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THE *Giant Atom*
An Astounding Complete Novel
By MALCOLM JAMESON

THE LAST WOMAN
A Hall of Fame Classic
By THOMAS S. GARDNER

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The GIANT Atom

By MALCOLM JAMESON

Only Steve Bennion, Inventive Genius, and His Lovely Assistant, Kitty Pennell, Stand Between the Earth and Destruction When a Flaming Monster Threatens to Devour and Destroy Civilization!

Contents

- I. [Ace in the Hole](#)
- II. [Whipsawed](#)
- III. [The House of Dread](#)
- IV. [The Fat Falls into the Fire](#)
- V. [Atomic Fire?](#)
- VI. [The Net Tightens](#)
- VII. [Fresh Hazards](#)
- VIII. [Defeat](#)
- IX. [Thrown to the Wolves](#)
- X. [Jail](#)
- XI. [The Army Tries—and Misses](#)
- XII. [A Changed World](#)
- XIII. [A Weird Proposition](#)
- XIV. [A Fresh Start](#)
- XV. [Sparring for Time](#)
- XVI. [Eureka!](#)
- XVII. [The Affair at the Farmhouse](#)
- XVIII. [Darkest Hour](#)
- XIX. [Taken for a Ride](#)
- XX. [Star of Hope](#)

CHAPTER I *Ace in the Hole*

The old quarry was an almost circular hole, a pit fully one hundred feet deep and with hewn walls that rose perpendicularly from the floor of the man-made crater. For a secret workshop the place had been ideally chosen. It lay high up in barren and sparsely wooded foothills in a section too poor to support so much as a rabbit. People rarely came there any more, now that the quarry was closed. There was no inducement—not even for game.

Which made the purring presence of the sleek automobile all the more inexplicable. But Steve Bennion knew perfectly well what he was doing. This old quarry some fifty miles up in the hills from the Bennion Research Laboratory belonged to him. He had spent a lot of solitary time up here, working privately on a project which he was exhibiting today for the first time.

Parking the car, Bennion assisted his lone companion out of the seat and led the way to the sheer edge of the cliff. He pointed downward toward the center of the abandoned quarry at what looked from here like a bronzed Easter egg resting on a giant ice-skate, within a stockade.

"There she is, Kitty," he said simply. "Inside that circle of dilapidated fencing. I screwed the last bolt home and made the final electrical connection yesterday. I wanted you to see her first."

Bennion's companion, a tall and unusually pretty girl, as deeply bronzed as he was; stared downward with widening brown eyes.

"Steve!" she exclaimed. "Not the completed space ship! You kept it secret while you worked on it?"

Steve Bennion smiled a trifle ruefully. "That's right," he admitted. "Now if we can just keep Bennion Research going for the few months necessary to perfect an atomic fuel—we'll be rich and famous in spite of General Atomics, Incorporated. At long last we can let the wedding bells ring out."

A shadow crossed the girl's face. She quickly tried to hide it as she moved closer, letting her arm rest against him.

"It's—it's wonderful, Steve," she murmured. "But I'm really afraid. You shouldn't have taken the entire last week off from your research work for Magnesium Metals. The bank has been calling up every day about that finance note."

"Oh, that," responded Bennion in quick relief. "They'll renew again. And as soon as we finish this job for Magnesium Metals we'll pay it off. Let's go down into the pit, Kitty. I can't rest until you've seen the first practical use for Anrad."

"How do we get down? Fly?" the girl asked, indicating the sheer drop.

Bennion laughed and stepped over to the car. From the baggage locker he took a boatswain's chair and a heavy coil of line. He led the way along the quarry edge to an old but sturdy derrick. In former days the derrick had been used to haul up the products of the quarry. Of late Bennion had used it to send down the plates and parts for the experimental space ship he had designed and built.

At the derrick he quickly rigged the bos'un's chair to the boom and rove his line through the end sheave.

"Ready," he cried. "Hop in, Kitty. Shut your eyes and have faith."

Aided by her employer and fiancé Katherine Pennell got into the seat for her descent into the quarry, but she didn't shut her eyes. She wasