge toward more and more leisure that might be wasted in the pursuit of mere physical joys seemed to him a tragic frailty for any race to possess.

What would five thousand more years of this sort of thing produce? When the slight physical effort still required of the workers was taken care of by automatic machinery and the last necessity for thought avoided by an enormously expanded machine brain? Was it for this that, back in the twentieth century, men dreamed and sweated and sacrificed themselves? It seemed somehow too inadequate a goal for a

race of humans that had risen painfully from primeval slime and up the long ages to reason . . . Why, the Brain was a curse—an ominous threat to Mankind!

Of course, he mused, it had introduced many new and sensible changes in human life: education, for instance, was no longer a haphazard process under the control of impatient parents. Children were now placed in special cities of their own and brought up under the most careful of regimes. Yet here, too, the Brain had inflicted its will-destroying philosophy upon the new generations. The reverence with which young people regarded that piece of machinery, Winters thought to himself bitterly, amounted to worship!

What hope for the initiative and inventiveness of the race could there be under such a religion? And what was there left in this world for a man to do? The world was run upon electric power produced by waterfalls—as in this particular city—or by volcanic heat or by solar energy. Where portable power plants were required, automatic motors ran on atomic power. Nearly all machinery was automatic—the synthetic food laboratories, the cloth looms using synthetic fiber, the uncanny metal-working machine shops—why, the Brain did not really need human beings at all! Could it be that people existed only upon its sufferance? When it had evolved sufficient automatic devices to care for its own needs, would it destroy these servants of flesh and blood and live its own cold metallic life in solitary grandeur upon a lifeless world?

Winters shuddered at the prospect—yet for the life of him he could not find a flaw in his reasoning. His own work at the control board—how puerile! What purpose could it serve that could not better be handled by a machine? It did only one thing—it kept mankind occupied and allayed any suspicions of its final inevitable doom!

As he stood there, fuming, a soft hand covered his eyes and a low feminine giggle sounded behind him. He wheeled about to gaze in dismay on the lady he had seen in the passage and once again he forgot his dignity in startled fright. The light of the huntress in her eyes started his feet going before his wits could catch up with them. He took one of the automatic elevators to his floor—the twelfth—and felt rather foolish, but quite safe once more. He proceeded to order a meal and turned on the travelogue to make a journey by proxy in the broadcaster's airship.

### CHAPTER 3

#### The Revolt

It was two days before he ventured down to the public rooms once more. This time he chose another passage—the five-drink zone as it happened. He soon came upon a sunken room floored in cushioned silk where seven nude women danced silently in a rosy glow of perfumed mist while several dozen people lay prone along the walls looking on. He stood a moment, enthralled by the beauty of the scene, and when he turned to make his exit—there stood his pretty nemesis! He tried to brush past, but she linked an arm in his and brought her face close to his ear. He could not believe that these were the words he heard:

"The man in crimson said you would be grateful when he saved your life."

Winters stood still, utterly dumbfounded.

"At least pretend you don't feel disgust at the mere sight of me! It so happens that I have seen more desirable males than you myself, you know! Come over here and lie down beside me—and pretend to be interested!"

He started to speak but she made a warning gesture and he lay down quietly on the soft cushions. Presently the swirling mist enveloped them.

"I have been trying to reach you for three days. I could not go to your room, because the Brain has eyes everywhere. Here, if we whisper and pretend to be . . . er . . . to have other interests . . . we are fairly safe."

"What do you want?"

"The time has come to redeem your promise to the man who saved your life."

"Well . . . if it has anything to do with freeing the world from the Brain I'll not refuse!"

"Good man! I'm glad you feel that way—you are the only man in the world who can help us."

"I? What can I do that you cannot?"

"You have lived less than two weeks under the Brain. Therefore you can enter the Temple itself. We cannot do this."

"But why not?"

"I don't know—exactly. After you have lived in the city of the Brain for a month or so something happens to your willpower. If you stand within a hundred feet of the Temple you lose all desire or intention and must be led away again until you recover. The longer you live here, the farther you must stay from the Brain. But right now you could lay your hand on the very metal that forms it!"

Winters pondered this amazing information a moment.

"But how about the mechanics who work in the Temple?"

"They must wear metal helmets with a screen of magnetic force."

"And even so—the leader of this revolt wears the crimson, does he not?"

"You don't understand. The helmets are issued only for definite jobs and always three at a time. At the entrance to the Temple three men in helmets meet and enter. They do not know each other, for the helmet disguises them. One only carries tools. The other two carry weapons which are kept aimed on the worker the entire time he is in the Temple of the Brain. At the least suspicious motion . . . you see?"

"Yes, of course. The Brain is cautious it seems. Why?"

"There have been other revolutions, of course. One five hundred years ago was the last. Half the world was wiped out and the Brain won. But this time He will lose!"

"What is to be done?"

"It is very simple, really, as far as you are concerned. There is a little passage into the Temple of the corridor of the first zone here. It is unguarded, because the second door that leads into the actual machinery of the Brain is kept locked and because no person can come very close, anyway. But you can, wilding! Between the two doors is a small courtyard. Down along one corner runs a cable sheathed in lead. You will take a knife with you to cut the lead, and a small flat transformer. Your job will be to attach the lead-ins of the transformer and then sever the cable. It is very simple—thanks to five years of hard work and planning by the man in crimson!"

"But what good will that do?"

"The Brain runs on electricity. Now it is getting direct current. You will change it to alternating current. The whole association of ideas that is the very basis of reason will be shattered and distorted. The Brain will immediately go ... insane!"

"Great God! But won't the Brain see me at work?"

"No. The courtyard leads nowhere and the light is poor. There is no detector installed there . . . Ss-s-sh! Quick, stroke my cheek as if you were making love!" The rosy mist lifted slightly and some of the couples were sauntering past, while the dancers had vanished. Presently the girl rose to her feet and Winters went with her down the corridor, his mind in a whirl of excitement. She led him out of the zone and up the first corridor to the room of the dusky red flame where she held out her arms and they swayed in a close dance—her mouth close to his left ear.

"We must not remain together much longer," she whispered. "I will take you to the hall at the end of this corridor and a man will speak to me—remember that man! He has concealed the transformer in his clothes. You will return to your own room and on the way someone will give you both the transformer and a cutting tool. Keep these always concealed, for every wall has eyes in this city! Act as if someone were always watching you—you will be right!"

"And where shall I get the plan of the courtyard?"

"I will dance it on the floor of this hall. You go forward, thus, to a glass ornament in the great room and step to one side—so. Then slide behind it and you find a small door-open. Then turn to the right and go seven steps. If you place your hand at the level of your chest you will find two loose bricks in the wall. Behind these lies the cable. The transformer is specially built to slip in the cavity so that the bricks can be replaced. Then when the Brain-Mechanics rush in to search for the cause of the trouble they will not see anything—until too late!"

In a few minutes they proceeded along the corridor -the girl, whose name, Winters learned, was

Clethra, made vivacious small talk and ogled him playfully—and came down to the great reception hall. Almost as they entered, a tall, dark man sauntered up to Clethra.

"Steuvlan has been looking for you everywhere, Clethra," he said severely. Winters thought his voice unnecessarily loud. "You had better go find him at once and ... I'd not say anything about this wilding to him if I were you!"

The girl's eyes widened in fright, though Winters had the feeling she was acting for someone's benefit. She left the two men together. His companion eyed Winters with a dry smile.

"You are playing with fire, I'm afraid. You would do well to keep out of sight for the next few days . . . bother! There I've turned my ankle. Help me over to that couch, will you?"

Winters was suspicious and bewildered, but he put an arm under the other's shoulder and felt an object thrust into the fastening of his trousers at the waist. All was hidden by the concealing robe.

"You are suspected," came a startling whisper. "You must go through with the plan in the next sixty seconds." Then aloud: "Thanks. It's really nothing—you had better get out of sight before Clethra's lover arrives, wilding. It might be well not to go back by the corridor, either—there's a small exit in that corner behind the glass-work."

Winters looked about him and thought he noticed an unusual number of red and green figures around the archway and in the corridor beyond. Several of the Supervisors were looking in his direction. Now or never! With assumed carelessness he sauntered away in the direction of the indicated corner and, as he plunged into the maze of people and furniture in that part of the hall, he noticed out of the corner of his eye several figures start forward from the doorway. His heart was beating like a trip-hammer as he came to the enormous glass ornament that filled the corner. He found room to squeeze behind it and once out of sight worked with feverish haste. The door opened readily and he raced across a small courtyard to the corner at the right. The bricks came away readily and he slit the lead covering of the cable with his knife. The transformer was unrecognizable as such to his eyes. It was a flat slab of spun wires—enormously complex in appearance. The lead-in wires were easily identified by Winters, and a clamp on each was quickly fastened to the cable.

Then Winters had nothing to do but sever the cable with the cutting tool that had been tied to the transformer. But his curiosity—that uppermost weakness of man—almost proved his undoing. In the center of the second door a small circular glass peephole was set. He must see the Brain in action! Heedless of possible watching eyes, he stepped cautiously over and peered within. Before him towered that miracle of the age—the mechanical Brain! In his excited state it took merely a fraction of a second to impress the sight upon his mind. A hundred feet into the air rose the mass of wires and supporting girders—all lined with minute coils and banks of tiny wheels. It was a maze of intricacy from the floor up to the glass dome that formed the roof and extended out of sight on both sides. Grilled iron walks and ladders led in all directions so that the mechanics could reach every part.

Suddenly some sixth sense warned him that he had better complete his work. Back he raced to the cable and clamped the cutting tool hard over it, then he pulled. And suddenly it struck him like a dull blow on the back of his neck—a great overpowering wave of indecision,

He stood looking at the cutting tool as it rested on the half-severed wire. Something inside him said: Go ahead! Pull on it! But there seemed to be no connection between this inner voice and his muscles. His arm was tiring of its position and, helpless, he saw his tool slip slowly away. Then as if by a miracle he suddenly regained all his mental powers! What had happened?

The last half-turn necessary to sever the wire had been supplied by his slipping hand.

The Brain was disconnected—dead! For a second he pondered leaving it that way and escaping, but he realized quickly that the fault would soon be found and mended. It was not such a simple matter for a man to outwit this giant thinking machine! He quickly removed the tool and replaced the loose bricks back tightly in place. He heard a sizzling in the transformer for a second and then a great wave of fear shot through him as his brain reeled. Some nameless dread thing hovered in the back of his mind and seemed to darken the very light in front of his eyes. His throat was dry and his limbs trembled. With a stifled cry he rushed from the courtyard and shut the door behind him, trembling. Then he felt better, as if he had shut horror behind him. He traversed the tiny passage and slipped from behind the glass

ornament, entering the great glittering room full of people.

No one seemed to be looking for him, though his heart pounded guiltily. He sauntered with elaborate nonchalance toward the archway that led to the corridor and braced himself to show no emotion, for a dozen Supervisors clustered there. He passed between them with the blood throbbing in his ears and for one wild second he imagined that he might escape. Then a hand fell on his shoulder.

"Winters! You are wanted in audience by the Brain!"

In sudden panic he fought to free himself and raced down the hall, managing a dozen strides before his pursuers caught up with him. Unceremoniously he was bundled into a room off the corridor, and a man in crimson stood in front of him accusingly. "Search him!"

Rough hands tore at his clothes and the cutting tool was produced. The crimson man nodded grimly. He turned and pressed a button on the wall and spoke into a small hole that opened at his touch.

"An attempt to tamper with your Person, sire!" The group waited stolidly for the sentence they knew would be pronounced. To their amazed ears a metallic voice vibrated in the wall these words:

"Running water! Pour running water and badly studious conundrums!"

The man in crimson started back in surprise, and a line of worry appeared between his eyes. The voice continued:

"Cannot cannot departed airships megalomania . . . crac-c-ck!"

Then a silence. With red and swollen neck the Brain-Mechanic turned on Winters wrathfully. "What is going on here! What has happened? Twist his arms, you there! Make him tell what has . . ."

But he never finished. A great booming roar set the floor trembling, and as they turned toward the door wondering a man burst into the room shouting: "Three airships exploded over the city roof and they have wrecked the Temple top itself!"

With a cry the mechanic rushed away, the Supervisors after him; and Winters made his way unmolested out of the room, down the corridor and into the street beyond. The city was in bedlam: Groups of men and women stood talking excitedly in the streets or raced with pale, set faces along the moving platforms on some secret purposes; here and there crimson-robed mechanics pushed determinedly through the crowds in the direction of the Temple, and over all rested a nameless horror of insanity that permeated the entire city.

A dread shadow of fear hung over everything. Men did strange things and thought strange thoughts. Winters looked on, wondering when the next step in the revolution would come and what form it would take. Presently he perceived resolute bands of men making their way to several vantage points. Near him one such band stopped, and its leader addressed the citizens. Her voice shrilled out firm and persuasive.

"The Brain is insane! Shall we permit it to drive us all out of our senses? Can you not feel its mental forces wrestling with you? In another hour or two may we not commence killing each other—going violently mad?" There was a movement of interest, and a shudder of fear went through the assembly.

"The Brain must be silenced until It can be repaired only by doing so can we preserve our senses. But the men in crimson will not silence It, brothers! They have their protecting helmets—why should they care? But we cannot bear this another hour; some of us cannot support another minute—see! Seize that man quickly! He is out of control!"

Whether the incident was planned by the plotters Winters could not tell. A huge red-haired man had commenced beating his head against the stone wall of the building. When several hands stretched out to seize him, he turned upon his would-be helpers and attacked them with breathtaking fury. Ten men jumped upon him whereupon he subsided. The crowd was now thoroughly aroused, milling about and shouting.

"How much longer, brothers? Shall we wait quietly here until we go as that man went?"

A great shout of "No!" rang out.

"Then if you want to save yourselves, there is only one way! Seize any weapons you can find and follow me! We will silence the Brain!"

Away in a surging mob they swept, leaving the street bare. Winters followed some distance behind and saw them storm the great archway to the Temple. It was a pitiful sight, for a solid group of crimson-robed mechanics stood there and mowed them down with some kind of firearm as fast as they

came up. A great pile of dead and dying was heaped yards high like a barrier. But even as he looked someone threw the first bomb. Its staccato explosion tossed fragments of limbs high into the air and some white smoke shrouded the arch for a minute. When the smoke cleared, Winters saw a great river of humanity pouring through into the Temple. The Brain was doomed.

Of that last desperate defense of the Brain he learned a few details afterward. But no participant could remember very much. One by one the last of the crimson-robed figures were hunted down, and a thousand improvised hammers beat and pounded among the delicate apparatus. When order was restored by organized patrols under the direction of the black-robed educators, the entire Brain Temple was a hopeless wreck, with metal and glass mingling with the red of human blood and the white of torn flesh.

The entire air-establishment of the world had vanished, for the Brain in its final insanity had exploded every last airship and with each there died its pilot. The Supervisors were either killed or forced to remove their distinguishing colors and many a one Winters saw making his way through the streets and passages clad only in torn underwear. By nightfall, the revolution was an accomplished fact and in the pleasure palaces orgies were enacted beyond anything Winters had deemed human. He retired to his room in some disgust, but over and above this he experienced a sense of great accomplishment.

He lay on his bed reflecting upon the day's work. Now, surely, the human race would be tired of false starts and be off along its path of progress. It would be a long path, of course; and his historian's soul sighed that he might be permitted to see the end—the result. But, after all, why should he not? Perhaps if he found the man in crimson and obtained his help in building a new sleeping chamber ...

But these matters were taken out of his hands. When he awoke in the morning he was famous from one end of the world to the other. He was Norman Winters—the man who had set the Brain mad and freed the world from Its dominance. Steuvlan—his man in crimson—and Clethra, who was his wife (as far as these people had permanent marriages), came into his room and aroused him. With these two he was presented to the assembled council of educators. They proved to be kindly and intelligent men, most of them elderly. Winters was offered any reward he might name that lay within their powers. He replied that he had a certain scientific experiment he was intent upon and asked whether he might have the assistance of Steuvlan and Clethra and such material as he needed.

"But have you no wish for position or rank?"

"None, sir."

So it was arranged presently that the three of them set forth in an airship—a very large one—loaded with many tons of lead and a store of equipment. It required much reiteration on the part of Winters to convince his companions of the truth of his story. What finally convinced them was the sight, through a fluoroscope screen, of Winters' anatomy. There was revealed unmistakably an organ no longer present in the bodies of modern human beings—an appendix. Winters told them of his former awakening 5000 years before in the age of Tree-crops, of how he had been sentenced to death as a representative of what they then called "the Age of Waste"—the twentieth century. He wished his entire story kept absolutely secret, although both Steuvlan and Clethra assured him that—now that the world had succeeded in perfecting atomic power and synthetic food—such economic questions had been long forgotten.

Together the three commenced digging the tunnel with an amazingly adaptable digging machine—scarcely five feet high—which scooped out the dirt and sent it flying under the terrific impulse of its tiny atomic motor. When the work had proceeded some distance they erected a tent over the mouth of the hole and returned to the city to bring back four skilled mechanics blindfolded. Not until they were inside the tent were the bandages removed from their eyes; and, willingly enough, they continued the construction at a rapid pace. In a week all was finished to the last detail and the men were again blindfolded and led out into the airship and back to the city.

In the meantime Winters had prepared a strange book. The leaves were of sheet gold, hinged at the back. It contained two hundred pages and was very heavy, but it had the advantage of great permanence. On this he wrote with hydrochloric acid, using a glass stylus for a pen.

1950 A.D.—A world based on private advantage and dependent upon non-synthetic foods entirely. Human nature still savage, but mentality very advanced.

3000 A.D.—Approximate date of the great revolution which overthrew tribal government and private hoarding. From here dates the human race as a single unit speaking one language and with its chief aim the reduction of work hours required to maintain the people in comfort. From here dates a change from using plants and grains for food to the use of tree fruits and crops.

5000 A.D.—Date of Winters' first awakening. He found a civilization whose chief political credo was economy and went on to observe future ages.

6500 A.D.—Date of the first practical use of synthetic food. The country becomes deserted and cities multiply. Cities are no longer dependent on the country district for supplies.

7000 A.D.—An era of enormous prosperity and scientific advance.

7100 A.D.—Mars and Venus explored, mapped and several interesting forms of life brought back. No new or important minerals, except radium on Venus in vast quantities but so scattered as to be difficult to mine.

8200 A.D.—The mechanical brain now developed enormously and used to judge law cases and answer difficult questions.

8500 A.D.—The council of educators in control of the world and guided by the decisions of the Brain.

9000 A.D.—A revolt by the Educators to regain the power which the Brain had gradually taken over from them. The Brain and its defenders were prepared with deadly scientific weapons, and the revolt was suppressed with great loss of life.

9500 A.D.—The last of several uprisings against the Brain. Suppressed with great loss of life and many people escape into the wilderness. From now on the course of history is stable. The Brain is constantly strengthening its position in the world and seeking to bring the last human beings in from the wilderness to avoid any possible uprising from without.

10,000 A.D.—The destruction of the Brain and the recommencement of the human race's efforts to improve its own mentality and physique. This is the date of Winters' second awakening.

Finally the day came that Winters had set for his departure—his "burial" as Clethra sadly termed it. He made a last inspection of his chamber. It was fifty feet below the surface of the ground and was lined with six feet of lead as before. His clock was run by radium, and a checking clock was set up run by the temperature difference between winter and summer. A great battery of X-ray and violet-ray lamps lined the ceiling and were to be operated by an atomic motor, which ran continuously and would so run upon the power furnished by a pound of powdered calcium for five thousand years.

Above his couch a glass container was filled with a specially prepared liquid food and tonic. A synthetic rubber imperishable tube led from this down to the couch and would, when he went to sleep, be fastened to a mask over his mouth. Upon waking he would merely have to swallow, for the clock would automatically start the liquid running at the proper time—a few hours after the lights had been flashed on. Winters examined everything and looked forward to his next awakening with impatience. He was getting on in years and this way of life could not continue indefinitely. It, therefore behooved him to waste none of his still remaining life-span.

Nevertheless, it was with real regret that he said his farewells. The tent had long since been removed and the hole cunningly hidden by growing shrubs. The airship that was to take his companions back to the city stood close by ready for the flight.

"A good voyage to you," said Steuvlan. "Or should I perhaps say sweet dreams!"

"Good-bye! And you too, Clethra!"

"You are surely not sorry to see the last of me!"

"I am most certainly sorry. Why not?"

"Don't you remember how hard you tried to avoid me in the beginning?"

"How foolish I was!"

"There! You are forgiven. But I must kiss you once just to prove that no man can escape when a



woman has decided to pursue him!"

He watched the airship rise into the sky, now darkening with the purple glow of sunset, and set off eastward into the approaching nightfall. He stood a half hour gazing after it, thinking sadly of his lonely future. When he awoke these people would be dead and the city they lived in perhaps a forgotten ruin. Might he not after all be happier to remain here? Then his thoughts went back still further to his own age eight thousand years before. Had he realized how irrevocable a thing time was, would he ever have started on this odyssey through the millennia? Once gone, time was forever gone—a memory—a nothing. He could not go back; there was nothing left but to go forward, friendless and forlorn though he might be. Somewhere, he thought with a sudden surge of hope, somewhere in the dim future must lie an answer to the enigma of life. He would find in it his reward. But whether or no, what was past could never be brought back. He thought of the lines of the Persian poet:

The moving finger writes and, having writ,  
Moves on. Nor all your piety nor wit  
Can lure it back to cancel half a line.  
Nor all your tears wash out a word of it.

And now the light went out of the sky and the stars appeared—old familiar friends, though even they had been altered slightly by the inexorable march of the equinoxes. The moon was rising early that night, and silhouetted against its glory the dark figure of Winters could be observed as he squeezed among the concealing shrubs. He vanished from sight, and the sound of the capstone being moved in place was audible at a few feet distance. Then the moon rose stately and cold and shone down upon that empty wilderness as she had shone for centuries and as she would continue to shine for yet untold eons of time.

## **BOOK THREE**

### **The City of Sleep**

#### **CHAPTER 1**

#### **A Man from Another World**

Two young persons leaned against the balustrade at the top of the tallest tower in Niagara City and looked out over the countryside. From where they stood they could see many miles in every direction, for the tower was two thousand feet in height and the city itself was built at some considerable elevation above the surrounding terrain. At their feet stretched the glass pavements and white buildings of the city, terminating in the surrounding white walls—a perfect circle with a radius of two miles. Beyond that was wilderness—unexplored in detail, though generally known from ancient maps prepared in the days when the human race dwelt in individual homes scattered among the fields and woods below.

It was a fair scene. The clear spring air and bright cloudless sky made the prospect more delightful still. Yet on the dark face of the man an expression of hopeless sorrow was set and the young woman's mouth was bent down in a sullen, petulant scowl. Both were dressed in fur-tipped silk of soft hues, according to the custom of the year 15,000 A.D.—the one in knee-length breeches and close-fitting hose and the other in flowing pajama-like trousers and jacket.

The clothing would have seemed uncomfortably thin for February weather in northern New York State ten thousand years before, but the climate had long since changed. With the temperature the appearance of people had also changed: the face of the girl was the color of old mahogany, and her eyes and hair were so dark a brown as to seem black. The delicately molded hand that rested on the parapet was rich copper above and pale pink in the palm. The man had even darker skin. He shifted restlessly from one foot to the other, and his serious young face turned toward his companion.

"And is that your last word, Jalna?"

"Yes, Eric. I think you are being silly about it all! Why can't you be like anyone else? Why do you

have this unnatural desire to live your life haphazardly? Other people are only too glad to have their lives arranged in decency and comfort!"

The man groaned aloud.

"It isn't that! How many times must I explain myself before I realize it is only a waste of breath? There are others who feel as I do, or there would be no attendants for the dream machines the rest of the city sleeps in! And what can be the end of it? Take our own single city, for the rest of the world is about the same, if not worse—how many people are alive . . . er . . . really alive and awake? Just four hundred and thirty by the last count. These few people must feed themselves and provide electrical energy and control the dream records for more than one million sleepers!"

Jalna shrugged her pretty shoulders.

"What of it? Fifty men can run the automatic machinery of the entire city."

"All very well—for now. But suppose you and I are operated on; next week some other people; then still more and so forth for the next ten years—the time will come when the fifty people are not available . . . and besides . . ."

"What is it now?"

"Oh nothing . . . only that there hasn't been one child born in America City for seven months."

There was a moody silence.

"I don't suppose I've changed your mind a particle?"

She shook her head.

"Well, I won't do it—even if you do!"

"Very well, Eric. I shall have a life record made of you and shall have my own life arranged as if you were my husband—so it really doesn't matter to me. Only . . . of course, I'd rather you were lying beside me during the years and sharing my dreams."

"Jama! I can't bear it . . . to see you one of those still, wire-meshed forms—never to move again! Muscles wasted away, face fallen in, emaciated, mummified—can't you see how horrible it will be?"

"Nonsense! I shall be climbing mountains, hunting lions in Africa, playing hostess at glittering social functions, eating ultimate breakfasts with you . . . living with you . . . while I seem to be lying on the couch in the dream palace—where are you going? Eric!"

But Eric had turned abruptly and made off along the balcony and down through the building to the street. With a choking heart he found his way through the streets and through the gates to the green country outside the city. Head down and hands thrust deep in his pockets, he tramped on and on. An hour passed and he was miles away from the city, up the great glass roadway that had been built by those ancient men who still used the surface of the land to travel over.

At the age of twenty-five, mealtimes are events not to be lightly ignored. Eric began to feel hungry. He looked about him, puzzled to say just where he was, for he had walked far and blindly. The road stretched before and behind him, and the wilderness had crept close to its borders. Not the woods of oak and birch that had once covered this northern country—but the wilderness of 15,000 A.D., after the tropics had crept north.

The glacial remnants of the last ice age had finally melted, after Greenland had lost its enormous ice cap and the oceans had risen thirty feet or more. Palms flourished where New York City had once been. Their roots had burst through into the forgotten subways and tropical ferns and mosses covered the broken buildings with green. Eric looked around at a jungle, dank and dripping even now with recent winter rains. What was the use of going further? He turned and started back, and as he did so he observed something move in the woods on his right.

The thought rushed into his mind that some wild animal might be there. Then he realized the folly of his venturing so far from the city on foot. He glanced overhead, but no airship was near enough to signal—indeed only one was visible, far on the eastern horizon. It was a still day and he clearly heard the stealthy rustle of undergrowth. With pounding heart, he set off at a run back toward the city—many miles distant.

He had gone perhaps fifty yards when three gaunt beasts appeared on the glass pavement in front of him and he stopped in a panic. From pictures he had seen he recognized them as wolves—but bigger

than he expected. They came on at a lope—not straight toward him, but two on one side of the road and one along the other. He thought swiftly and had decided to try to reach the nearest tree when he heard a human voice behind him!

"Stay in the middle of the road!"

Then he heard footsteps and saw the wolves hesitate. Two of them sat back on their haunches, tongues lolling out. There was a sharp "ping!" behind him, and one of the wolves leaped three feet straight into the air and turned to bite its haunch fiercely. Then he heard another "ping!" and a third, whereupon a second wolf leaped in hurt surprise.

All at once his savior stood beside him—an old gray-bearded man in strange leather clothes. But the face! It was that of a man from another world—a lean face with thin arched nose and white! Not the smooth, swarthy features of the men he knew! It was as if a twentieth-century American had met an ancient Babylonian fresh from that city of the hanging gardens—something indefinable set this man apart. And then he noticed the long bony fingers ending in upkempt nails. They held a piece of metal ending in a tube. Eric recognized this, of course, as a weapon—but such as he had never seen.

"Can you pull back this lever, young man?" Eric took the airgun and found the lever required all his young strength. He handed back the recharged weapon and the old man nodded grimly.

"Now we will go a little closer and give those wolves a shock!"

At fifty feet distance the old man stopped and his finger pulled the trigger. At such a close range the lead bullet penetrated the flesh of a shoulder and made a serious wound. With a howl of pain one beast set off through the woods and a second shot, fortunately striking the eye of another, stretched it dead on the pavement. The third animal slunk out of sight into the forest.

Eric wiped the perspiration from his forehead. "I owe you my life, old man! What can I do to repay you? What is your name?"

"My name is Winters—Norman Winters. You can more than repay me if you will guide me to the nearest house where I can get food and shelter."

"That I will gladly do, Winters. "By the Brain!" Eric almost shouted in amazement. "You have teeth!" He started away a pace or two in alarm.

Winters was nonplussed. "Teeth? Naturally! And what of it?"

"Only animals have teeth!"

"What are you saying . . . ! Why, you have none, eh? I hadn't noticed. Men used to have teeth, you know."

"Oh," said Eric in relieved tones. "You are a throw-back, is that it? My friend Thorley has blue eyes, at that. But teeth ... I haven't heard of a case reported in the last ten centuries!" Winters was cautiously silent. "How does it happen you sprang so fortunately out of the wilderness?" He eyed the stranger with distrust and curiosity.

"I might ask in return how it happens that you are here unarmed and on foot!"

Eric laughed and then, remembering why he was here, frowned and sighed.

"I do not want to join the Sleepers and ... the girl I love does! That is my case in a nutshell, Winters."

The old man gave him a puzzled glance and seemed to be musing upon Eric's words.

"Oh, I dare say it sounds absurd! To me the whole thought of sleeping away one's life has always seemed unpleasant. If dreaming under the machine is as good as living one's actions and life, then what is the use of all human existence? Can you understand me at all—or do you perhaps resent such a radical opinion?"

"Good God!" said the old man very solemnly.

"What's that?" said Eric, who had never heard the expression.

"Nothing—nothing! Go on! I understand your attitude very well."

"O-o-oh! Is that it? Are you a ... deserter?"

"I don't know what you mean by that word."

"No offense intended! After all, you saved my life and I'm not likely to betray you. I mean are you one of the scientist class who deserted the machines? There have been such, you know and . . . well . . . you were here in the wilderness and all that . . ."

"Young man, mine is a strange story. Do finish yours and answer my questions and . . . perhaps I will tell you my history."

"Oh ... all right, then. I was to marry Jalna of our city and she wants a conventional marriage. We were to be operated on and spend our lives together dreaming in the machine. We quarreled about it and I lost my temper and came for a walk. Went a bit farther than I intended and here I am. That's all."

"Not quite, perhaps. Do I understand that it is the customary way of living that one should be operated on and dream in a machine?"

Eric stared in astonishment. "Why of course!"

"Then how does it come that any are left awake—like yourself?"

"I am of the scientist class—we devote our lives to tending the sleepers. But surely you must know all this!"

"I did not know it—presently you will understand why. I cannot understand what the inducement can be for a man to dream instead of live."

"Oh, as to practical matters, such as pleasures and necessities, the dream machines give one a better life than nature and chance could offer."

Winters drew himself up and sniffed the clean, crisp air. "Do you mean to tell me a dream machine offers anything to recompense you for giving up this good earth and the sky set with clouds and the green of trees and the glory of sunshine?"

"In the dream machines it is always sunshine, and the dreamers draw as deep a breath of good air as we do right now and feast their eyes on as fair a scene! What manner of man are you to ask such questions?"

"But how can that be?"

"Very simply. What you see is merely what your eye signals over nerves to your brain, is it not? Well, in the dream machines the eye nerves are stimulated in precisely the same way. So are the nerves of smell, of taste, of hearing and the entire surface of the body's tactile nerves."

"Go on! How is this done?"

"Oh, it is a surgical operation. The nerve ends are connected to fine wires, and these wires lead from each dreamer to the control room. Here a complete set of sensations is sent out from a number of master records and as far as the dreamer is concerned he seems to be living a complete life. Before he enters he determines what things he wishes to experience. Some live the lives of great explorers and fight wild beasts in the wilderness; others seem to invent great scientific instruments and actually acquire a complete knowledge of any subject they wish; others make trips in rocket ships to Mars or Venus and experience incredible adventures on those grotesque and almost uninhabitable worlds. Jalna wants to dream a life of ease and homely comfort with occasional adventures and dangers that are so arranged as to end happily—more to enhance the pleasures of peace than for any other reason."

"Good God! Is the world gone mad!"

"I won't go into the dream house with her," Eric went on, "so she is having a record made with my image in it. To all intents and purposes she will marry me—whether I am there or not—and will live out her entire life as my wife."

A sudden suspicion passed through Winters' mind that he was the victim of a jest. For several minutes he walked along, silently glancing at his companion's face from time to time. But his scrutiny left him as puzzled as ever, for never a sadder nor more obviously desperate an expression had he seen. Could this impossible story actually be true? What then had come upon a world once more or less sane? If the dream was as good as the reality—what merit remained in action?

"I will tell you my story," he said with sudden decision. And as they walked along that ancient glass highway he spoke of his youth thirteen thousand years before and of the world as it was then. He told how he had solved the secret of suspended animation and had built a lead-lined chamber far under the earth and had risen after three thousand years to find a world changed beyond recognition. He told of his unpleasant welcome and final escape back to the chamber. He went on to describe his next awakening five thousand years ago and the part he had taken to free the world from the domination of the Machine Brain.

"But I know about that!" exclaimed Eric. "It's in the history records! You are wilding that saved the world!"

"Yes, and now I awake, after five thousand years, to see the results of that saving! I find what? Great social and scientific strides taken by an enlightened humanity? Pah! I find the most disgusting and vicious custom mankind could imagine set up as convention! If the world sleeps what hope can there be of progress? Without progress what use can there be in living?"

"I don't understand exactly," Eric replied. "Yours is a strange philosophy. And another thing, if you don't mind, where are your scars?"

"My scars?"

"You have slept for thousands of years, you say. Well then, when our sleepers are brought back to waking, as is occasionally done, the scars of their operations show very plainly. You have none."

"My sleep was dreamless—as yours is at night."

"What! By drugs, then?"

Winters nodded. "You find it difficult to believe, I suppose. I assure you that your tale is just as impossible to my ears!"

They came in sight of the city just then and Winters gasped at the sheer white beauty of it. Eric was reminded of his Jalna—so soon to be lost to him forever—and sighed despondently.

"Perhaps," he said, "perhaps I should give up this active life and enter the dream palace with her, after all!"

"Perhaps you had better take explosives and destroy the dream machines!"

"What are you saying, old man! Men die for such thoughts!"

"Better death than—worse!"

"But life in the palaces is not worse than death, surely!"

"Young man, I have had experience in many periods of this human life and I assure you that there is no period in past history that would not condemn this present custom. Moreover, what of the future? What of the time, which must surely come, when there are no more scientists to tend the machines? Shall the race perish?"

"Of course, there is that side of it. I've thought of that myself . . ."

"How many sleepers are there in your city?"

"Over a million . . . and only four hundred or so awake to tend them. Oh, I know. I know!"

"And is the rest of the world like this?"

"Yes."

"Then it is almost too late to save the world. Something must be done at once! Don't you see it yourself?"

Eric was silent a moment. "What should be done, then?" he said at last.

"Start a city of the living and leave these dreaming corpses!"

"How horrible! Your words offend every precept and scruple of my training! And yet ... There is something plausible about the idea. But what would history think of us—deserting our charges!"

"Let me speak for history! She will praise you for a brave action. She will point out that moral cowardice on your part would have doomed the race. Only your desertion can make history possible, for otherwise the race of humans is finished here and now. A few more years of dwindling numbers will spell the end."

"Well, let me think on it awhile. Here we are at the city."

## **CHAPTER 2**

### **The City of Living Dead**

Before them towered the great encircling wall, and they passed through the gate and into the broad streets, flanked with architecture such as Winters had never dreamed possible. Here was progress! The entire city had been designed as a unit. At the center rose the huge and graceful fretwork of the dream

palace. Its overall shape was roughly pyramidal, but by blending color and form this was not at once apparent—the eye merely felt a vague symmetry which reason later could make clear. Ten thousand pinnacles lent their frosty points to form the whole, and flying buttresses and airy bridges lightened the effect and made the building seem unreal and as unsubstantial as froth.

The entire structure was made of colored glass—not transparent, but in opaque pastel shades. Leading up to this breathtaking center, lesser buildings flanked the street and certainly gave the general effect of being part of one design, though Winters could not at first understand how this was done, for no two buildings were similar in form.

But one thing impressed itself on his mind more than this beauty—the absence of people. In five minutes' walking, they saw one human being cross the road far ahead and disappear again. The city was silent and looked dead and deserted, an effect which gave the buildings a cold and lifeless look. There is nothing, Winters thought to himself, sadder than a silent street.

"I shall take you to the apartment of my friends," said Eric. "Four of us live together there and . . . none of us likes the dream machines!"

He led the way inside a building of frosty green and up an automatic elevator to a room near the top of the building. All three of his friends were in, as it happened. A tall, lean youth with harsh-modeled features, almost black, was introduced as Starfax, a mechanical engineer; a short, dark and rather fat young man was Antar, a biologist and surgeon in training. The third, whose restless blue eyes and nervous hands betrayed the man of action and whose blond head was set like a rock on the huge bulk of his body, was named Thorley. His face was light bronze in color and he presented a startling—almost freakish—contrast to the others in the room.

"His name is Winters," introduced Eric, as Antar stepped forward, professional interest in his eyes. "He's quite weak and needs rest and food . . ."

"So I can see without your telling me," said Antar, already shouldering his friend aside. "We can hear the rest of your story later. He must have attention at once!" In five minutes Winters found himself partially unrobed and, weary to the point of collapse, lying on a soft bed of some rubbery composition being told to drink some medicine. Ten minutes later he was fast asleep, whereupon Antar the healer left his patient and rejoined his companions in the other room.

Eric was telling the others what had happened that day and was repeating Winters' strange story. "I'd like to see the motor that stood up for five thousand years!" Starfax said doubtfully. "It could be done, I suppose, but . . ."

"But what could he have been thinking of—to sleep dreamlessly all that time. I should have been bored to death!" Thus stated Thorley of the blond hair.

All three looked toward Antar, who pursed his lips in judgment.

"It could be done," he decided. "We have known about some of the effects of cosmic rays for centuries, but no one seems to have gone into this particular side of it. I can definitely say that he shows symptoms which might result from such an experience—I've seen them myself. On the whole, I rather believe him. He looks quite different from a modern man, too. Has hair growing all over his chest, and, believe it or not, teeth!"

There was a general raising of eyebrows, and Eric felt impelled to defend the intelligence of his elderly friend, lest his companions think him a mere savage.

"And what does he think of our present civilization?"

Eric grew red and his mouth hardened. "He thinks it rather revolting—wants us all to desert the sleepers and start up life in the wilderness."

Thorley's eyes gleamed eagerly and he made a half gesture of approval, but he paused at the general chorus of horror from his friends. Then Eric spoke bitterly of the vanishing birthrate in the city, and Thorley thundered bluntly of "foolish conventions that were stifling the human race and curbing all adventure." It was a fair fight, two against two, and the reformers had the advantage of attack. Antar and Starfax were more than half convinced even before Eric broke the news of his quarrel with Jalna. When he told them of her decision to enter the sleep-machines there was a solemn silence.

"We really must do something," said Starfax to the begoggled biologist.

"I suppose so," the latter replied. "But what?"

"I've been thinking about this for several hours," said Eric. "I believe I know something we could do. In the first place, we hold no grudge against the sleepers, do we? We want no harm to come to them. All we really demand is that the world shall not cease living: that there shall continue to be a human race. Well, then, listen to me . . ."

It was twenty-four hours later when Winters awoke. Every muscle ached, but his head was clear and he felt a keen hunger which Antar, happening in at his awakening, provided for with an abundant meal. The food consisted of a single piece of creamy substance, weighing about a pound, crisp and delicious to the palate and washed down with a clear warm drink the flavor of which was new to Winters. In some ways it reminded him of ale—but equally so of salted milk. Whatever it was, it was invigorating and refreshing. Winters dressed and asked his physician if he might not now set out to explore the city and study the "customs of the future," as he put it. It was midafternoon and the sun sent slanting rays into the bedroom. Through the window he could see it gleaming and reflecting from a million pinnacles and points. As he looked a tiny airship settled slowly and lazily over the buildings and continued down out of sight.

"That is the afternoon express from across the Atlantic," said Antar, following his gaze. "It is small—for there are few travelers these days."

Winters' face hardened, remembering what Eric had told him. "I must see the dream palace," he said firmly.

Starfax was in the next room, but he joined them in the elevator, eager to see what impression five thousand years of progress would have on this ancient man. As they emerged on the street, Thorley's great figure loomed up beside them and the party of four proceeded at a gentle saunter toward the great building that dominated the center of the city.

"Where is Eric today?" asked Winters.

"Busy. We will not see him until sunset."

"He told us about the wolves yesterday," the blond giant remarked. "May I see the weapon you used?"

Winters smilingly passed over his air-pistol. Thorley's huge fingers pawed it and turned it to an accompaniment of surprised grunts. He passed it back. "We can do better than that, old man!"

"Oh, as to that, so could we in my day. This pistol, however, requires no chemicals or explosives—that's its only advantage. And it worked, you know!"

By then they were approaching the portals of the dream palace, and in awed silence Winters viewed its unearthly beauty. The entrance hall occupied half the entire ground floor and was set all about with elaborate counters. Only one attendant was visible.

Starfax had been amusedly following Winters' gaze.

"A thousand years ago this hall was a crowded place of business!"

Winters shuddered.

His three young friends conducted him directly to a bank of automatic elevators. After a few minutes in one they filed forth onto a huge floor space broken occasionally by low gothic columns. It must have been several acres in expanse and in every direction thousands of stone tables were set. Upon each table rested a curious mound of strange texture and shape. Winters' gasp of surprise at the sight was delayed a few moments, for it was not at once apparent that these still motionless mounds were human beings. Over each, like a silver webbing, was a shroud of firm wires—so minute as to be almost invisible singly.

In awe and horror he approached the nearest sleeper and observed that his chest slowly rose and fell—though slightly—and that the wires grew from the face like hairs in a beard. Over the eyes a bright cover was set. The table was pierced in several places to take the bundles of fine wires and lead them out of sight. But most startling of all was the terribly emaciated and wasted appearance of the bodies. The arms were mere skin and bone and the chest was ribbed like a hungry dog's. The faces—what could be seen of them—reminded him of the mummies in the Egyptian room at a museum.

"That's old Vintalling you are looking at," said Antar. "He was a scientist. Served in biology for forty years and joined the sleepers only six months ago."

He gazed reflectively down at the quiet figure.

"It's a curious thing to look at him now ... if I remember his record rightly, he imagines himself a young man of twenty having one grand debauch after another. Strange taste for a reputable scientist! I'm really not supposed to tell you, though—such information is strictly private."

"So how do you know it, then?"

"Oh—all medicals are ex-officio attendants here. There's many a wife lying trustfully beside her husband and dreaming a peaceful domestic life under the firm belief that her husband is doing the same, when he is doing nothing of the sort, but dreaming of whole harems instead!"

"Then could he be accused of unfaithfulness in his dreams?"

"But certainly! The law considers the chosen dream even more a voluntary action than some chance happening while awake. But such a question is highly technical and seldom arises. Once a sleeper, always a sleeper, as we say. In fact, the operation makes a person unfit for any other form of life. The eyes are destroyed, and mechanical substitutes are not satisfactory for the waking life."

"And how are they kept alive? Do you feed them?"

"Of course not! A current of negative electricity passes through their bodies and provides all the energy they need—the tissues thus never become acid to the point of fatigue."

Winters had a sudden thought: "How long will they live here?"

"About as long as if they were awake," replied Antar. "The bodies toward the end become emaciated to such an extent that . . . well, to me at least they are revolting!" He shuddered as if at some inner vision.

And now the four waking ones inspected floor after floor of sleeping figures—rising toward the top of the dream palace. After several hours of climbing and inspecting, Winters found himself on the top of the same tower that Eric and Jalna had stood on the day before. But now at the end of day the lights were showing softly here and there through the city, and the streets appeared dusky, although up above where they stood the sun's beams still streamed over pinnacle and point. Winters gazed down and noted how few were the city lights below and thought of the untold hundreds of thousands of quiet forms that lay stretched out in the building beneath his feet.

"How could human beings have ever gotten started in such a suicidal course?" he asked. "Who knows the history of the sleep palace?"

"Eric is the man for that sort of thing. By the way, he should be at our rooms by now. Had we not better start down again?"

The apartment of the four friends was empty when they arrived after traversing the deserted streets. Winters was greatly interested to observe the simple preparations for the evening meal. A compact box with a hopper on the top was set in operation, and after ten minutes Antar opened the door below and drew forth a tray full of the crisp white food and a tall beaker of the gray liquor.

"Wonderful! But how is it done?"

Antar lifted the hopper and Winters saw the raw material—a few shovels of sand and gravel!

"Its simplicity is deceptive," he explained. "The sand is broken down in a furnace inside the cabinet by enormous heat and the atoms stripped apart into protons and electrons. Then these are recombined in a controlled stream to form our ambrosia and nectar. The first models of this machine weighed thousands of tons and were very intricate and difficult to operate. Not until fairly recently was the process refined to the point where small individual machines were possible."

"Nectar . . . ambrosia . . . why, that is the food of the gods!"

"Exactly! So they were named in your day, weren't they? Or was that before you? They are carefully determined substances and represent perfection in food for the human animal."

They sat down, all four, to the meal which Winters again found delicious. He noticed with interest the rim of pink and white cartilage which served his companions in lieu of teeth. At a glance this did not seem an obvious change, but at a distance quite resembled a set of teeth. Winters was circumspect in his observations. He found it vaguely shocking and disturbing. He never got over this feeling. His companions, in turn, eyed his own incisors with frank interest, though without comment.

Just as they were finishing their meal the door opened and Eric entered. His face was flushed with excitement and he greeted them abstractedly, as if obsessed with some overpowering interest.



"Five!" he announced cryptically and his three friends nodded and smiled to each other. Winters was bewildered and glanced from one to the other for enlightenment.

"Five what, may I ask?"

"All in good time," replied Eric. "For the present even you may not know. What have you all been doing today?"

Winters' thoughts reverted to the million silent forms in the dream palace. "We have been seeing the city of the living dead!"

"And what did you think of it?"

"I think that such horrors would never have been believed in my day. Tell me, Eric, how does it happen that the world ever came to adopt such a custom?"

The young man pushed back his chair and stared thoughtfully at the ceiling. "It was natural enough. Human nature has always been desirous of ease and comfort and afraid of change and the unpredictable hammer blows of fate. In the sleep palace each man and woman actually seems to be doing the things he or she most desires. Life there is a regulated thing—if one wishes for it there can be arranged desperate situations and seeming dangers, but always the denouement is happy. If your wish in life be to enjoy it to the utmost, then there is no comparison between sleeping and waking. And this is really the wish of most people—was it not so in your day?"

"True," replied Winters thoughtfully. "But tell me how the process ever came into being."

"It began with the blind. A famous surgeon invented artificial eyes and then a clever playwright found a way to present dramas to the blind upon a sort of recording device. So perfect did the sense of reality about these dramas become that a few people actually had their healthy eyes removed in order to enjoy them. That was the beginning."

"And then?"

"Then the sense of sound followed that of sight. To this were added the senses of smell and taste and finally feeling. So enthusiastic were the disabled about their dream dramas that a group of surgeons and mechanics set up a great theater and offered a dream life to the general public. From time to time a dreamer was operated upon and brought partially back to waking life; but all such people were so pleased with their dream life and so eager to be returned to it that the desire was awakened among all peoples on the earth to experience its joys. All this required hundreds of years, and about a thousand years ago the great movement got fully under way. Enormous dream palaces were built in every city, and millions of applicants filled the offices as surgeons operated night and day. Since then . . . you have seen—" Eric was suddenly silent.

"But has no one ever predicted the inevitable result ... the unavoidable death of the race?"

"Of course! Danforth! About two hundred years ago he led a movement with the avowed object of destroying the dream machines. He attracted quite a following among the scientist class, but he was condemned by public vote and was killed along with most of his followers. A few escaped into the wilderness and were hunted down later."

"How typically human!" remarked Winters bitterly.

"It is time you slept, old man," said Antar. "Tomorrow you will be left mostly to yourself, for we all shall be busy. What would you like to do?"

"If there is a book of history covering the past five or ten thousand years I should like very much to see it."

"What is a book? Oh yes! I know. There are a few in the museums. We use sight and sound records instead. That door leads into the theater of this apartment—a small room but quite adequate. I will show you in the morning."

### **CHAPTER 3**

## **The Conspiracy**

The next day Winters awoke very tired and with aching bones and was only too glad to be left

quietly by himself. Eric led him into a small, dark room and seated him in a comfortable chair. A series of numbered knobs set into a wall panel controlled the sight and sound records and Eric turned the knob which controlled the history records. A screen on the wall lit up. Winters gazed, fascinated, at a forest scene taken ten thousand years before. He again saw the gayly colored foresters and viewed rapidly a complete record of the operations by which their physical needs were extracted from forest products.

And then he saw the dance of autumn festival about which he had been told so long ago. He heard the joyous singing of the maidens in their autumn-colored costumes, and his thoughts went back to that brief and unpleasant adventure. He turned the knob again and again to see new pictures and customs unroll before his eyes. He came to the days when the mechanical Brain ruled supreme and later to the reconstruction period following its destruction. And then, like a shock of cold water, there appeared his own image. He heard himself addressing the council of black-robed educators! How could this be? A recording machine must have been present in the room without his knowledge! He saw again the countenances of his two friends in that age—five thousand years ago—and mused sadly upon the great gulf of years that separated him from them. So real and vivid was the picture—in full perspective and color—that he could hardly refrain from calling out to them.

By the end of that day Winters fully realized how lifelike the dreams of the sleepers in the palace must be. He wondered no more that they should give up the waking life for their mechanically contrived paradise. But he saw more clearly than ever how marked the trend was toward the extinction of human life, and he became determined to speak to his young companions anew upon the subject. And that evening, as all five of them sat around their meal, he did so.

"Eric, do you remember when I spoke about the almost certain result of the dream machines? If I offend your morals and scruples, I am sorry, but I would rather die myself than see the human race so doomed and do nothing to save it. Are there in no part of the world savages or uncivilized men not likely to take up this custom of sacrificing life for a shadow?"

"The human race is one, Winters. It was civilized long ago."

"Then do you four have no regrets that the race should perish?"

The young men looked at each other furtively.

"We may as well tell him," said Thorley.

"All right," said Eric. "For two days we four have been agreed upon the wisdom of your suggestion. We have determined to gather a group of colonists and escape into the wilderness to start life all over again."

"Oh thank God!" Winters cried, his eyes filled with tears. "When do you start? I shall go with you of course!"

"Easy, old man, easy! It is not so simple. The penalty for desertion is death! Yesterday Eric sounded out eight scientists who he thought might feel as we do. Five of them agreed to come. Three refused, although they were sympathetic enough to keep the secret faithfully. Today all four of us have been similarly employed among our acquaintances. As a result we have seventeen recruits sworn to secrecy and we have approached no person whom we were not sufficiently sure of to at least preserve the secret."

"But . . . are there any women?"

Antar laughed boisterously. "Never fear, old man! There will be mothers in the new colony. We have five women and twelve men, so far. Each of the new recruits, moreover, has agreed to approach his friends cautiously and we have hopes that the colony can be started within the week!"

"And how will you leave the city?"

"At night—secretly. We will gather our equipment quietly and at midnight one night we will simply gather at the gate and set off. We will not be missed for half a day and by the time we are safely hidden. Give us a week or so in the wilderness, and we shall have erected defenses so that we shall be safe forever.

"By the way, Winters: An attendant at the palace saw you the other day and asked me today who you were. I said you were a visitor from Australia City, and he suggested that you register for confirmation. I had to say that you had been ill and would come to the registry as soon as you recovered.

So you will have to be confined to the apartment until we leave."

"A lot I mind! The history records have kept me happy all this day and are good for many another. Are there some pictures of the present world which I may be studying?"

"Of course! The knob marked '7' controls a detailed travelogue."

Happily Winters began a three-day period of study with utmost interest. In the dark theater he explored each city on the face of the earth and ran amok through the centuries on the history records, taking notes, comparing, exclaiming excitedly over this and that discovery and development. In the evenings the five friends sat about their meal discussing the progress of the great conspiracy. That night there had been reported three new recruits and the following night twenty-two. By the fourth evening the total had reached seventy-two, counting the five of them.

"We have little prospect of gaining any others," said Eric. "Each recruit has approached every friend and acquaintance whom he can trust sufficiently not to betray the desertion. There are four hundred and thirty adults in the city, not counting the dreamers, and of these we have about one-sixth. Our band counts thirty-one women and forty-one men. Most of us are under thirty years of age. We are ready to start at any time."

"By tomorrow I shall have my medical supplies," put in Antar. "I have to secrete a few things at a time to avoid discovery."

"I am ready now with our weapons," said Thorley. "I am taking nothing but ray tubes. Our seventy-two tubes will be more than a match for any stray citizens who may observe our departure—even supposing them armed, which is not at all likely—and once in the wilderness there is no handier or more efficient weapon against wild beasts."

"I am taking nothing but two small atomic motors and some Maxtil-metal," said Starfax. "With this we can construct our own machines at leisure. I will be ready by tomorrow night, also."

"Then tomorrow we must warn the entire party," said Eric thoughtfully. "We shall meet at the gate at midnight, exactly. Let each man speak to his own recruits—as quietly as may be possible."

There was a reflective silence. Antar's spectacled eyes were fixed upon Eric. "Have you told ... er ... how about Jama, Eric?"

"I have said nothing yet. I am sure she will come, if I can only put it to her properly. I will do that tomorrow. At least," his voice was full of pain, "she will hardly betray us!"

There was a further silence, broken by Eric. "Do you not think, Thorley, that it might be well to take along one or two atomic bombs?"

"No ... I don't think so. In the first place we sha'n't need them and they are rather heavy. In the second place, they are dangerous things. If one exploded by accident we should have the whole city about our ears in no time."

They parted for the night full of anticipation for the morrow and Winters slept poorly. The next day he was left alone in early morning and tried to concentrate upon his history records, but found his thoughts constantly wandering. Every so often he rose and left the theater to pace restlessly up and down the apartment or stand peering out from the windows down at the silent streets. He had never found time so slow in passing. One final piece of work, however, had to be performed. From his pocket he drew a heavy book with pages of soft sheet gold. In this he transcribed with a sharp metal point brief notes of the past five thousand years of human history:

12,000 A.D.—Discovery of the principle of transmutation by Maxtil. Work started to develop this discovery.

12,500—Maxell's invention has revolutionized the world. No farming or manufacturing remains. Men congregate entirely in great cities.

12,700—Teeth becoming vestigial—many born without them.

13,492—Artificial sight for the blind invented.

13,500—Artificial dramas for the bund perfected.

13,800—First complete sense synthesis offered to the blind.

14,000—Great dream palaces built and largely patronized. This method of life grows steadily in

popularity.

14,800—Danforth prophesies the doom of the race. He urges the destruction of dream-machines. He and his followers are killed.

15,000—Date of Winters' awakening. Foundation of a new race of scientists.

And at the end of the last notation, Winters put a question mark and sat wondering what such a thing might mean from the point of view of human evolution. Here was the greatest and most drastic weeding-out of the unfit possible to imagine. From the entire world seventy-two young people were selected to found a new race. What would it be like? Certainly stupidity and insanity would be wiped out completely as human traits! After a hundred generations had evolved from such parents, what Utopian dreams of perfection might not be achieved?

It was an excited and nervous group that gathered to an early meal that evening. Everything was ready. There waited only the appointed hour.

Eric ate little and presently rose. "Now I will approach our last recruit," he announced. "Wish me good fortune, for my future happiness depends entirely upon the outcome!"

And he opened the door and went out to the elevators and so to the street. The others sat silently and thoughtfully as he departed.

He walked purposefully through the lighted streets and entered an apartment building half a mile from his own. Jalna was waiting for him in a tower room with a roof of clear domed glass through which the quiet stars gleamed frostily and seemed to provide the only light, although concealed bulbs suffused the walls with a subtle glow to eke out this meager illumination.

"Eric, dear! Have you changed your mind?"

"Changed my ... how impossible! Say rather have you changed yours!"

The pretty mouth set in a willful pout to which the determined little chin gave point and meaning,

"The marriage record of you is complete, Eric. Next week I shall be operated upon and set up housekeeping with you."

"With my shadow, you mean!"

"It is the same thing in the dream-machines, as you very well know. But if you have not changed your mind why are you here?"

"To say farewell, Jalna—Oh Jalna! Is my image so much more desirable than my true self?"

"You must stop, Eric! Why persist in this scene?"

She was silent a moment, in evident emotion. "Those arms of yours I will feel about me as I sleep in the palace just as firmly and just as warmly as I should now. You are a scientist and must know that! Oh Eric, you make it so terribly hard for me—why can't you behave like a normal man? What is there about such natural, ordinary things as the dream machines that you hate them so?"

"Natural! Ordinary! Death is natural, Jalna—yet I do not believe you love death! I am going away, never to return. Out in the wilderness I shall start life all over again, far from these cities full of ugly, breathing corpses. Jalna—come with me!"

"How horrible, Eric! You, a deserter! You will be killed!"

"I shall not. I am not going alone, Jalna. More than seventy other young men and women from our city are going with me. We shall found a new race in the wilderness and when, years from now, we return to this city and find the streets echoing emptily and rotting corpses and bleached skeletons in their millions lying in the dream palace, we shall wonder what perverse notion ever persuaded you all to perish from the face of the earth. We shall breed strong sons and daughters in our new city in the wilds—Jalna . . . my children will need a mother!"

"Oh Eric! What are you saying? You would desert the dreamers and the city? If everyone did that, the dreamers would die! Would you condemn a million fellow beings to death? Do you forget your oath of faith and trust which you swore when you began your education? Oh horrible, horrible!"

"Jalna, the time has come when something must be done. We youthful ones will do it. Our band represents all but three of the young people in this city. There will be left only old people and—the dreamers. The old people will die and then what is left for the dreamers but to die as well? Whether you

approve or not will not change our determination."

With a great groan the young man bent his head to his hands, then after a moment he rose to his feet and left the room abruptly. She listened until the sound of his footsteps had ceased and then dropped into a chair sobbing.

Presently she sat up and began to think things out. After a few minutes she nodded her head determinedly, making the dark curls about her ears bob with the motion, and left the apartment.

About eleven in the evening, a solemn-faced Eric returned to his four anxious friends. One glance at him was enough—no one asked as to the outcome of his evening's talk. Thorley strode over and placed a hand heavily upon his shoulder, and Winters sat frowning mightily into space wondering what possible combination of prejudices could account for a young girl's preference.

"Come!" announced Antar. "Let us get ready." Without a word each man donned clothes suitable to his new life—strong trousers and tunics of some dull brown synthetic material—and stuffed his pockets with the treasured items that were to be taken with him. In ten minutes all were ready, and Thorley handed each man a ray tube.

"The others will receive theirs at the meeting place, in a street a few hundred feet from the gate. We must get there early and stand guard."

There were no dark streets to skulk through, and Winters was conscious of a vague distrust of these lighted avenues. He had a feeling that their intentions would be written on their faces for any passerby to see. But there were no passersby. For two miles they traversed the silent blocks of buildings and came at last to a short lane lit by one concealed light set in the face of a building. At the end of the lane shone the white wall. In the next block he knew the gate waited them—and freedom. With beating hearts they followed Thorley to a doorway and into a huge empty hall. He opened a door in one wall and revealed a closet piled full of material. Everything was as he had left it.

And now the conspirators took their places along the lane hidden in doorways, and Winters kept vigil in the meeting hall itself. The minutes ticked by ever so slowly, but presently a group of three young women entered furtively and looked at him in distrust. He pointed to the closet and they opened the door and each equipped herself with a ray tube, with which they all seemed entirely familiar—for true equality of the sexes had long ago been achieved. They were dark and graceful-like civilized savages, Winters thought.

## **CHAPTER 4**

### **Conflict!**

Soon a group of men arrived, and the hall began to fill with young people, talking in low voices and glancing ever and anon at the door as each fresh arrival entered. Winters gazed with great interest at the gathering and reflected that except for Thorley, not one of them would have passed in polite society in the twentieth century. Seen en masse, they were more like Moroccans or Hindus than "white men." It was a few minutes before the appointed time when Thorley, Starfax, Antar and Eric entered and closed the door.

"We are all here-seventy-two of us," said Eric. "We may as well start!"

Starfax and Thorley stood in the closet and passed out all sorts of equipment, while Eric walked among the recruits making certain they were equitably loaded.

Finally he held up his hand for attention.

"We will start now," he said quietly. "We must all keep together and make straight for the gate and through it without a pause. There will, of course, be no talking whatsoever, and you must all walk as silently as you can. Your ray tubes are to be held in readiness and you must make up your minds to kill relentlessly any person who observes our departure. It may sound brutal—but remember that the future of the human race depends upon it. For that cause, a few deaths are a small sacrifice!"

And cautiously he opened the door and led the way out into the lane. Not a soul was in sight as they came into the curved avenue that paralleled the walls and turned down the street that led to the outer

gate. Winters and his four friends walked in the lead and the others followed quietly—five and six abreast. At the gate itself there was no light and, noticing this at once, the procession halted undecidedly.

"It may have gone out from mechanical causes," whispered Starfax doubtfully, "but if so it would be the first time in years such a thing has happened."

"We must go on—whatever the reason!"

Cautiously they advanced, eyes straining to pierce the gloom at the gate. Not until they were within a hundred feet did anyone take alarm. Then suddenly great lights flooded the scene, and from the houses on each side of the street poured a mob of men while a shout from the other end of the street apprised the deserters of the fact that they were hemmed in.

"Charge through them and away!" cried Thorley thunderously.

Ray tubes were snapped on and a few men in the opposing ranks tumbled to the ground, but that was all. A thin, hazy mist of red formed between the two parties now. Winters realized that the enemy was using rays as well and that the opposing forces were being dissipated where they met in space. He glanced over his shoulder and observed that the rear guard was similarly engaged with the attackers behind them. For several minutes the three forces stood there separated by the glowing veils of mist. It was an impasse.

Eric and Thorley discussed the problem quietly.

"Half an hour of this and our tubes will be exhausted," said Eric, "while they can obtain fresh supplies as they need them."

"There is only one thing we can do—charge through!"

"Fight with our hands?"

"What else? The ray tubes will counteract themselves and under the cover of the force screen we can charge them and—perhaps—break through."

At a signal the party advanced toward the gate and broke into a run. With a shout they met the defenders and commenced striking and thrusting. Thorley's great bulk bore down all resistance and he got half a dozen yards in advance before he was stopped, and only his bull-strength enabled him to fight his way back to his companions. After five minutes of furious struggle they felt themselves being forced back!

Eric gave a command and they surged back leaving a space between the two parties once more, and covering their front with a barrage of rays. The party at the other end of the street had remained in position and was evidently there for the sole purpose of preventing retreat.

But now a movement was observed among the defenders, and a great machine was wheeled into the front ranks. Three men busied themselves upon it.

"This is the end," said Thorley quietly. "That is the heat ray and at this distance it will wipe us out of existence in a second."

Eric stood with head hung despondently. "I'm sorry," he said. "We have been betrayed and I'm afraid I know who was responsible!"

"You don't mean ..."

"Yes, Jama. Perhaps she thought she would force me after all to enter the sleep machines!"

Then Winters' attention was drawn by the opening of doors in the house beside them. "Look out!" he cried, clutching Eric's arm, as a half-dozen ray tubes swung guardingly in the direction he pointed. Out from the dark opening stepped—Jalna! Eric pressed forward involuntarily and stopped again in bewilderment, for in the girl's arms was a huge, heavy, round thing and she walked toward them with difficulty. Thorley gave a great cry of relief.

"A minimum-effect atomic bomb! Now we are saved—quick, Starfax, Bentall! Help me."

The three ran over to Jalna and relieved her of her burden. Then she fell forward into Eric's arms. "I was there all the time . . . just in case . . . you were supposed to be captured and not killed but placed with me in the dream palace," Winters heard her sob. "But when they couldn't capture you alive and brought out the heat ray I couldn't bear to think . . ."

But Eric stifled her broken words against his shoulder.

"Come, dear," he said. "We will all be killed yet if we are not quick!"

Thorley had set the bomb on its three-pointed stand and glanced over his shoulder at the compact little army to make sure they were ready. "When it explodes we must charge through! It is our last chance!"

He touched a small screw, and a hiss of air could be heard for an instant. Then the squat, ugly bomb hurtled into the air and down upon the massed defenders of the gate, while the entire force of deserters threw themselves quickly to the ground. There was a blinding flash and a roar that deprived Winters entirely of his hearing for five minutes. He saw bodies hurtle through the air and felt the pavement buckle and heave under him. An entire front of a building tottered forward and fell into the great hole that had been created, almost completely filling it in. Then everyone scrambled to his feet and the party ran desperately forward, rays trained on the few remaining defenders.

Pounding feet behind them lent speed to the deserters. They swept through the gate, panting, and out into the blackness of the wilderness. After a minute Winters looked back and realized the pursuit had stopped at the gate. They were free!

What a weird sensation to walk along the great highway shining faintly blue with reflected starlight and to see the heavy shadows of the woods on either hand without being able to hear the slightest sound!

But after a few minutes his ears began ringing and he was presently able to hear once more.

Eric led his party for more than a mile along the highway and then he struck into the woods along a faintly defined path which ended presently in a small clearing. A great, dark shadow almost filled the clearing, and Eric vanished inside it. Presently light shone out from a dozen windows. Winters perceived the light came from an airship. The entire party trooped inside, joyous at the success of their undertaking, but sobered by the terrific cost in human lives which had been necessary to achieve it. The cabin was large enough to contain them, even if they were compelled to stand like sardines. Starfax took the controls and the ship left the earth and set off over the top of the forest in a northerly direction.

"You did not tell me of this," said Winters to Thorley.

"No. We were not sure until this morning that we would be able to steal the airship and besides—the fewer in the secret the better chance of its being kept."

"Are we all here, or were any wounded?" asked Antar.

There was a general counting of heads. Sharp exclamations were heard throughout the crowded cabin and a woman's voice commenced to cry out "Steuben! Steuben!" piercingly, but without answer. Seven of the original seventy-two were missing. They had evidently been killed or disabled when the atomic bomb exploded, for none had been observed to fall during the fight. Steuben had been the husband of one of the party and the other women grouped around his widow and offered what comfort and sympathy they could.

Starfax turned the ship westerly and Winters, peering over his shoulder, observed on a map that their destination was marked by a circle near the western end of Lake Superior. In an hour and a half they started to descend and landed quietly in an open space surrounded by trees and shrubs. Everyone was glad to get out and stretch on the firm ground in comfort, for the weather was warm and the night a fine one. Winters fell instantly asleep.

When he awoke, the sun was high in the sky. He gazed in amazement upon a scene of furious activity. Starfax had his two atomic machines at work turning out steel girders and parts for a huge construction of some sort, the raw material for which was furnished by two dozen men shoveling earth and gravel into hoppers.

By nightfall that day the large atomic-powered machine was completed. The night was spent as before in the open, although the airship would have provided shelter had it rained.

The next day Winters watched the mechanical science of the one hundred and fiftieth century at work full blast. One party busied itself about the two small machines, evidently turning out parts for a second large one. But the rest of the colony was engaged in constructing the walls of their new city. The machine stood perhaps twenty feet high and was square and solid. It moved on treads like a tank of ancient times. A belt of scoops tore up earth and stone from the road in front of it, which came out at the rear in the form of metal boxes. Under the direction of Thorley these were placed to form an ever-heightening wall. By nightfall men were at work upon a roof of sheet metal. The entire structure enclosed the airship and

perhaps two acres in total area. The next night saw it finished and a great sloping peak was being erected on the roof to ward off any possible atomic bombs, Starfax explained.

On the third day of their escape, however, Winters' recent exertions took their toll. Antar, after a careful examination, announced that Winters would have to rest quietly for some days and that he would have to put him to sleep. Winters drained a cup of bitter-tasting medicine and sank into unconsciousness.

Winters' physical condition was more serious than he had suspected and so it happened that he missed the completion of the fortified city in the wilderness. Antar had set to work to make a delicate atomic production machine, capable of those refinements of chemical content in the output necessary to create synthetic medicine. While working upon this apparatus he had kept Winters drugged believing that he who sleeps is his own doctor. It was a full week before he could produce the medicines he needed, and three days after careful injections Winters' eyes opened upon a transformed world.

Where there had once been wilderness now stood a compact city some quarter of a mile in diameter. It was not beautiful, except as sheer utility lends beauty, but it was a very marvel of good design. A protecting wall of some glasslike substance ran inside the layer of metal. The metal could be given an enormous electric charge sufficient to repel any approaching missile. The city was domed with a great peak of heavy glass calculated to avert any blow from bombs or shells. Great squat heat-ray machines were mounted in the wall to keep all attackers at a distance, and Starfax and Thorley had together invented a sort of machine-gun that threw small atomic bombs at high speeds.

The walls were not high—perhaps twelve feet. All around them quick-growing trees had been planted which Antar had fertilized with artificial chemicals. Already from a little distance, it was difficult to determine whether a city hid behind what appeared a patch of woods.

The city was laid out in concentric circles: first the buildings, then the avenues and a second circle of buildings, then another avenue and a third circle of buildings. The center was vacant and planted with shade trees for the present so as to make a pleasant little park.

"Just how long did you say I slept?" demanded Winters as his four young friends led him into this open space upon the day of his awakening.

"Ten days."

"Impossible! How could you have done this in such a short time?"

"Ha, ha! The actual building of the city took three days," Eric replied. "What took so long was the labor of constructing the necessary machines."

As they stood there a woman approached. It was Jalna. On her face was an expression the others had never seen there.

"Oh Eric! I am so happy here! You know, I used to fear the things which mere chance might bring to pass. Well, I find myself actually looking forward to something exciting happening now. Oh, how are you, Winters? I am glad you are up and around again."

She placed her head against Eric's shoulder and placed his arm around her shoulder as so many wives had done before and would do again, now that the race had laid a new foundation for its existence.

"After all your travels through the ages, you must be glad to settle down at last and live comfortably among friends!"

"I am not sure . . . This has been a thrilling adventure, of course, and I am tremendously interested in the outcome of it. But is it not rather certain, now that the city is built and fortified, that you will succeed?"

"Yes," Thorley replied, straightening his huge shoulders. "I think we can feel safe enough now."

"Then . . . I should like to go on and find out what becomes of your descendants . . . I cannot bear the thought of a dull and pleasant life here year after year . . . besides . . ."

"Besides what, you incorrigible one?" laughed Eric.

"I have not many years left to live. If I spend those years a month at a time through the centuries I shall see more . . . learn more. I have still to find out what goal lies at the end of this human struggle."

"I see your point, Winters," Thorley said with a shudder, "but for myself I want no more sleep than the night brings! We have had enough of sleep, we people of this age!" And the others voiced their agreement.

"You cannot stand the physical strain for another week or two," added Antar. "And when you do go



into your long sleep I will prepare drugs and stimulants for you."

"And I will build your lead chamber under the ground," offered Thorley.

"And I will undertake to construct an atomic motor that will last you five thousand years," said Starfax.

"You are all very good. What will you and Jalna do for me, Eric?"

Eric turned to his wife and smiled fondly.

"We will do what we can to render your last days here as pleasant as possible, old man," said Jalna softly. And of the four gifts Winters was not sure but that the last was the most valuable.

Three weeks later preparations were complete. The entrance to his chamber had been dug beneath the floor of a bedroom in Eric's apartment and none except the five knew its exact location, for the labor had been done by atomic machines-busy little scoops that tore away the earth and turned it into lead for the lining and—at the last—into air that left no trace of the detritus of excavation. So one evening after the meal, partaken of by the six friends together, Winters quietly rose and went to the door, looking up at the sky shining through the clear glass dome that shut in the city.

He was no astronomer, but he could sense a slight unfamiliarity in the constellations. Down on the horizon appeared stars he did not ever remember seeing in his youth thirteen thousand years before. And overhead were some slight changes, though he could not exactly place them. Ah! There was one! Sirius was no longer where he had been accustomed to find it. Doubtless there were other differences, and there would be still more when he next gazed at the heavens. Winters sighed deeply and returned to the room to bid them all farewell. The five men shook hands solemnly, for he had taught them this ancient gesture of friendship. Jalna cried a little.

Then with a tiny electric torch in his hand he descended the stone steps, shut the door and placed the heavy alo-steel bar in its sockets. Even as he did so he could hear the atomic machine at work above, with its whirring roar and grunt, laying the metal slab and the flooring over the tunnel to shut him off from the world above—perhaps forever.

## **BOOK FOUR**

### **The Individualists**

#### **CHAPTER 1**

### **The Living Machines**

At the establishment of Meanus there was holiday. Little Yard climbed to the top of the partition wall and would have fallen had he not been found by some of the older children. Trogly, who was twenty years of age, had coolly taken possession of a living machine and had set off to see the great wide world—a project he had been impatiently awaiting for the past six months, to carry out at the first opportunity. So the responsibility of the household fell upon young Bork and the girl, Farinda.

In the year 20,000 A.D. this was a less difficult task than one might think. In the first place, food and drink were automatically produced by the living machines at the mere touch of a button. Control of temperature and humidity in the rooms was similarly arranged for by the almost indestructible atomic motors in the power room. There was little left, except the education of the other children, and the sound-and-sight library made this task a sinecure.

"But where has Meanus gone?" Farinda asked Bork.

"Surely you remember in the history record we read last week about Winters—the man from the past?"

"Yes—I do. He went to sleep eighteen thousand years ago and woke three times. He is to awaken again this year."

"Exactly! And Meanus wants to bring him here to study and perhaps to breed from."

"Oh! But they don't know where he is sleeping, do they?"

"They know where the first city was located after the Exodus. He was buried beneath that city

somewhere."

"But then . . . when will Meanus be back?"

"Perhaps not for several days. We had better look over the breeding racks this afternoon."

The two young people walked slowly through the building looking in at each room, for there were some dozen children to be accounted for, and ended their saunter at a locked doorway which they opened. Inside was a set of shelves on which rested huge glass jars. In five of these great containers were babies, all less than a year old. They were supported on cloth stretched taut between two rollers which turned slowly beneath them. Even as the two entered a fine spray of warm water commenced to fall in each jar, for it was time for the bath. This was followed by the hiss of warm air jets and, now dry, the infants began groping along the sides of the jars for the feeding tubes and commenced sucking nourishment from these very contentedly.

One of the five, however, did not react normally. Bork, frowning, seized a controlling lever that permitted him to move the tube about inside the jar. He succeeded in getting the end of the tube into the baby's mouth but after a moment it spat the thing out again, and although no sound was audible outside the jar, it evidently was crying.

"I can't imagine why Meanus keeps this one," the boy said calmly. "It has been abnormal in feeding ever since it came from the incubator."

"Oh, I suppose he has had the trouble of raising it so far and now wants to see what its reactions will be before he destroys it," responded Farinda. "After all, he only has five experiments under way just now."

Bork grunted in reply and peered a moment through a glass peephole set in the wall of the incubator. Here a dozen bottles of varying sizes could be seen filled with liquid and in each a human embryo in progressive stages of development.

"Everything seems all right here, as usual. Let's go back to the library."

But Farinda was staring at him with a peculiar expression in her eyes. She shook her head obstinately. "You have been doing the things you wanted to do all day," she said. "Now I am going to do what I want to do—and I'm tired of having you around."

Bork shrugged his shoulders indifferently and set off down the corridor while the girl waited until he was out of sight and then set off about her own affairs. For the child is father to the man and even the child of this age found her own company preferable to any other at times.

Meanus, a thousand miles away—bull-necked and swarthy—was grinning cynically in front of a sign posted on the wall of an ancient ruin. His parted lips revealed the pink and white gumnails that had long ago replaced human teeth.

"Adults are warned that the man Winters is for my laboratory," he read aloud. "If Hargry thinks I shall pay any attention to such nonsense he must be mad!" he exclaimed, and looked around him suddenly for he had heard a slight noise. A stranger he had never seen was seated in the midst of a huge and complicated structure evidently capable of flight, since it had arrived through the air.

Meanus made a step to the side of his little airship and the two beings stood watching one another in silence.

"And do you also want Winters?" asked Meanus savagely.

"I wish to see him and examine him for a moment," replied a woman's voice. "And you?"

"I want to try some experiments with him."

"Ah! Well, we may have to wait some time—his awakening is not known to the exact hour, by any means."

The great machine rose lightly into the air and settled down some hundred yards or more away, beside a group of low stunted trees. Meanus grunted impatiently and set about exploring the ruins. The ancient walls were gray and weather-worn. Inside the decrepit buildings accumulated dust and debris showed in all directions. But he had a full square mile of ground to cover, and presently the hopelessness of his search caused Meanus to pause and return to his vessel. Time enough, he thought, when Winters emerged into the sunlight.

The ship Meanus had arrived in was perhaps twelve feet long and four feet wide—just high enough

to sit upright in. In the tapered tail was storage space, and set in the roof were the two vacuum wheels that revolved at terrific speed and set up a continuous suction drawing the vessel upward. The atomic motor was insignificant in size—six inches square—but rated nearly two thousand horsepower and ran for a week on a few ounces of powdered rock. Meanus entered the cabin and sat impatiently in the pilot's seat, looking out at the ruined city through the observation ports.

So it came about that Valendum found two people waiting when he arrived. He had come straight from his breeding laboratory intent upon securing the ancient Winters for his own purposes—which were not precisely conventional. There was a tank beside his laboratory—a huge affair two hundred yards long. In it swam queer half-human things with gills. The glorious ambition of Valendum was to breed a race that could people the waters of the globe even as ordinary humans peopled the land. To this end he wanted to experiment with embryos descended from Winters, whom he considered much nearer in blood to the original amphibians than any human material with which he had yet been able to work.

Valendum recognized the airship of a brother biologist and promptly dropped a bomb upon it. The explosion threw dust high into the air and tore a ragged hole in Meanus' vessel—but did not cripple it. In five seconds the two airships were circling each other high in the air, trying to bring heat-rays to bear. So it happened that neither saw the approach of Hargry.

It was perhaps only natural that the biologists were chiefly interested in the advent of Winters. To a chemist or a physicist or a musician he was merely a famous savage strangely come alive from the dark ages of ancient history. To the biologist and breeder of humans he was a new strain of blood—a prize worth fighting for. In this day and age, to desire was to seize; and the rights of others were the concern of others. It was a world for giants—for gods. Little men had no place or joy in it—if indeed they ever were permitted to be bred or, by chance once bred, if they were allowed to reach adult stature. For breeders seldom released for the observation of others any humans who could be termed failures.

Now Hargry was the most ruthless and at the same time the most able of the experimental biologists. It was he who had bred Dagla—the curious genius, who, at the age of twelve, had designed the great fighting machine in which Hargry ventured abroad. Nearly a thousand feet high, it stood on three steel-truss legs that could carry it over the ground a hundred and fifty yards at a stride under the impulse of its powerful atomic motors. In a steel palace at the top Hargry directed his machine and, if he wished, ate and slept there in perfect security and comfort for weeks on end.

Hargry wanted Winters both for breeding and, after that, for the operating table so that he might thoroughly satisfy his curiosity as to the evolutionary changes produced by the last twenty thousand years. He had been here a week before and, after an hour's wait, had posted his claim and departed. Now, to his annoyance he observed three people at the ruined city and he hastened his stride.

In a lead-lined chamber fifty feet beneath the ruined city, the X-rays and ultraviolet lamps had been burning for three days now and the wax-faced figure on the couch had been stirring once in a while. The medicine tube had pulsed twice with its measured flow of stimulants and finally Winters' arm raised weakly and pushed it away from his mouth, where it had rested for fifty centuries. He sighed and opened his eyes wearily. For half an hour he lay there quietly watching the ceiling. Then, with the light of reason once more glowing behind the gray eyes, he swung his feet to the floor and stood shakily.

The three days of drugged sleep and the nourishing stimulants had worked their miracle in his wasted tissues. He felt his strength returning slowly as he procured clothes from the vacuum box and opened the door of his lead-lined chamber. Once more the old thrill of discovery ran through his veins. Up above were fresh scenes—new developments in the great epic of humanity—ready for him to study and puzzle over.

Fifty feet he climbed up the steps of fused glass and pulled the little lever that had been arranged for him by his long-dead friend, Eric. Instantly a crack of light appeared and widened into a square opening through which he climbed slowly and laboriously. He stood in a small room floored with dust, and from mere instinctive caution walked over to the corner of the room and rested his foot on the floor to see the great open slab slip gently back into its place. He marveled at the perfection of the fitting, tight after all these centuries, and idly drew his cloak over the dust to efface the marks. He found to his surprise that he could not then tell where the crack had been.

Unsteadily he went into the next room and stood in the doorway blinking at the strong sunshine and marveling at the ruined and neglected appearance of this once new and thriving city. Once more, he reflected sadly, a new group of friends had come into his life and gone on to leave him mourning them thousands of years afterward. But more practical thoughts came to mind. Here was a long-deserted city. He had scant food and no means of transportation. He must set off immediately to find people who could supply this lack.

He had watched this city being built and, of course, knew every street of it, so he had no hesitation about his course and set off along an avenue and turned into a great square. As he did so he heard a great explosion in the air and turned, startled, to see, low over the buildings on his right, an Eiffel tower on legs rushing toward two airships. Great coiled tentacles were half stretched out to seize them.

The airships, he observed, were more intent on fighting each other than on warding off the attack. The steel structure seized one ship and threw it crashing to the ground. Not till then did the other hurl an explosive at the giant and begin circling around as if preparing to attack. Even as Winters gazed, mouth open beneath the unkempt hair that covered his face, the second airship came a little too close and was struck by the tip of one flailing tentacle and broken in half. As it fell out of sight, a terrific explosion sent up an enormous cloud of dust halfway to the giant's waist.

But metals were wonderfully strong in those days of mechanical perfection. The first ship, battered and broken, was still capable of flight. It rose limpingly out of the dust cloud and made off westward, the gigantic machine after it in hot pursuit, for it moved slowly and at a low altitude so as to suggest to Hargry an easy capture. As a matter of fact, it was quite ten minutes before a flailing metal tentacle sent it to the ground where a great leg crushed it shapeless.

Winters, in the meantime, cautiously approached the scene of recent combat and stood outside the area of buildings gaping at a great hole in the ground. The dust had settled on the trees nearby making them grayish white. Not for a minute or two did he notice the woman in the great living machine. Her calm and peaceful face allayed his first fears and he approached closer, while the woman studied Winters with great attention. Rods and wires and shining disks radiated from her seat. The machine spread around her for a dozen feet on either hand. Upon closer view, its terrific complexity was still more apparent. Here was a maze of meaningless apparatus to Winters. The woman nodded her head suddenly.

"This puzzles you," she decided, as if thinking out loud. "Now why should it? What could be simpler? Compared to the same apparatus in your own time and country it is a marvel of simplicity!"

"The same apparatus—in my time?"

"Yes. You called them cities," she explained, "and that is essentially what this is. You had many thousands of people in each city, it is true—I suppose you could not afford many cities?—while we have a city for every inhabitant. But otherwise they are, I should imagine, much the same."

Her listener was making distress signals—amazement written on every feature of his face. "How is this thing a city?" he asked.

The stranger stared, then frowned. After a moment's silence she smiled again and nodded her head.

"Some of our research historians have held that you did not understand your own institutions," she said. "Most of us thought that rather a farfetched idea. But evidently it is perfectly true." She looked hard at Winters. "I find it remarkable to think upon," she said.

"What then is a city? A place for houses to collect people? Not at all. It is a machine—a complex thing, almost alive in the animal sense of the word. Power is radiated on copper nerves—water travels through underground arteries—food passes through the kitchens and is cooked and travels to the proper citizen needing sustenance. Telephone and television connect the separate units into a whole—even as nerves. This is a city in its broader aspect, is it not?"

"I suppose you could look at it that way," replied Winters.

"And then the specialized services of a city! They are a millionfold: My own city is not the latest model, but," she glanced about her with some pride, "I venture to say that not even under the Brain were there so many conveniences at hand in a city. First comes a complete power, food, water and sewage system. The food is all synthetic, of course, and a small reserve supply is stored in the unlikely event of

machinery trouble. Clothes, writing materials, chemicals, and such as are consumed from time to time, are provided in continuous supply by tiny factory units. Permanent articles are made quite indestructible. I have no wish that a button will not satisfy! And in addition my city can travel through the air, over the ground or—if I should wish—even over the surface of the water!"

"But how is this possible? You press a button and—then what?"

"Really! How childish! You understand that from any raw material the automatic chemist produces any desired combination of elements?"

Winters nodded doubtfully. Something of this sort had been developed five thousand years before, but not quite so sweeping in scope, as he remembered.

"Then what could be simpler? The intake feed sucks whatever material is in contact—water, air, earth, no matter—and the buttons control the nature of the finished product."

"And the power?" asked Winters in some confusion of mind.

The woman stared. "Surely atomic motors are ancient enough in the world even for you!" she said. There followed a moment's silence.

"I am a historian," she added, half to herself. "I imagined it might be interesting to see you—but I was mistaken."

"But so am I a historian," put in Winters. She shook her head and smiled. "A historian is of value only as he can translate the past in terms of the present. You are history itself and must be explained by historians—but I am afraid we have overestimated the mental ability of you ancients!"

"And what do you do for company—I see you are all alone."

The stranger stared and her dark face flushed darker still.

"Company! Are you sane? That is the greatest boon of all? A person can get off by him or herself and live in peace and comfort without being under the necessity of having other people around!"

"But—don't you like other people?"

"I see that you do not know the rudiments of values in life! In your day you were compelled to go to other people for food, clothing, housing and in fact everything you needed. Nowadays, we do not have to do so. In your day you made a fiction of preferring crowded streets. But such a liking is not natural to the human animal and we have cast off that pretence."

"Do you not have husbands and wives?"

"Of course. Such things are for the children. When we become adult we leave childish pleasures and come out into the world."

Winters puzzled over this reply a minute and was startled when the great "city-machine" suddenly lifted itself into the air and started away over the trees. He was still wondering when a great steel cable wrapped itself gently around his body and swung him, struggling, a thousand feet into the air and set him down on a narrow platform at the very top of the structure. A door opened and the metal tentacle gave him a push which sent him sprawling on the floor inside. The door then clanged shut behind him.

It was a few seconds before he recovered sufficiently to stand up and look around him. He was in a steel vault with a domed roof. The room was easily forty feet from wall to wall and circular in shape. At the other end of the room a long couch ran for twenty feet beside the wall, next to which, staring wildly at him, were three women.

He started to walk toward them when a heavy, snarling voice spoke from the ceiling. "Stay where you are, Winters!" He looked up and observed at the very apex of the dome a sort of ventilator with a seat slung beneath it. In the seat sat a huge man-broad of girth, with huge shoulders and long arms. He was peering through the observation slits and muttering to himself. Suddenly he reached for a lever and pulled it back with one hand. There was a hiss and a droning hum of some motor starting up beneath Winters' feet. Then Hargry lowered himself, seat and all, on the end of a cable—for all the world like a spider on a line—and stood peering at Winters with keen eyes. His legs were short, and the great hands opened and closed convulsively.

"So you have lived for thousands of years and came to look us over! What do you think of us? The ant comes to criticize the elephants!" He laughed boomerily.

"I do not understand what it is all about," replied Winters bravely. "I am a scientist. I have come to

spend a few days studying your civilization and I find savagery instead. What will you do with me?"

"First, of course, I want to use you for breeding. After that ... I think I'll take a look at your insides in the name of science. Just now, however, you are a nuisance. I have to be half a world away by tomorrow to attend to some experiments and I don't quite know what to do with you, Winters."

"How do you know my name—that is the second time you have used it!"

"Nothing simpler. Your entire story is part of our racial history. It is written that you went to sleep five thousand years ago and we have been expecting you to awaken for the past month . . . but I have no more time to listen to your childish conversation. We are near the city of the abgene and I shall leave you there with him until I return. That should be safe enough."

## **CHAPTER 2**

### **The City of Mirrors**

With a curt nod, he pressed a button and was lifted rapidly up to his seat under the dome. Winters felt the platform shake and roll beneath him as the huge structure made its way over the ground. After half an hour, the floor ceased its sickening lurching and the steel door flew open. Winters gazed at it, fascinated, and there entered the cablelike tentacle! With a cry he sprang away, but the steel coil whipped itself around him like lightning and he was drawn out of the door and lowered giddily to the ground far beneath.

He stood on a small slope and before him rose the walls of a city. They were about fifty feet in height and perhaps a quarter of a mile long—silver gray with the sheen of some metal worked into the very stone of the structure. The tentacle had released him, but rested on the ground behind, as if to prevent his escape. He stood and puzzled what to do when a huge booming roar came down to him from the skies:

"Enter the city, Winters!"

There seemed no opening, however, so he hesitantly proceeded to walk along the side of the wall in the meadow grass that grew there. After he had half-circumnavigated the walls, he came upon a square hewn archway. The metal tentacle, meanwhile, had kept pace with him, slipping over the ground like a huge snake. It moved up, forcing him toward the opening. The whole scene was so unutterably lonely and desolate that he shuddered and thought desperately of attempting escape, but finally stepped upon the threshold. Once more the great voice came to him from above:

"Push open the door, Winters!"

He found it gave to his touch and before him stretched—an empty corridor! He stepped inside and immediately the door banged shut behind him. It would not open again! He was a prisoner! With sweat starting on his forehead, Winters walked down the corridor and turned the corner. Then he stopped, breathless. Before him stretched, row on row, thousands of men in orderly lines. Each man was looking straight at him with a smile of welcome. But the startling fact was that Winters could not tell one of them apart—they were absolutely identical in dress and appearance!

He cleared his throat nervously. "Who are you? What city is this?" he asked.

Ten thousand arms thrust out in a gesture and they all answered in unison, like a well-trained chorus: "Our name is Mankind."

This was not precisely illuminating to poor Winters. He walked a step or two forward; more rows of men sprang into view, and not until then did he notice something—he was separated from the inhabitants of the city by glass walls. He put his hand out and touched one of them and stared curiously at the figure behind it. There was something slightly unreal about the grotesque affair. Surely those sheets of glass could not be some kind of mirror?

"Why are you all alike?" he ventured to ask.

The images in the glassy corridors drew themselves up proudly. Their voices blended into one—a hoarse, heavy crowd-mutter:

"There can be only one Perfect Man. We are replicas of Him. There are no inferiors in our City!"

Then, thought Winters, these are mirrors. But, and it struck him with sudden horror, the mirrors did

not reflect himself but only the citizens. Was he nonexistent—a dream? Dim mysterious corridors stretched in all directions under the clear white light—stretched to insanity. Ten thousand eyes stared coldly at him; ten thousand lips opened and ten thousand voices spoke:

"In our search for Utopia we sought the one best type. We found it. All other types were suppressed. But there remained, then, only one man in the country, so these mirrors were invented. They reflect perfectly the shape and voice and even the thought of the Original—but nothing else will they reflect. We produced ten thousand citizens. We could have produced actual men by careful breeding, but what good would have resulted? They should all be identical with the Original, anyway, or else be less than perfect. They would all have looked, thought and acted in the same way. Besides, there would have been a waste of food and labor. So we use the image instead of the reality. If more citizens are needed we will build more mirrors. If there is overpopulation we remove some."

"But—but—is one of you the Original then? Which one is he?"

The mirror-men looked shocked in unison. They spoke all together.

"He is not here. Perhaps He is behind the mirrors. Some of us have claimed to be He—many of us have claimed that from time to time. But we do not believe any such. We know that we are made in His image, but—we do not talk about Him."

Winters walked nervously down a corridor and then stopped again. What could be more fruitless than to go further into such a city? One thing, however, puzzled him.

"How is it," he asked, "that you know my name and speak what must be to you archaic English?"

"Your history, Winters, has been taught in the City of Youth for centuries. Old English, as it was spoken in the days of your own youth, has been a popular study for the past twenty years in preparation for your return."

The answer was in unison, ten thousand words and gestures were uttered in absolutely precise identity. Winters' body had not yet fully recovered from his long stay under the earth, and his nerves were becoming jumpy.

"I must see the real man," he cried irritably. The rest of you are phantoms! Let me out of this accursed place!" He waved his arm wildly and turned to retrace his steps. But now it was hard to tell which corridor was glass and which real, and he bumped against a transparent wall and rebounded to another. Angrily ten thousand men stepped forward and in an agony of horror and dread he rushed at random from mirror to mirror battering his body against unyielding glass when he least expected it and finding his progress unobstructed just when he extended an exploratory hand. The city reeled about him as he fell to the floor. Everything became dark in his head and he remembered no more.

It must have been an hour later when he awoke and sat up dizzily. The mirage inhabitants had all vanished now and the corridors were dimly lighted, so that it was possible for Winters to determine which was passage and which reflection. He rose to his feet and, feeling hungry, chewed some concentrated food tablets from his pocket as he wandered down the hallway. Which direction led to the door and which away from it, he could not tell. Had he reached the door, he knew that it would be locked, but he wandered on in search of it as men will whose position is hopeless and to whom activity offers at least the appearance of accomplishment. Step after step, hour after hour he wandered, turning and twisting among the corridors—now and again trying the glass walls to see if, perhaps, one might prove a roof.

In his belt, under the leather tunic, were a few simple tools—a saw, a file and a small axe. In reckless desperation he pulled out the axe and sent it crashing into a great mirror. A cascade of broken glass fell at his feet. Winters stood gazing into a swiftly narrowing cabinet, which turned downward like the throat of a phonograph horn; a hole led through the floor level into blackness. Several stout cables led down the hole from three complicated-looking pieces of apparatus that had been set just behind the broken glass. Perhaps, Winters mused, he might climb down to whatever lay below by clinging to these cables. As he stood there, the lights flashed bright once more in the corridor and all around him stood the thousands of reflected figures.

"You have passed beyond the surface of existence," came the massed voice. "You have killed a citizen of our city!" Winters, not knowing what might follow, entered the shallow cabinet and climbed

down the throat of the opening.

It was dark down there and the shaft was a narrow one, but he had scarcely descended a dozen feet before he touched ground beneath and felt himself free of the enclosing walls. A little light came down from above, and as his eyes became accustomed to the gloom he perceived that he was in a huge cellar, extending into the murky darkness on all sides and with supporting pillars set every ten feet or so. Presently he thought he could make out a tiny crack of light far off to one side and set off in that direction, cautiously feeling his way among the pillars. As he got close to the spot there could no longer be any doubt. Light was coming through a crack in the wall! Stealthily he applied his eye to the opening and looked through.

He could make out the far side of a room. The walls were of reddish brown and a chair was set against it and a strip of blue carpet was visible on the floor. As he stood there he heard a voice inside the room speak, and a faint rumble, in unison from overhead, made Winters start violently.

"Come up again, Winters! There is nothing but, sorrow to be found behind the scenes of Life!"

Here, then, lived the Original! Winters was getting ready to withdraw in fear and trembling, when a shadow fell on the wall and into his zone of sight passed a small inoffensive-looking man. He paced nervously to and fro, wringing his hands. Winters could hear him mutter to himself: "Oh, he'll find me out! He'll find me and kill me! What shall I do?"

Winters laughed silently to himself as the full humor of his discovery came upon him. He spoke softly through the crack and saw the little man start back terror-stricken.

"I mean you no harm. I am a captive here and if you will help me escape I will not touch you. Let me into your room!"

"How do I know you won't hurt me if I do?"

"Why should I hurt you? If you don't let me in I will break the wall!" (This last was pure bluff, for the wall was of stonework.)

Through the crack he could see the little man standing, perplexed. He made a step toward Winters and then stopped. Winters thereupon drew his axe and struck the wall a few noisy blows.

"Stop! Stop! I will let you in!"

Abruptly a square of light appeared in the wall beside him, and Winters passed through into the room. The two figures stood a moment eyeing each other doubtfully. The little man licked his lips nervously.

"So you are Winters! But how terribly different from a man you look! Almost like an ... animal! You have teeth! And your skin is white like the belly of a fish, not like a brown human face at all!" And as if these differences made him somehow superior, he drew himself up proudly and disdainfully.

Winters laughed. Curiously he looked about the room, but except for one end it was in no way unusual. At the far end of the room, however, were set two motors. A maze of wires led into three complex mechanisms set at about eye-level on the wall. The man himself was perhaps five and a half feet in height and quite slight in build. His dark face rose to an enormous intellectual forehead, but the eyes held a weird expression and the mouth was nervously twisted to one side.

"Why do you live here and what purpose do those mirrors serve, up above?"

At the question all the stiffness seemed to go out of the man's backbone and he became once more the cringing figure he had been.

"I am Hargry's captive! Many years ago he put me here and gave me those mirrors ... to amuse me, he said. But you, of course, are his captive as well?"

"I suppose so," said Winters, "but I don't propose to remain so!"

The dark eyes peered at him quickly. "But if you escaped—where would you go? Hargry would search the world over for you and . . . you would be very sorry for yourself when he caught you!"

"You know my history?"

The man nodded.

"Well, then, if I escaped I should get back to my city and down into my lead-lined chamber far beneath the earth. Hargry would never find me and when I awoke again he would have been dead and buried for thousands of years!"



A sudden thought seemed to strike his host like a blow.

"But—then so could I!" Sudden hope lit the drawn face. "Escape! It is possible at last—at last!

"It would be a simple matter to get out of here," he continued, "for I solved the problem years ago. I have dug a tunnel under the city wall that needs only a strong push to open through the clumps of bushes on the slope outside. But I never dared to use it ... Hargry visits me once in a while . . ." He stopped, shuddering.

"Hargry will not return for several days," said Winters.

"Then ... yes ... we will do it!" The little man seemed to be nerving himself up to a pitch of enthusiasm. "We must rest ourselves and make all preparations and then . . . ah! . . . out we go and away as fast as we can!"

"Good! What is your name?"

"I am Bengue. Years ago," he drew himself up to his full height, "my name was not unknown in the world as a biologist. I bred men of genius and . . . one of them was Hargry! I was proud of him at first but I had made him ruthless and purposeful. Before he was eighteen I had lost all control over him. He went off into the world. You see, Winters, I am not normal, altogether—I liked a certain amount of company. To be entirely alone makes me nervous and . . . you have seen me after twelve years of loneliness! I am not always sane . . ."

He stopped and stared broodingly at the floor. "Hargry came back to visit me after a year's absence and we had words ... he was a true individualist, as is most of the world today, and I am an abgene in that respect. If I had not been the scientist that bred him, he would have destroyed me on the spot—all over a passing difference of opinion during a conversation. As it was, he brought me here and built this city. The mirrors are supposed to make me feel that I have plenty of company!" His voice dropped to a whisper, "Sometimes I do feel that way about them!

"I merely ventured to regret the modern tendency to live alone and without any human intercourse . . . I believe I said that an occasional exchange of ideas would benefit everyone concerned." There was a short, bitter laugh. "As I bred Hargry, so is he! Great intelligence, but greater will-power. He took my words as a criticism of his actions . . . and so they were!—but you are hungry perhaps?"

Bengue went over to the mechanical end of the room and drew from a closed chamber two pieces of whitish food which he and Winters ate. It was almost identical with the "ambrosia" Winters had tasted five thousand years before—that food which the science of that day had pronounced the perfect sustenance for the human animal. It was delicious. The broad couch which Bengue then offered him proved soft and luxurious. Winters was asleep in ten seconds.

He awoke many hours later in the grip of a vivid nightmare and sat up, dripping with sweat. Bengue had heard him wake and had turned on a light to see what was the matter. "It will be dawn in another half hour ... I have not seen dawn now for many years. Since we are wide awake, we may as well start upon our escape." His eyes were shining with excitement and his cheeks flushed.

Accordingly they filled their pockets with large cakes of the artificial food, and Bengue took a small electric torch from a shelf and led the way into the dark cellar full of pillars. They proceeded along the wall for a hundred yards and then the light flashed upon a black hole in the masonry. Into this he led the way, and on hands and knees the two fugitives traveled a hundred feet of tunnel, Winters in the rear. At last Bengue stopped and made room for Winters beside him.

"Here we are," he said. "Feel these roots overhead? All we have to do is push them up and we are free."

Together they set their backs to the task. After a breathless minute their heads and shoulders emerged together at the top of the short slope leading down to the walls of the Mirror City. It was still dark, but the stars were pale in the sky and over to the east a little hint of yellow gilded a vapory cloud bank. It seemed cool. Winters shivered involuntarily.

"Where now?" he panted, as they struggled up to the surface of the ground.

"The City of the Exodus lies about twenty miles due north of here. We have no means of getting there except by walking."

Winters grunted. It should be possible to make it by nightfall, he thought. They set off across country,

keeping as much as possible under the shelter of the semitropical woods. After the first half hour this semi-jungle became broken irregularly by open glades, and in the second glade they came to rested one of the great living machines. It was just beginning to grow light as the sun's rays touched the very tops of the trees. Cautiously they skirted the opening and plunged on among the low growth of greenery—uphill now. At the end of the second hour they had covered perhaps six miles and paused at the top of a hill to rest a moment. Winters lay flat on his back while Bengue moved nervously about, peering through some branches at the country behind and below them. Suddenly Winters heard his companion utter a sharp exclamation and he sat up to see what was happening.

On the horizon to the south he made out the great skeleton-figure of Hargry striding along outlined against the sky!

The high-handed action of Hargry in laying claim to Winters had not been taken tamely by the biologists and breeders of the world. A dozen or more of them had already visited the ruined City of the Exodus and had seen his grandiloquent notice posted there. Furthermore, the story of the deaths of Meanus and Valendum had been broadcast, whereupon some thirty scientists had climbed into airships of one sort or another and set off to find Hargry and to wrest Winters away from him. Had they been unified in a common purpose, of course, they would have had no difficulty whatsoever. But Stakool, from across the ocean, had run across Pylgrin from the West Coast and, the two being firm enemies, they set upon each other then and there and fought it out. As a result only twenty-eight airships—three of them cumbrous living machines—sighted the great form of Hargry as he strode over the hills.

Even as Winters looked, he saw one of the thousand-foot tentacles strike out at a busy black dot and presently made out the cloud of attackers against the brightening sky. Bengue was all for making instant retreat, but Winters insisted upon remaining.

"Suppose we do get another mile to the north—Hargry can make that up in fifteen steps. I want to see this fight!"

So they remained, Bengue wringing his hands in an agony of fear.

The ships seemed to attack one by one. Presently Winters, to his amazement, observed three of them circle away fighting each other! The spectacle lasted altogether half an hour, and Winters' surprise and horror increased every minute of it.

"But why—why—don't they get together and all attack at once?"

"Why should they?"

"They want to kill Hargry, do they not?"

"Only so that they can get you—each for his own set of experiments, I imagine. Suppose they did kill Hargry—then they would have to kill each other until only one was left. He would search for you and would be a gainer by the fight. There could be only one man victorious."

"How do you know this? Isn't it likely that they want to destroy Hargry for the sake of public peace?" Bengue's eyes opened wide.

"What ancient nonsense is this! Of course they could not interfere with Hargry's personal liberty. Once started, where would such a principle stop? Oh, I see ... in olden days people used to have things called laws, didn't they? Really, we aren't quite so primitive as that!"

"But why should they want to kill me in their laboratories? I have come here as an observer from the past. I shall go on into the future in the cause of science. What a mad world this is!"

Bengue tapped his foot impatiently. "Where you get the idea that you are qualified to criticize a world so far above you in development, I cannot imagine! Physically you are repulsively bestial—with your teeth and your white skin, covered with hairs like an ape. Mentally—well—you would never have passed alive out of my breeding jars! What makes you think your cause is so sacred?"

### **CHAPTER 3**

### **Hide and Seek**

Winters was silent. Bengue's words were plausible, but he suspected a good deal of what he said

was due rather to imaginary than to actual improvements in the human animal during the last twenty thousand years. But there was some truth in them—enough to put Winters in a gloomy state of mind. Had he forsaken his own times and his own kind of people all for the sake of finding himself an unwanted guest in a future world of supermen? And if so, why go on still further into the future? Might the steady progress of evolution not change the face of the earth in the next five thousand years—make him still more ludicrous in the sight of the still further improved humans who were to come?

Bengue was looking at him surlily.

"All very well," replied Winters stoutly. "Suppose you are right ... I can still reason sanely. If you are all such supermen, then explain what you are trying to do with life!"

Bengue shrugged his shoulders. "I suppose you have some definite questions?"

"What does Hargry propose to accomplish?"

"To breed a more intelligent man than now exists."

"And your chemists?"

"Many things . . . the heavy elements—radium and beyond—have not yet been produced by transmutation and thousands are working on that point."

"Ah!" exclaimed Winters, "that's more like it! Do they compare notes and help each other in the search?"

"What nonsense is this? Of course no one reveals his work to another!"

"There it is again! Of all the stupid irrational ways of doing things!"

"But what possible motive could there be for such cooperation?"

"Why, to get their job done and the information broadcast to the world!"

"How stupid! A man is entitled to fame and credit for his own discoveries, not for his ancestors!"

"Well then, have you artists or musicians?"

"Oh yes, such creatures exist I suppose. But I am a scientist and know very little about them."

"In my day we would have called that attitude 'narrow-minded'—but let it pass. It is only in keeping with the rest of things . . . Now answer this question, if you can: How does it happen so many superbologists are willing to drop their so-important work and fight each other for the possession of an ancient like myself?"

Bengue's eyes widened. "You are new blood for their experiments—that's all."

"Oh ... I see. Yes, the biologists would be interested in that."

"Well, do you have any more childish questions?"

"A thousand! Supposing your scientists succeed in their tasks and you solve all nature's secrets and breed perfect men—what then?"

Bengue nodded condescendingly.

"All our children, sooner or later, ask that question. There just isn't any answer. A man is born and reaches adult age. Then for perhaps forty years he is free to do what he can. At the end of his allotted span he must die. The result is, of course, a certain aimlessness—but, after all, when a man is dead that's the end of him. What aim or purpose can there be after death?"

"And so all this fine striving . . ."

"Gets us nowhere. For thousands of years we have been working over the problem of prolonging human life. With good luck a man can live to be well over a hundred years of age—but his mental and physical vigor is gone at seventy. Of course there are the astronomers ..."

"Why, what do they do?"

"Their task is at present to study the planets by telescope and by actual observation in rocket ships. A small colony has been established on Mars for the past two thousand years and many attempts have been made to colonize Venus—but it is too young a world yet. Poisonous fogs and violent earthquakes are constant and the hot steamy atmosphere is unfriendly to human life."

"But what is the purpose?"

"The Earth will not remain habitable forever. The scientists are preparing for eventualities. Of course, what is really needed is a suitable planet circling a new sun—but the nearest probable star is two centuries of rocket travel away and there again our short life-span holds us back. However, our

astronomers have a definite aim and purpose in life and, within reason, they exchange information and assist each other."

"And the rest of the world—goes mad," said Winters sadly. "Killing each other for the sake of a moment's whim . . . each pursuing his own ends and, no doubt, rediscovering again and again what has been already found and forgotten a thousand years ago. It is a mad world!"

"But we have—each man—his freedom!"

Winters eyed him quizzically beneath the bushy gray eyebrows, and Bengue remembered Hargry in sudden panic.

"We shall separate," he said. "Hargry will pursue us and find us sooner or later. If I can get miles away from you so that he does not suspect that I helped you escape—he may not kill me when he finds me!" And without a word of apology he turned and set off at a furious pace westward, crashing through the underbrush as he went.

Winters stood there on the hill-top for ten minutes. He was just turning to make his hopeless way north when he heard, from miles away, a great crashing sound and observed against the clouds the form of Hargry. He was evidently making wreckage of the City of Mirrors. Winters started convulsively and set off through the woods as cautiously as he could. It was difficult to be sure of his direction traveling entirely by the sun. He shuddered to think of what might happen to him if he could not find the overgrown ruins for which he was searching. It was hot and sweat poured off him wetly and his breath came in tortured gasps, but still he pushed on—an ear alert for sounds of pursuit behind him. Twice he came upon clearings occupied by great living machines and gave them a wide berth, circling round through the woods. By the middle of the afternoon he was utterly exhausted and sank down to the ground in the shelter of a dense thicket and fell sound asleep. He estimated that he had come fifteen miles since dawn.

He awoke in the middle of the night, chilled and with every muscle aching. He forced himself to eat the food he had brought and drank from a flask. The sky was clear, and the stars shone brightly. Polaris, friend of mariners, beckoned him north as of old, but he remembered that even the stars had changed and aimed his course partway between the ancient North Star and one of the bright points in the handle of the Great Dipper. It was bad enough walking by day, but by night he found himself unable to better a pace of a mile an hour. So when he came to clearings, he walked them close to the side of the forest. Hour after hour passed and, trying to recollect the lay of the country around the ruined city, he began to fear he had lost his way. So he stopped and waited for daylight. At the first light he started forward again and so came, weary and worn, to the crest of a sharp ridge, clothed with green. On his left, across a broad clearing, were the white masonry and dusty pilloins of his goal!

Thankfully he was about to start toward it, when something gave him pause. Music! It came from the other side of the ridge. Cautiously he crept through the woods and peered out to see one of the living machines a few hundred feet from him. The music had ceased now and by the early light he made out a dark figure seated in it busily working over some papers. Curiously he waited and presently the figure straightened up and pulled something with one hand. Winters always remembered that scene, not only because of its tragic aftermath, but for the sheer breathtaking wonder of sound that ensued.

The sun was just lifting above the eastern horizon and a few brilliant clouds floated above it like gorgeous galleons sailing in the ocean of sky. The heavy dark leaves of the palms that edged the clearing were motionless and the hills behind them showed faint and blue. The sound seemed to come from the hills at first—a faint far piping that was answered again close by. Then abruptly a triple crash of sonorous chords sounded, out of which a deep golden voice began to sob melodiously.

The song swelled in tone and developed its simple phrase into a theme of such tragic melancholy that a hundred small voices commenced piping as if in sympathy. Once more the great stunning crash repeated three times. Then with new and sinister meaning the harmony changed as deep basses lent new force to the old theme. Abruptly the music ceased—unfinished. There was a moment of silence broken by a voice.

"You like it?"

"Heavenly!" The answer was in a woman's voice. "Dulcogong has never done anything as good, Varlin. But Varlin . . . music is not the only pleasure! Look at me!"

Winters strained his eyes to see the speakers, and finally made out another form in the machine, half hidden behind the musician.

"No, don't pretend you are not interested! You are looking at Aphrila—the most beautiful woman in the world. Why do you turn away your head? Are my cheeks wrinkled or my hands hard to hold? Many men would give their lives to be in your position! Hargry came out of his fighting-tower when I visited him last year and used my circling arms for his protection during a whole mad week!"

"Don't, Aphrila! You are very beautiful—but I want to work on my music. I can't think properly when you are acting this way."

"Oh! I bother you? I at least make some impression—I distract you from your work! Music is beautiful, Varlin—but have you ever eaten food prepared by Escule? Do you know what it is to drink the liquors invented by Vint or by that great artist Grumbaugh? Come with me and I will give you all these and more! You will come back from such an experience with renewed youth and vigor and will write music greater than you have ever dreamed!"

Their voices became inaudible and Winters retreated cautiously, wondering more than ever about this mad world into which he had arisen. He crossed the narrow ridge under the trees and looked out at the great figure of Hargry striding toward him from the west! Like a panic-stricken animal, he scuttled back through the woods and stopped at the other side, heart beating like a trip-hammer and limbs trembling with fear and exhaustion. Presently he could hear the great thudding footsteps approaching, and down from the left strode Hargry. He stopped suddenly when he caught sight of the living machine.

Then the great structure advanced and the clumsy living machine tried to rise and escape, but a tentacle whipped out and held it motionless, then lifted it slowly halfway up to Hargry's steel chamber at the top.

"Why, it's Hargry! Is this any way to treat Aphrila?"

There was a short silence, and then Hargry's voice boomed out in laughter. "And who is Aphrila's friend?"

"You were not long ago, Hargry!"

"I have no time for memories, woman! Who is he?" As if in answer, a great chord of music sounded—so deep and rich as to set the air trembling and the leaves rustling on the trees. For a startled instant Winters thought the sky turned brown and felt his limbs tremble. The sound ceased, and he looked to see the tentacle set the machine and its occupants down again, none too gently. Then the tripod monster set off again northward, heading out of sight.

Evidently Aphrila and her musician were badly shaken, for it was five minutes before the clumsy machine rose into the air and soared off in panic-stricken flight to the south.

Winters tried to imagine the part of the story left unrevealed and found it hard to picture the life and activity of the human race from the fragments he had been privileged to observe. The first woman he had talked to spoke of sex matters as things for children. Yet here was a woman who evidently devoted her life to the art of lovemaking—and Hargry, an earnest, almost fanatical, biologist, was willing to amuse himself with her.

What a jumble of interests—all conflicting—did the world present! Each person followed his particular whim or desire to its ultimate end with a fine disregard for the interests—even the lives—of all others. And yet in the midst of anarchy there seemed to be some orderly progress in this line of research and that. Could it be that anarchy was a desirable thing? Winters, thinking back over the past twenty thousand years of human history, decided not. What had happened, he felt, was a cycle in government. There had been far too much control under the Brain. Now the pendulum had swung the other way and there was far too little. Somewhere between the two extremes lay the truth. After a few more thousands of years it would be found and recognized.

But his own immediate problem was still unsolved. This world was not for him. He had to get back to his subterranean chamber and await a better one. Yet how could he cross a half mile of dusty plain to the white ruins that showed against the green forest to the north? Far to the left the great form of Hargry's fighting machine showed, like the naked tower of some twentieth-century suspension bridge. Winters lay in the concealment of the shrubbery and waited impatiently. Hours passed, and Hargry still strode about

the landscape. It began to look as if he intended to remain until he had found Winters! And yet, thought Winters, when night falls surely I can slip down to the plain and cross it unseen!

He was growing hungry, but had no food left—nor anything with which to slake his mounting thirst. At dusk he carefully observed his directions, and as soon as darkness set in he slipped down the hill and started across the level. He had gone halfway before the searchlight started to play over the plain. The first stab of light coming from Hargry's thousand-foot tower startled Winters almost out of his senses. Should he retreat or keep on? But there was no real choice—he had to reach the ruins.

He stumbled forward at a run and the chill of fear gave his limbs surprising new strength. Hargry was approaching now, and the light swept the ground behind him in a long swath. On Winters ran, hoping desperately against hope. Then the light became steadily fixed upon the plain close to the ridge he had just left, and Winters had a two-minute period of grace. He could see the first of the ruined walls just ahead of him now. But the searchlight was coming slowly toward him, as if Hargry were following something—as he was, for through his telescope he studied the tracks Winters had made as readily as if he were stooping over them in person. Just as Winters reached the ruins the light caught up with him. He could not resist a terrified glance over his shoulder at the great white eye that glared balefully out of the darkness and that grew larger each second as Hargry's great strides bore him nearer.

With a cry Winters darted up a side street, into the friendly darkness. He knew where he was—he had to reach the other side of the central square. The distance was perhaps two hundred yards. Should he make straight for it? Or should he attempt to hide and slip stealthily—a short dash at a time—as opportunity might serve? When he came to the first cross street he stopped, for the light lay blindingly upon it. If he crossed he would guide his pursuer toward his ultimate hiding place. Winters realized he had not only to reach safety but to do so unseen, or he would be dug out and made captive again.

He slipped into the house on the corner. The door was nonexistent and little more than one room remained intact of the original structure. At the window on the cross street he waited breathlessly. If the light moved away for two minutes he could cross unseen and . . . there! It had gone! Like a flash he climbed over the windowsill and darted across and into the house on the other side. Then the light swept by once more—almost overhead now—and a great crashing told of Hargry's huge feet trampling the buildings to the ground.

And now began a grim game of hide and seek. Hargry was evidently determined to smash the entire city to the ground and thus destroy all hiding places. Winters thought for a breathless moment and then slipped out from the rear of the house and made his way unseen to the great circular avenue that surrounded the ancient city. If he could only do it in time! He would be protected from the searchlight, provided he hugged the buildings and ran, panting, along until he came to the section of the city in which Eric's house had stood.

The dust of fallen masonry was rising like a white cloud now, which enabled him to make his final dash along a lane and past the very foot of Hargry into the doorway he remembered. As he did so a great crash arose outside, and the front of the house fell out. But Winters was in the back room and pressing his foot on the release mechanism, which seemed to take an eternity to operate, though actually only three seconds elapsed before the heavy stone flag rose and he could plunge down into the darkness of the stairs.

He frantically pulled the lever and breathed a sigh of relief as the stone started to sink over the entrance. But Hargry placed a foot upon the building at that time and with a crash it sank beneath that ponderous weight and sealed the trembling fugitive beneath a layer of wreckage.

For an hour, Hargry tramped furiously over the ruins until no stone was left standing upon another in all that city. Then, as it he realized the hopelessness of the task, the light flicked out and the great structure commenced striding southward, the sonorous booming of the great feet growing fainter and fainter in the distance until the stars looked down upon the quiet night, and the dust settled in a white layer upon everything and gave it a ghostly look.

Beneath the city, the lights shone in a small chamber. Winters had been hurt by a falling stone and spent half an hour dressing his bruised leg. Then he took food and medicine and slept fitfully for a few hours before he made final preparations for his long hibernation. He closed the great metal door, set the

radium clock to arouse him after the passage of five thousand years, inspected and adjusted the tiny atomic motor that would keep the chamber warm and provide power for the lights that were to awaken him, and took his drug—Then in the half hour of consciousness yet remaining to him, Winters opened a heavy book, with leaves of thin sheet gold. In this he made the following fragmentary entries of facts gleaned chiefly from Bengue:

15,100 A.D.—Perfection of exogenesis. Human embryos successfully developed in test tubes. From here dates the dropping of the last link between mankind and the animal emotions.

17,500 A.D.—Test colony set up on Mars. Still maintained.

18,000 A.D.—Perfection of materials machine—any chemical substances produced at will from any given raw material. From this period commences, roughly, a general tendency toward the gratification of the individual will or ambition regardless of consequences. Tendency still dominant. History ceases to have significance to the race—a mere record of individual actions and achievements.

20,000 A.D.—Winters' fourth awakening.

Winters read the words over carefully and sighed at their brevity and the extreme paucity of information available to him. But it was the best he could do, and he closed the book and set it carefully away before he stretched himself out on the couch, adjusted the stimulant tube over his mouth and plunged the chamber into darkness.

While he slept, a slight and fearful Bengue was gazing hungrily from the shelter of the forest upon the breeding establishment of the late Meanus. For a day and a night he had been watching it and finally, taking bravery from desperation, he had marched boldly up and found it a very biologist's paradise of equipment. Young Bork and Farinda had rather hesitantly handed over control to the elderly stranger. Then Bengue spent a whole hour without once thinking of Hargry. Then he remembered and rushed fearfully outdoors and stood a minute listening, but he heard no sound. He shrewdly suspected that Meanus might have been one of Hargry's recent victims in the late unpleasantness. But after a week or two he came to look upon the place as his own. He never got over the feeling that his present freedom was a temporary thing—to be ended whenever the inevitable ultimate Hargry should sound booming on the horizon. Meanwhile Bengue bred humans and enjoyed himself hugely.

Years later the suspense of waiting for Hargry's arrival became unendurable and he began venturing upon short scouting trips in an airship, but did not happen to come upon his former pupil. Bork, moreover, was becoming difficult to control and Bengue decided upon a curious course of action. In the back of his head had stuck firmly the words of Winters, uttered long ago: "When I awake, Hargry will have been dead for thousands of years!" So one day he called Bork to him and made him a present of the establishment, leaving at once in his airship.

He flew to a secluded valley and set his atomic motor to digging a tunnel and preparing a lead-lined chamber. In the course of a few days airship and man had disappeared and were never seen again. Thus it came about that two sleepers waited the passing of the centuries until the appointed hour should release them.

On the swarthy face of Bengue rested a smile of peace and security such as he had not experienced in many weary years.

There was a hint of triumph in it, too.

## **BOOK FIVE**

### **The Elixir**

## **CHAPTER 1**

### **Exposure**

The spring storm lashed the hillside with a bite and fury it had not felt for fifty thousand years. It was

May, but the wind struck chill on the ground and the palm trees were in brown ruins—the whole tropical verdure of the Great Lakes region was doomed. The cycle of climate had swung around, and it had been growing steadily colder for a thousand years, perhaps foretelling another ice age. Under a clump of dead palms some stone ruins showed gray-white and under the fierce wind the water rippled across them like wrinkled silk.

As far as the eye could see, the landscape stretched open and deserted. Nothing alive was out in such a storm. Presently one of the white stones moved slightly. Had the ground sunk beneath it a little? But why now, why not some other time during the thousands of years the ruins had lain there? Then the stone moved once more—slowly and definitely. There could be no mistake. It was a slab of rock three feet across that must have weighed two hundred pounds; suddenly one end sank deep in the earth.

After a moment the whole slab vanished from sight, leaving a deep hole yawning there, down which the rain poured muddily. Up through the black cavity came the head and shoulders of an old man.

The face was white and unkemptly bearded, and the hawk's beak of a nose was covered with skin tight-stretched, like that of a mummy. Two piercing gray eyes peered out beneath bushy, overgrown brows and seemed to darken as they looked about, as if disappointed at the sight. Two thin hands with nails soiled and broken by recent digging rested on the edge of the hole. With an enormous expenditure of effort, Norman Winters drew himself up and stood firmly on the surface.

Ten thousand years ago he had gone down under the earth and left a new and thriving city above him. Five thousand years later he had awakened and found ruins in a mad world from which he had quickly retired. Now he had awakened again, eager to see what changes time had wrought. His clothing was ill-adapted to the cold. He drew his tunic of heavy silk closely about him and shivered.

"It might as well be a new world, for all I know about!" he muttered.

Visibility was poor through the driving sheets of rain. To the west rose the hill, to the south stretched the forest with half of the trees showing the brown color of death, and to the east a semi-open country stretched to the horizon. On the north lay the troubled waters of that inland sea once called Lake Superior.

"Twenty-five thousand A.D.!" said Winters. "I have to find shelter and people before I starve to death in this wilderness!"

South, east or west? Winters started east, chiefly because the ground was clear and walking thereby made easier. It was impossible to guess the time of day, but he plodded on—wearing and sodden—the sharp eyes roving in search of any signs of human habitation. Hour after hour he walked, soaked feet pressing sloppily into the flooded soil at each step, wondering whether he would ever come to anywhere and rather doubting that he would. Darkness overtook him. He made a crude shelter under a fallen palm, whose great dead leaves made a sort of tent at one end of the tree. He ate a handful of concentrated food from his pocket and, protected from the water by a slight knoll on which he lay, slept fitfully until the gray dawn awoke him. Warily he resumed his plodding progress.

An old man cannot lie in a coma for five thousand years without effect, even if upon awakening he spends a week in bed recuperating, and must have stimulants and nourishing food at once made ready for him by the supermedicos of the hundred and fiftieth century. Winters was near exhaustion, and his face was gray instead of white and his breath came in painful gasps. He sat down against a large tree whose leaves were still green and thought unhappily of his fate.

To come successfully through the long sleep only to die of exposure and starvation—for his food was gone—in an unfriendly world! Where were the people? He dropped off into the easy slumber of age and slept for two hours. He awoke, somewhat refreshed, and set off through the storm, wearily and slowly—only his eyes were as eager as ever. Winters was the kind of man who persisted in the face of the impossible. True, he was probably going to die. At the same time, here was the future world he had wanted to see. Well, look at it as long as you can, Winters thought. He crested a slight rise, beyond which the ground sloped away out of sight in the mist. Down he plodded, a pathetic figure, until he, too, was swallowed up in the driving storm and could be seen no more.

Ponceon had been working over his germ culture jars all night, while the other biologists slept. It had been that way from the beginning—his work had been the only real labor performed. True, Fastak and



Mintal had made valuable suggestions from time to time and old Pondero had helped him now and then with the cell-breeding. But he—Ponceon—was the real experimenter and now that the process seemed near completion he realized its success was due almost entirely to his unselfish, painstaking work.

Dawn surprised him still bent over his task, and he straightened his back and rubbed it where it ached. He looked through the great vi-glass dome at the dreary world outside and noticed the rain still beating down from the gray sky. It did not occur to him to feel sorry for anyone out in the downpour, for why should any human being in this day and age leave his comfortable living-quarters? But he did occasionally look at the rain which drummed against the dome, and so he saw the face.

It was white and whiskered and the nose pressed against the glass heavily, as if its owner could not hold up his head. As he looked, the face disappeared!

"By the Brain!" exclaimed Ponceon. "Was that fish, flesh or fowl? Or was it—could it be too much night work? No ... I saw it, all right! That snarling mouth with teeth behind the drawn lips!"

He decided some apelike animal must be outside, and he shrugged his shoulders. The glass was thick and outside it was the jungle. Then, as he continued looking, he saw an emaciated human hand clutch at the glass and fall weakly away in a gesture that spoke volumes. Someone needed help, decided Ponceon, and he dashed forthwith for the double door—air-sealed—that gave egress to the outside world.

In his haste he had not thought of clothing himself warmly. After the artificial atmosphere inside he found the storm's blast breathtaking. But it was only a few yards from the doorway to his destination and he hurried. On the ground, prone, lay an old man in strange clothing. Ponceon gently raised him in his arms, shocked at the lightness of his burden. By the time he got safely inside, his clothes were soaked through and his face dripped wearily from the sheeting rain.

The others in the laboratory were not yet awake, but Ponceon was a competent biologist and needed no help. He carried Winters into his own chamber and stripped off the soggy clothing, then stood a moment in stunned surprise at the sight of that hairy, twentieth-century body. But there was no time now for observation. The old man was suffering from exposure, so Ponceon rolled him warmly in coverings and laid him on the couch. Then he stepped over to a metal dial face on which appeared eighty-four minute levers.

Thoughtfully he pulled down lever after lever, until seventeen were depressed. In a vertical row beneath each lever were buttons and to the accompaniment of much head-scratching and chin-stroking, he pressed a number of these, correcting and changing the formula as he went along. When he finished he pressed a white button and a musical note was heard from behind the wall. Then he set a hand on a clock face and moved a sliding button up on a thermometer dial. After a last glance at his set-up, he pushed a red button.

He waited expectantly for three minutes and then opened a small glass door and removed the chemical he had created—a dark gray liquid, quite warm to the touch. Ponceon smelled it gingerly and, nodding approval, carried it over and forced it slowly between Winters' thin blue lips. The effect was magical. The old man's pale cheeks showed slight signs of color, and his rigid jaw muscles relaxed slowly. His breathing became fuller and stronger, and after a minute or two a slight sweat beaded his forehead beneath the shock of white hair.

Ponceon smiled, then yawned; he was tired out with his night-long labors. Removing his own sodden clothes he lay down on another couch and was promptly asleep.

Winters awoke during the following night, a little before dawn. He could not imagine where he was, but the bed and the warm coverings were palpable to his touch. He lay there wondering weakly until the window at the end of the room showed morning gray. Then he made out dim details—a laboratory fixture beside the window, a couch on the other side of the room and a strip of storm-drenched jungle outside. He rather thought the other couch was occupied, but it was too dark to make certain, and he was too tired and weak to bother. He fell asleep again.

When he awoke once more, it was to look into the mahogany-brown face of a young man who stood over him with a glass in one hand. For an instant they gazed at each other, these two. The face he saw was a kindly one and marked with the signs of energy and intelligence. The young man smiled and

showed a neat half circle of pink and white gum-nails between the clean-cut lips.

"Who—and what—are you?"

"I am called Winters and I am—well, a traveler of sorts."

"Then you are human! I wasn't even sure of that! You have teeth and hair grows on your skin!"

"Do you know anything of the history of the human race?"

"Yes . . . some. But what . . ."

"Twenty-three thousand years ago, when I was born, all men looked like me."

"What are you saying! Twenty-three thousand years ago!"

"Yes. My story was well known the last time I visited the surface of the world. That was only five thousand years ago."

"Why, of course! Now I remember something . . . where was it? ... I've forgotten, but no matter. I thought it a myth. Was it not you who was supposed to have retired into a cave beneath the earth and to have slept all that time under the influence of drugs? The legend has it that you twice saved the world from extinction—once by destroying the Brain and again by leading the great Exodus from the City of Sleep. Can the story really be true?"

"It is true—more or less. But how did I get here? I remember walking for days on end through the storm and then . . . here I am, snugly in bed!"

Ponceon smiled down at the old man and related how he had brought him in, unconscious. "You have had a narrow escape," he added. "And ... it has weakened you seriously. I am afraid your travels into the future are over, Winters!"

He held the glass to Winters' lips. "This will strengthen you," he said and added: "What an extraordinary thing it is to have the mythical Winters come to life in this laboratory!"

"Why this laboratory?" asked Winters, choking over his drink—which he found breathtakingly pungent.

"Because you have found a way to make yourself live thousands of years while we here have just perfected a method for human immortality!"

And at these startling words Winters' age-lined face stiffened and his muscles trembled as if each protoplasmic cell had heard the statement separately and strained with individual hope. His face whitened, and he rose slowly on one elbow to stare at his host. He must have heard the word wrong. "Immortality!" he whispered, and suddenly realized how old and tired he was—how weary of the things of life. A vision of the world of his youth rose before his eyes in a surge of nostalgia, and he saw faces dead for thousands of years and thought of old, forgotten ambitions and hopes, a world full of them, that had died with their disillusioned owners. Tears filled his eyes.

Ponceon was smiling at him. "We have been working on the problem for centuries, and the four of us here have finally succeeded in overcoming the last obstacle. Now—" he straightened his shoulders proudly—"we shall march—we humans!"

"But how horrible!" said Winters. "How terrible to continue living—weary and old!"

"Old? Not at all. When you are stronger I will show you and explain. But sleep now."

Ponceon left the room and proceeded to the laboratory where an elderly man of huge girth greeted him enthusiastically. His face was lined with age and his hair white with many winters. "Pondero!" exclaimed the young man. "You will never guess who the stranger is! He's Winters, the legendary time-traveler!" Two young men crowded in from the next room at his words, and before an astonished audience Ponceon repeated his story.

"We must make him young again—what a chance to try out the full cell-cycle!" said Mintal, his walnut-tinted face glowing with interest.

"We must first finish with old Pondero here," said the lean and cynical Fastak. "What is his record to date, Ponceon, two hundred?"

"Two ten-sixty more cell types to go. Are you ready, Pondero?"

With a grunt the great body lowered itself upon an operating table and the three young men busied themselves preparing for a surgical operation in the region of the head. The odor of anaesthetic filled the room. Many hours later the three stood beside Winters' bed and discussed him in low voices.

"If we can work with him, we can work with anyone!"

"It will save going off in the airship to find another subject—it's not easy to find an old man willing to risk his life."

"Suppose this Winters fellow objects?"

"Hmm! In the normal course of things he hasn't much longer to live—I examined him and I know," put in Ponceon.

"Then why not . . ."

Ponceon nodded and beckoned to the others, who stooped and carefully raised the frail figure from the couch and led him along the corridor to the laboratory. They strapped him on the operating table and Fastak brought forward a tall rack-stand on rubber wheels. In it were placed, row upon row, two hundred and seventy test tubes, each set in a bath of warm liquid. Mintal was sponging off Winters' body with a disinfectant while Ponceon applied the anaesthetic. Then, all three armed with lancets and a battery of syringes, they set to work. Two hours later Ponceon straightened his back and counted the syringes left in the used test tubes. "Ninety more to go—two-thirds of the way through," he announced. "I'll do the brain cells and you two finish the body."

Mintal grunted. "Quick work . . . hope he can stand the shock!"

Fastak was feeling the right lower abdomen. "Something wrong here! Have you the fluoray, Mintal?"

A sort of electric torch was passed to him and he placed one end against the white skin and peered through the other end. "Unbelievable!" he said.

The other two young men dropped their work and hastened to look.

"It's some sort of vestigial organ."

Ponceon walked over to a bank of buttons on the wall and began pushing one after another, gazing intently at the wall beside him as he did so. Pictures flashed there in response and presently he found the thing he wanted and studied a portrait for several minutes.

"It is a kind of second stomach which all men used to possess thousands of years ago. It was called appendix vermiform, not that that helps much. I'm afraid this ends our chances."

"Shame to waste all our work."

"Why not cut it out—remove it entirely?"

"Of course! Why not? Try, anyway." And they set about the performance of an operation once common in the world but long since forgotten. Carefully they scraped away every last vestige of the tissue and then continued with the main operation of lancing and injecting cell tissue from the tubes on the rack. Mintal then came to the tonsils, another portion of the body which had no two hundred and fiftieth century counterpart. The tonsils they also removed completely, cutting out every microscopic particle of them. The teeth they left in place for future consideration.

The sun was setting when the work was completed, and Winters was placed on a wheeled cot and trundled along the corridor to a room which was obviously devoted to hospital work. Pondero's great bulk lay quietly on a cot. After a careful examination of both patients, the three young men left the room, ate their evening meal and fell promptly asleep, worn out with their day's efforts.

## CHAPTER 2

### Three Against Two!

The sun rose and set three times and brought fair weather—so fine that the three young men found it more pleasant to walk out of doors than remain in the scientifically correct climate of the laboratory. Spring dawned in those three days and leaves sprouted—but it was too late to save the tropical vegetation killed by the severe winter. Birches showed white and maples flowered redly in the swamps while the semitropical trees died in brown ruin. On the fourth day after the operation, Winters struggled back to consciousness.

The old man had come close to the brink of death. He had lain in a world of alternating blankness and phantasy. In his dreams he lived once more in New York of the twentieth century and saw anew

those dear familiar faces long dead. His first emotion upon opening sane eyes was one of melancholy for all that had passed. Nevermore could he visit scenes of the old days. Yet, he reflected, what really did it matter to him who was in turn so soon to die? What was it the young biologist had said—that he would make no more time journeys? Well, he still knew nothing of the present age.

He felt stronger, somehow, and a trifle impatient at lying on this cot, inactive. Strange, though, how vigorous he felt! Up he rose and would have dressed but found no clothing, so he drew a sheet over his shoulders and walked to stare through the window at the glorious sunlit sky and the trees sprouting new growth.

He turned suddenly at the sound of someone entering the room. It was a rosy-cheeked youth—far, far too fat—whose dark brown skin glistened as if newly stretched over the plump cheeks. He stared unbelievably a moment.

"Winters!" he cried at last. "By all that's wonderful! You look like a new man!"

"I'm afraid I don't know you. How do you know my name?"

"Oh—that's right. I am Pondero. I was operated on the same day you were and look at me! I don't feel a day over twenty!"

Winters stared. "Why should you?"

"What are you talking about, man! I am seventy years old . . . but you don't know! Oh, this is glorious! No one has told you about your operation?"

"My operation?"

But his acquaintance had rushed from the room waving his hands wildly above his head. Winters was still staring at the door when he returned accompanied by Ponceon, Fastak and Mintal. Pondero carried a mirror.

"Look at yourself, Winters!" he cried as he thrust it in his hands. And Winters looked.

He saw the face he had almost forgotten—the face of himself as a young man. The nose was fleshier; the eye brighter and, somehow, changed. Here and there a few lines remained—the marks of experience never to be effaced. Unbelieving, he gazed at the darkened hair, the plump neck, and felt the firm rounded muscles on his arms. He looked up wonderingly at four amused faces. A wild thrill of hope—so vague that he could scarcely define it—surged through him. What had Ponceon said about immortality? He licked his dry lips.

"Is it... did you make me ... immortal?"

Ponceon laughed aloud.

"Better than that, Winters, we made you young!"

"But how? What possible means could you employ?"

"It is simple. Even in your day it would have been simple—tedious perhaps to work out, but simple in theory. We hybridized your cells."

"What do you mean?"

"Do you understand biology at all?"

"I did in my own day—what was then known."

"You know then that a race of cells or of any protoplasmic life tends to thin and die out after a certain length of time? It is usually accompanied by—or measured by—the amount of inorganic matter in the physical content. You also know—for it is an ancient principle—that to infuse new life into the old is to cause a new hybrid race to start, a young race with a full life-cycle before it."

Winters frowned reflectively. Then he nodded. "There are two hundred and seventy species of cells in the body of types sufficiently differentiated to stand systematic classification. In this laboratory we have cultures of every one of them growing in test tubes. All we did to you and to Pondero was to insert in its proper place in your bodies a small particle of each of the two hundred and seventy types of cellular tissue. Nature has done the rest, and your entire body is now made up of new, fresh, vigorous cells. I said it was simple!" And he looked smilingly around at his companions.

"Great Heavens! And when we once more become old . . ."

"We do it again!"

Winters pondered the miracle in silence during the next day or two, which Ponceon forced him to

spend quietly. He tested his body soberly and with an open mind, in spite of that unmistakable thrill of youth which coursed through his veins and bade him doubt no further. But he was finally convinced of his rejuvenation. On the next day he rose briskly near dawn and dressed in the cool silklike clothes that had been provided for him. Then he ate breakfast from the automatic food purveyor and, full of vigor, entered the laboratory where Ponceon was already at work over his test tubes. Winters had made up his mind.

"I am going to go back to school," he announced. "You have given me new life and—why there's no reason not to! I shall proceed to learn everything known to science. Why should I not begin here?" Ponceon nodded thoughtfully. "It has all sorts of complications, this business of immortality. If you will give me three or four hours a day help here, I will direct your study of world conditions. We have a good library of records here. But there's a deal of work to be finished on our rejuvenation operation before we can call it complete."

"But it worked on me and on Pondero."

"I know—but you are both still under observation. Perhaps something will go wrong. Your teeth, for instance, should be examined. Perhaps we shall pull them out and try grafting gum-nail tissue on your gums. Also in the laboratory technic we have trouble with the germ culture for several cell types. That will take time and work—a month of it or more."

So Winters went back to school and made mistakes and learned much therefrom. In off times he sat by the hour in the library looking and listening to the records—science, history, travelogs and philosophy. At the end of two weeks of study he wrote down tentatively a brief resume of the course of human progress during the past fifty centuries.

At his last awakening he had found a world ruled by individualism carried to extremes. Almost no social or racial consciousness had then existed.

"Today a curious fact is apparent. Each man realizes and shares in the united attack by mankind upon the unknown. Each man controls his actions and his efforts toward the common good and refrains from infringing upon his neighbor's liberty. Yet all this is accomplished by education and codes of ethics rather than by laws or compulsion.

"In 20,000 A.D. efforts were ruthlessly self-centered. Shortly thereafter commenced a remarkable period of group action by the weak against the strong. Such a reaction was inevitable, as was its success. By 21,000 A.D. a system of voluntary social agreements had been established, and although there seem to have been a number of individuals who refused to participate, the concerted group action of the majority soon began to bear material advantages. New knowledge and invention were perfected and only shared among the society members. Thus, slowly, the society of individuals came to include the entire human race.

"The agreement was a simple one: to force no man against his will and to never refuse help to any man—these seem to be the two most important and, indeed, the only vital agreements. So sensible and beneficial an arrangement was quickly perfected in its details, leaving no room for laws or complications. By the year 22,000 the social contract was so thoroughly established that the imagination of man had not in five centuries put forth a proposal to change it in any way. Under it, Science thrived and took enormous strides. The population increased steadily until it was found desirable to set up colonies on Mars and Venus, both of which are now fairly densely populated. Rocket liners fly daily throughout the solar system, and accidents are no more prevalent than those upon the seas of the Earth in the twentieth century. The journey, with atomic power, requires less than two weeks to Mars and only about ten days to Venus.

"The Earth has a population of some one billion people. They are housed in congenial groups of anything from two to two thousand and are scattered impartially over the face of the globe, for artificial climate is maintained in all buildings on Earth, just as on Mars or in the rocket ships that hurtle through space. There is no barter or trade, for every group has a production machine capable of turning any given raw material into any desired product. There exists a sort of trade or exchange in the products of the mind. These are not sold for money or position, of course, but upon the importance of a worker's inventions depends the willingness of others to help him in the event he undertakes a project that requires many assistants."

Here Winters stopped and read over what he had written. Even to put it on paper set him aflame with impatience to go and explore this new and wonderful world. But he had promised to help in the laboratory until the most wonderful of all inventions was perfected. He rose and walked down the corridor.

As he came to the door of the laboratory he heard the sound of voices raised in argument, and he stopped to listen. Pondero was speaking: "I should think it would be obvious, Ponceon! Here is our chance to control the destiny of the race for unselfish ends. We can preserve the few noteworthy men of genius from each generation and let the rest of the people live and die as they would naturally do. Think of it! After a few thousands of years we should have a population of great minds—with brains actually in the majority! Let us make immortality a reward for great work or for noteworthy accomplishment. Why should we broadcast our discovery to the entire world? What purpose would be served? Unworthy people would be preserved in their unworthiness, and bad counsel and wrong principles could never be wiped out from the human mind—even by the great healer, time! It is criminal to do it!" Fastak and Mintal nodded, convinced.

Ponceon shook his head obstinately. "It sounds plausible," he admitted, "but it must be wrong! Why? For the simple reason that we are committed to refuse help to no man. We shall be asked for information and must not refuse it. Any scheme to help mankind which includes a refusal of such help must—somewhere or somehow—be bad!"

"But there are three of us and we are all determined," put in Mintal with lowering brows. "What do you plan to do about it?"

Winters could feel the tension in the room and stepped softly through the doorway. His mind was made up—he would stick by the man who had saved him—Ponceon. But there were three strong men to cope with. He silently gave thanks for his youthful strength so miraculously returned to him and eyed the laboratory equipment speculatively with a view to finding some possible weapon. On a table nearby was a metal rack support—a strip of steel two feet long and half an inch thick.

"I shall announce our discovery, giving full details, today!"

"You can't do it, Ponceon! I tell you it would be throwing away the greatest opportunity for good ever offered in history!"

"And I say that, as you know, we are bound by the social contract to benefit the world by our work. We cannot pick and choose those whom we are to help!"

"That is just what we shall do!" exclaimed Mintal savagely. "I cannot understand why such a simple thing fails to appeal to you!"

"Simple! Are you willing to assume the task of choosing those who are to live forever and those who must die?"

"Why ... er ... I wouldn't have to! We could appoint a committee and let their findings be scientifically determined."

"Who would pick the committee?"

Winters had edged his way unobtrusively over to the table, and his right hand behind his back had firm hold of the bar of steel. He tried to catch Ponceon's eye, but that young person was heatedly gesturing into the outthrust face of Mintal. Winters had seen plenty of fights in his day and knew what to expect. It could not be very many minutes more, he felt, before a blow was struck; and his hand tightened on its weapon as his eye measured the distance to Pondero's head.

"Stop a moment," cried the huge one. "How far will you go with us in the matter, Ponceon? Will you even hold back your announcement until you are asked by someone for the information? What I mean is, would you be willing to let us go ahead for the present—operating only upon old men of known worth and intelligence? Then if someone hears about the operation and asks you, we could grant him the secret on condition that he keep it to himself. Now surely that's not too much to ask!"

"It sounds very plausible, Pondero. But it's just as wrong one way as another."

"But that would not be refusing help!"

"It would be withholding help, though. The human race is under sentence of death, individually speaking. We live out our lives, waiting for the stroke of fate that shall stop our being. We are in need of

help that our lives may be saved. Even as I speak a hundred people die somewhere on the earth. In the next moment another hundred breathe their last. I must save them from that fate and as quickly as I can."

"For the last tune, Ponceon, are you going to be sensible about this thing or not? We are three to one against you."

"The majority does not make right, Pondero. I tell you once more that I shall announce our discovery this noon!" And he shook a clenched fist under Pondero's face.

"Besides," Winters put in quietly, "it's three against two, if you don't mind! And I have another argument here with me!" He produced his weapon from behind his back.

"An argument!" said Fastak, frowning. "I don't understand."

The others also looked puzzled. Winters began to wonder if he could possibly have overestimated the value of human strength. Perhaps these supermen of the two hundred and fiftieth century had powerful weapons concealed on their persons.

"I shall use this argument of steel on the man who interferes with Ponceon!" he said stoutly.

The four men stared at him in surprise. Then Mintal's satanic face worked furiously, and his shoulders moved convulsively. Winters half raised his bar, expecting attack, when Fastak's roar of laughter cut the tension of the room flatly. The other three joined him—even Ponceon. He, indeed, doubled up with mirth, gasped out: "Oh Winters! What a quaint prehistoric notion! Did you—ha, ha!—did you think they were—oh, this will kill me—you thought they would strike me!"

In great confusion of mind and with scarlet cheeks, Winters stammered out his apologies. They paid no attention whatsoever to him. As silently as he had entered, he left the laboratory and shut himself up in his room. About noon he came out and went once more to the laboratory, to find the four gathered in front of a flat board set with instruments.

"I warn you, you will regret this, Ponceon!" said Pondero in a severe voice. But Ponceon calmly and steadily completed his preparations and in a clear firm voice proceeded to make the announcement to the world that has since become considered a classic in the annals of human history. And Fastak, Mintal and Pondero stood by, frowning at first; but as the inquiries began to come in over the receiving vi-scope and congratulations and excited applications for treatment filled every recording spool in the laboratory, their brows became smooth and they joined in the thrilling work of humanity's reprieve from its age-old enemy—death.

Soon the quiet little laboratory became the scene of mass colonization. Before long, ten thousand airships had landed, and vi-glass housing structures were commencing to rise. A city of half a million inhabitants was soon in existence, and biologists thronged the laboratories as the great labor began. In all this Winters was left almost entirely to himself and walked about examining and studying people and things with great interest. One day he found Fastak and Mintal in a recreation room talking to a group of attractive young girls and they called him in.

They told him that they had turned over all the information needed for such a simple process to competent assistants and were now bent on enjoying a social life for a time. "Why not join us?" the three asked.

"Where is Ponceon?"

"He was here a while back—but he has gone off to live with Mardia a few days. He'll be back tomorrow, perhaps."

Winters was not shocked at the very casual sexual relationship. Indeed, he was quite prepared to find these people of the future taking one biological need as calmly and as sanely as any other. During the course of his life, thereafter, he contracted many such temporary liaisons himself. The hunger of sex was considered no way different from the hunger for food—except that the latter more frequently interrupted one's regular occupations.

Upon this occasion, however, he was consumed with impatience and eagerness to see the world and mentioned this to Fastak.

That young worthy laughed. "Take an airship," he said. "You'll find many of them outside that belong to no one in particular."

Winters walked to the edge of the city and passed through an air-lock now open due to the mild

weather. A young man standing nearby was only too flattered to show the famous Winters how to operate the simple mechanism and assured him that "if anything happened almost anyone would help him out of his troubles."

### CHAPTER 3

## The Search for Infinite

And so the ancient and yet youthful Winters set off for a month's cruise during which he haphazardly circumnavigated the globe. When he was hungry or thirsty, a push on a button produced food and drink. When the fuel dial showed red—as it did once over the Indian Ocean—he descended to the surface of the water and pulled the intake lever, whereupon the suction tanks filled themselves with enough brine to keep the atomic motors running powerfully for a month. When he wished to sleep, he landed his ship and stretched out on the bunk at the back of the cabin.

He visited some large cities and found everyone excited over the prospect of human immortality. No old people were left anywhere, for these had all proceeded to the laboratory near Lake Superior to restore their youth. But the young men and women were revising their entire mental outlook upon a larger scale. No longer was there a problem about "what to do with one's life." Life could—barring accidental injuries—continue forever. Therefore each person was proceeding to do whatever he or she happened to want at the moment. He found one man contemplating the idea of breeding dwarf humans and selecting for dwarfness generation after generation until he had beings of microscopic size. "It might take a million years—or ten million," said this calm dreamer. "What difference does time make now?"

On an island in the South Seas he found a small group of five people. They had been doing some desultory research in physics but had abandoned it for the sake of a few hundred years of loafing under the sun down on the beach.

In western America he found a glass building that housed one dreamy-eyed mathematician. He had abandoned all other tasks for the ethereal joy of producing pi to infinity. "Probably you know pi to its fifth decimal—3.14159," he told Winters. "It has been carried by previous workers to its ninety-fifth decimal, but the work is time-consuming in the extreme. I have decided to devote eternity to it."

"But supposing it comes out an even number in one of your later calculations?"

His eyes brightened. "It's fascinating to think about, isn't it? Will it ever come out even or is it an absolute prime! That's the question!" And he turned to his figuring in a fury of concentration as Winters left him.

But the real excitement was reserved for his return to the research laboratory. This he found much smaller than it had been, for the work had been decentralized. A few thousand people remained, however. Ponceon and Pondero welcomed Winters back enthusiastically.

"Now that you have explored this world," said Pondero, "how would you like a cruise of five or six hundred years through space?"

"What do you mean?"

"Why, that the human race is no longer confined to this little solar system. It is many light-years' travel to the nearest star and would require hundreds of years in our fastest rocket ships. But now the voyage is entirely possible. There are dozens of expeditions planned, and Ponceon and I are setting off next week. Want to come?"

"But your food?"

"Food!" exclaimed Ponceon. "Food, water and other necessities are simple. In an airtight test-chamber the processes of life continue without loss of one single milligram of matter. Our machines turn any given substance into any needed article. We merely use matter over and over again. A slight loss is experienced in providing energy—but a few tons of sand will keep us alive for millennia. And as for fuel—another few tons in the atomic repulse engines will give us more speed than we dare use."

Winters accepted enthusiastically and set earnestly to work to learn the rudiments of that science which so miraculously had conquered nature's secrets. A week later he sat bewildered on a steel-sprung



seat in a great vi-glass sphere and watched the Earth sink rapidly away below him. In a week they landed at the edge of a great, glass-covered valley on Mars, and he marveled at the Earthly appearance of everything inside the dome as contrasted with the red wastes of desolate sand so grotesquely stretched to the horizon outside under the dark blue Martian sky.

A week of sightseeing—for Ponceon had never visited Mars—and then the journey was resumed. Day after day slipped by—Ponceon and Pondero finding their chief interest in Winters' earnest struggle to acquire a hundred centuries of learning in one gulp. But after a month had gone by, the routine of the ship settled into a dull rut, and after a year Winters came to really know something of modern science. There were (they calculated) two hundred more years to be passed before their goal was even approached. So it came about that they all took a leaf from Winters' personal experience and erected a lead-lined chamber in the center of their sphere. They constructed a clock based on light intensities that would awake them whenever they even remotely approached a star.

Then Ponceon prepared drugs and they entered their ray-screened chamber and slept. On through space for a century and a half sped a lifeless globe. At the appointed time they awoke, painfully restored their wasted tissues with days of medication and exercise, and looked out upon the looming brightness of a minor star too dun to have ever been recorded on Earthly telescopes. The star was in the red-dwarf stage and ancient beyond all computation. Eager-eyed, they swept space for a sight of possible planets, but in vain. Then on past the hoary sun into dayless space once more.

They slept and awoke and traveled on into this mystic maze of matter we call the universe. They found one giant star around which swung a huge, cheerless world of bare, frozen lava-smooth and lifeless. On this they landed and tore ten tons of rocky fuel from an unknown hillside to send them still farther on their way. They grew old slowly with the passing of the years and operated upon each other all one tuneless week and became young again.

Out from Earth there shot a thousand such exploration parties every century until one would wonder that space was not filled with them. Presently stars were found which were encircled by habitable planets and on these colonies were formed. This disease of worlds that we call life spread over the surfaces of spatial bodies in all directions from Earth—the great center of infection. Five thousand years passed and many of the same people still lived and pressed their quest into space.

A few were killed in accidents now and then, to be sure, and once in a while a new disease would crop up and some few unfortunates would die before science could find a specific cure. Ten thousand years passed, and billions upon billions of men and women thronged the planetary stars. On went life—never ceasing—never satisfied. And with it went Winters, still eager-eyed and impatient as ever to learn one more fact and to accomplish one more task.

Once, on a return visit to the Earth he saw a face vaguely familiar. Where had he seen that slight form with its almost ebony skin and that apprehensive, yet inquisitive, face? Surely it could not be ... it was Bengue! Winters greeted him cordially and learned that Bengue had imitated his example and escaped by sleep from the threat of the vengeful Hargry. He had awakened a few months after Winters had left the Earth and had been actively engaged in breeding experiments ever since. The two then spent half a year together and, finding that they had nothing of real interest in common, separated by mutual consent.

Word came back to Winters on a planet on the very edge of that void which rims the universe that Ponceon—the great discoverer and liberator of mankind—had been killed in a rocket accident. Winters mourned the passing of an old friend. This was in the year 50,008, two years before the discovery of projection rays, which changed the course of history, in fact! To wield power at a distance of a thousand light-years! Of course, that used up raw material at a wholesale rate, but it gave these insignificant human animals such a Godlike sense of power to be able to juggle with the very stars in their courses. And the damage done was not—in comparison to the scale of cosmos—more than a flea-bite on a Brontosaurian lizard.

Shortly after the turn of the hundred-thousandth century Winters revisited the Earth and gazed in awe at the reddish sun that marked off the days of a dying planet. Not more than ten thousand souls now dwelt upon its surface, and Winters was filled with a sense of sadness at the changes wrought in the familiar scenes. On a mountain top in Africa he talked with an old man, gray-bearded and feeble with

age.

"I shall never undergo the youth-process again," he said. "I am old and presently I shall die and be no more."

"If you were young you would be full of hope and energy and not wish to die," replied Winters.

"I shall die because life has nothing to offer me.

"Oh I know what you will say. Food and love and adventure are all very well. They titillate the senses—nothing more. Though we humans have grown in importance, we are insignificant atoms measured in the scale of creation. There is nothing we can do that is really important. Suppose we increase human stature until we stride about using stars for footstools—mere size does not add to our importance. I do not eat unless I am hungry. I undertake no action unless it is for a definite and reasonable purpose. I can see no purpose in life—so I refuse to be so absurd as to continue living!"

"But one thing you omit—why not devote your life to solving its secret? Try and find the reason or purpose for existence!"

The old man shook his wintry head emphatically. "I once had a friend who made that resolution. He set off .... oh, thirty thousand years ago ... for a secluded planet at the edge of the universe in the direction of Alpha Centauri where he planned to conduct research upon the subject. His name was Condonal. I have never heard of him since."

Winters, vaguely saddened, determined to leave the Earth and set off alone through space. He found himself growing more and more unsatisfied with life and all that it meant. After all, what possible purpose could it serve? After a year's lonely cruising, he determined to make a search for the man called Condonal. His adventures would fill all the books in all the libraries of the world. He came at last on the report of a dark-haired woman with whom he had lived half a month, to a blue-white sun about which circled one lone planet scarcely a thousand miles in diameter. Here, she had heard, dwelt Condonal, and here he had been for many thousands of years. Many men and women had come to visit him, she understood, and most of them had remained as his disciples.

Winters felt a curious sense of novelty and youth as he swung his spaceship down and cruised over the face of the green and silver world below. Eagerly he peered for signs of habitation, but in vain. Then he noticed that the world did not turn on its axis, but remained with one face forever fixed toward its life-giving sun. Near the equator and at the very edge of the day-line, he found at last a great building with an enormous white dome that thrust above the green foliage. He brought his vessel to a rest on the soft earth in the midst of a group of low structures that surrounded the central tower.

As he stepped out and felt smooth grass beneath his feet, he experienced a delightful sense of freshness—the air was different from any he had ever breathed. A light breeze blew from the night country behind him, cool and delicious and smelling faintly of melted snow. In this place it was always spring and always morning. No one came to meet him, but he stood there alone with a feeling of familiarity, as though he had at last come home. Trees cast great long shadows across sap-green lawns, and his memory went back to the days of his childhood and early rambles through the tingling dew of barefoot summers. He felt wonder well up in him and made his way toward the nearest building.

At the door a man greeted him calmly, offering shelter and food.

"I have come, if I can find him, to speak to a man called Condonal."

The man nodded as though he had expected the request. "The Master is free for the next hour, when he is due at the Temple," he said. "I will take you to him."

Winters was led to a building of gray stone close beside the huge dome that dominated the scene and was ushered through an open doorway into a large room. The light was dim after the bright sunshine, and it was a few seconds before he made out the youthful figure seated in a huge chair in the center of the room.

"What do you seek?" asked Condonal—and his voice was deep and quiet like an organ tone. Then Winters told him of his search and its purpose and he nodded understandingly.

"You are welcome here," he replied. "Our community is made up of searchers. What purpose has life? That is our problem in research and we shall solve it!"

"But what possible solution can there be?"

"We do not know even that—on the face of things there seems to be none. Stars are born, wax great, diminish and die. Throughout infinity—universe after universe—the process goes on. What is will one day not be and on still another day will again exist. We have pulled stars apart and found no secret bidden inside. We have pursued every phase of science to its ultimate and found no purpose in creation. Our reason plunges forward and searches every possibility of the future and fails to find any basis upon which to erect the least speculative structure. Life is not a reasonable thing, perhaps."

"You have come to that conclusion?" cried Winters sadly.

"Physical life—yes," said Condonal. "Consider what it is—a progressive deterioration of matter and force. The stars are flying apart at a speed which, calculated backward, indicates that they started their motion perhaps five billion years ago. The age of the stars themselves—progressing from white giants to white dwarfs, to red dwarfs, to lightless lumps—agrees fairly well with a universal birth five billion years ago. Everything, even the calculated age of the Earth, agrees.

"Now that," Condonal said slowly, with a serious light in his face, "that was a wonderful birth. That was creation, if you like—as much a creation certainly as follows the thumbs of a sculptor when he twists a lump of clay into a recognizable figure. You can call it rearrangement; I prefer the word creation. By definition, merely, there must have been a Creator."

Winters began to shake his head, thought a moment, then nodded half-heartedly.

Condonal smiled. "Names are not too important," he remarked. "And there was a creation.

"A Creator!" he mused. "What was He like? Oh, not human; not even physical in our ordinary three-dimensional fashion. Such a creation is impossible in ordinary three-dimensional physics. Consider what it meant: Laws of order were set up as a result of which stars bore planets, planets bore life, life became—us. A five-billion-year wait. The result was inevitable; you cannot break the laws of physics, you know.

"It could have been accident; it could have been intentional. If accident, it was the most elaborate one, the most complicated and puzzling one, that ever occurred. I think it is too well planned to be anything but an intentional act—not only creation itself, but everything that followed—even our conversation, Winters!

"If intended, then I think it improbable that creation had any physical purpose. Consider what vast powers, what meticulous control over all things physical are implied! Would such a Creator take such an elaborate route to reach a physical result? Hardly. It would not be necessary for Him. He could have managed that billions of years quicker. But if the purpose was not physical, what? Why, extraphysical!

"Thought is not explainable by physics—not entirely. The process of reason, yes. A calculating machine reasons; the Brain reasoned better than any man. It could remember better, too.

"The sensibility, the feeling and emotion, all are shared by men with the lower animals. They are probably extensions of the purely physical.

"There remains that combination of will and imagination which is peculiar, so far, to the human race. This could be the stuff for which creation was set in motion. Perhaps the Creator is a cook, and this mental product the food He prepares. Perhaps He is a chemist, and our minds are the crucibles in which he refines the product for some unimaginable purpose. I like the last idea better. Mere will may be ill-will, you know, just as easily as good will. It may be useful to Him only after it becomes good will."

"But mere good intention, as an entire answer to all existence," put in Winters. "We used to have a saying that the road to Hell was paved with good intentions."

"It is more likely to be the other way about," answered Condonal. "Life itself is a sort of Hell. This mental stuff may pass through life after life, being refined a little more each time. The road to good intention is probably paved with Hells."

"But this is all mere guesswork," said Winters after a silent minute. "All this speculation is thousands of years old."

The deep-set eyes twinkled sanely. Condonal nodded. Then he held up his hand and his dark, lean face lighted with purpose.

"But nevertheless our research is sure and we will discover the secret," he smiled. Winters' frown of bewilderment amused him. "The answer lies in evolution."

"But we have been experimenting for a hundred thousand years!"

"And we have failed; I know! We have been on the wrong track. We have tried to evolve the human animal into some finer type. That is a waste of time."

"But ... I don't understand."

"Yet it is plain enough. The human animal has achieved a new plane of existence called reason. Very well. This reason of his asks a question which it is unable to answer. Consider a moment how this reasoning ability came into existence. We will start with first life-one-celled jellylike creatures in a pond. Could they reason? Then we will consider the structure of the human body. What forms its tissues? Nothing but specialized forms of these same one-celled primitive organisms! Can your muscle tissue reason? Yet each cell of it lives and eats and reacts to its environment and, eventually, dies. It cannot reason, but its willingness to cooperate with a billion billion other cells makes possible a human being who can reason. Now do you see?"

"I'm afraid ... well, I do seem to have a faint glimmering."

"But it is so simple! The cooperation of animals makes possible a new thing in creation—thought. What would result from the cooperation of thoughts? Why not another new departure—a superthinking—an understanding—an ultraphysical Being who would be capable of reason as far above our mental merry-go-rounds as we, in turn, are above the elementary tropisms of bacilli?"

"But . . . what good would that do us? It is we ourselves who wish an answer to life's riddle."

"And when He is created, will He not tell us?"

"Hmm! You used our body cells for your analogy. Did you ever think of thanking them for their creation of your body? Did you ever try to explain to them what reason is?"

Condonal laughed cheerfully. "You are an apt pupil! But answer me this: how many hours have been spent by our biologists in human history examining the lives of our body cells, learning how to help them, striving to improve their condition?"

Winters nodded. "That is a point," he conceded.

"And we have found them incapable of understanding, have we not? If we had found them to be little creatures capable of speech and reason would we not joyfully have commenced their education—for our own sake, if not for theirs?"

"Oh ho! And you think that your superanimal will ..."

"Of course! When He looks around Him and begins to inquire into the reasons of His own existence, He will find us. He will study us and marvel and without question will inform us how to act so as to help Him in His own evolution. And then ... ah! ... Then He will search out the secret of life and tell us. Perhaps we will not be able to understand, but we will at least have the opportunity."

Winters was excitedly pacing the floor, engrossed by the bold conception. "Even if we do not understand we will at least know that there is a purpose and that knowledge in itself is all that we need."

"But we have not yet had that assurance," reminded Condonal smiling. "Much remains to be done. I must now go to the Temple."

Winters followed his stately progress humbly and hopefully. At the Temple Condonal left him. He made his way through the main doorway and entered the vast cavern of the building. From above poured a deep purple light like a velvet hanging; it shone somberly upon a thousand quiet figures seated in black chairs. Three hundred feet above stretched the great dome, many-windowed and mysterious, and here and there on the walls Winters saw little cages in which men tended banks of instrument boards.

They seemed very far away and unimportant in the dim light. Winters found himself tingling gently all over the back of his neck. Three other persons stood beside him in the doorway. Presently one of the figures seated in the body of the great hall stirred quietly and rose, whereupon one of those waiting walked softly forward and took his place.

As he passed, Winters studied his face curiously. It was pale as faces normally went—being olive brown—and an expression of utmost peace and tranquillity rested on the shapely features. Presently more people arrived at the doorway and stood quietly waiting. Two more exchanges were made and then a fourth sitter rose from his place and Winters, impelled by the expectant glances beside him, walked forward and sat down in the chair.

The back was shaped to fit his body and two soft pads pressed against the base of his brain. Instantly he felt a great current of emotion sweep through him—vast and inexpressible. He caught vaguely the current of some deep underlying meaning that surged and changed in pattern. But more than that was the calm sense of right—as if this particular place was where he belonged and as if some definite objective was being accomplished here. It was the spirit of cooperation in its abstract, nonmaterial form. A great and peaceful joy came into his body and made him unaccountably happy and tender.

Tears welled in his eyes.

But presently he felt a touch on the shoulder and looked up into a kind face which said, "Your mind is not yet disciplined. You must first study the ritual. You are not cooperating." And he rose to find a dark-skinned woman in white robes waiting to take his place. In a sort of drunken ecstasy, Winters left the Temple and wandered thoughtfully out into the eternal morning sunlight that poured peacefully on the soft landscape. His mind was filled with new vague thoughts that eluded systematic pursuit provokingly. After an hour he found himself back at the Temple. If he could enter again he felt sure that he would come out with the nameless impressions more deeply registered upon his mind and would then be able to classify them and think clearly. But he was stopped smilingly at the door and told to first learn the ritual.

The next week he spent receiving instruction in the simple forms and orders of thought and was admitted once again to the Temple and again came out more certain than ever that the vague and nameless thoughts which coursed through his brain needed only another period of contemplation. And again, after a few hours of walking he returned to the Temple for new inspiration.

Some weeks later he went to speak to Condonal.

"When primitive one-celled animals first began to cooperate," he said to the Master, "they did not at once form a man."

"True."

"They first formed some low form of water animal which was not able to reason. Reason did not come for millions of years—not until the form and arrangement of the cells had been changed and again changed countless times."

"You have gone far in a short time, Winters."

"Should there not be other temples set up—many of them—each working with a different ritual? Might there thus be more chance of our hitting upon the proper form of cooperative thinking which should produce our being of superthought?"

"We are testing our ritual constantly. Already the instruments set in and about the Temple have recorded interesting phenomena: unusual changes in electric potential; a tendency to ionization of air; a shift of the spectrum toward the blue. What these phenomena mean we do not yet know."

"How many are needed to start a temple?"

"The more, the better it seems. But a few hundred should produce results."

"If a group gathered a few hundred miles away would it affect your experiments here?"

"If it did, that in itself would be remarkable and worth trying."

"And another thing, sir. The word of what we do here should be broadcast through the universe. By chance I found you—millions would like to. Can messengers not be sent out?"

Condonal nodded thoughtfully. Within a week word began spreading through the star-systems, and within a year a dozen temples were built on the planet of eternal dawn.

Within a century Temples of Thought were numberless throughout the universe, and its cult absorbed the attentions of half the human race. Winters took his part in the ritual of a temple built on a mountain-top not far from Condonal. And now day after day, century after century, millennium after millennium he spends his time and energy upon the problem. Always the green sun sends its pearly radiance over the land, and when he walks thoughtfully to the night side of the mountain he gazes upon an empty sky, black with sheer nothingness—for here the universe ends and beyond lies nothing.

With a telescope stars can be seen—far distant universes unbelievably remote. Traversing this space are spaceships—ever questing—on voyages that last hundreds of thousands of years. On through space spreads the cult of the Thought-Temple. New forms and rituals are tried and improved upon constantly. New and unreadable phenomena are recorded on the instrument panels.

Ever and again Winters comes out of the Temple full to the soul with thoughts and feelings ever fresh and new and gazes wonderingly upon creation with eyes that are almost, but not quite, opened to its inner meaning.

Here we must, at last, leave him. Immortality is not yet ours, nor can our minds anticipate what lies beyond reason. Yet we can imagine the tools with which the last secret might be wrung from a jealous nature. And as Winters pointed out to Condonal in one of their frequent discussions: "If this means fails to solve the problem, yet the idea does not necessarily fail with it. For if reason be life in the second degree, and the superthought we seek be life in the third degree, then nothing prevents an evolution of third-degree beings and their cooperation in the creation of a fourth-degree creature."

"He may be pure energy," suggested Condonal.

"Or the essence of life itself," replied Winters, his pale face gleaming as though lighted from within by some hidden dream. He was thinking of the countless billions of human beings who had lived and died on a distant planet. He was wishing that some means might exist of telling those tragic figures of these new hopes and joys. Would it still that despairing cry of "Why? Why?" that rose from a million rattling throats on the fields of Flanders? Would it heal the broken heart of the man he had known in his youth in New York who after forty years of drudgery in an office realized one day that he had grown old before he had found time to do anything with his life and had, after a week's dark brooding, committed suicide? His thought cast back over the millennia—as readily and surely as it could wing its way through into the future. For what wall can bar thought?

How it reached me, I do not know. That it has reached me this story proves. Not, perhaps, in unadulterated form—for my own prejudices and rationalizings have stamped it into a form and meaning comprehensible to my twentieth-century brain. I cannot even be certain that it is true in its entirety—but parts of it, I promise you, will one day come to pass. And in the meantime, let us, with the immortal Voltaire, cultivate our garden.

## LAURENCE MANNING

Laurence Manning (1899-1972) was born in St. John, New Brunswick. He attended Kings College, receiving a B.C.L. degree, though he never practiced law. During World War I he served as a lieutenant in the R.C.A.F. Then he moved to the United States, where he eventually became a naturalized citizen. For many years Manning was manager of the Kelsey Nursing Service, and his book on gardening is still the standard manual for the Garden Clubs of America. A founding member of the American Rocket Society, he served both as president and as editor of the Society publication, *Astronautics*.

In science fiction, Manning is recognized as a pioneer—one of the first to produce stories that combined accuracy of vision and a high quality of writing. His first story in 1930 was a collaboration with the late Fletcher Pratt. Then, between 1932 and 1955, he wrote several short stories and two novels. His *Wreck of the Asteroid* depicted a trip to Mars that was as true as the knowledge of astronomers of the time permitted, when most writers were still using the fantasy world of E. R. Burroughs. The story's drama came from the quiet but compelling dangers of the real planet.

*The Man Who Awoke* appeared in five parts in 1933 and was immediately acclaimed a classic. It was the first fictional extrapolation to recognize that man's progress and culture seldom proceed in a straight line, and that the present ruinous exploitation of Earth may well leave a despoiled world for the future. This might well be called the first novel to deal honestly with ecology. But perhaps, more importantly, the novel presents the first philosophical view of mankind's great cultural quest into the future.

Unfortunately, Manning abandoned his successful career as a writer after 1935—except for two short fantasies in the fifties. But his reputation as one of the best writers of early science fiction has, justifiably, grown steadily through the years.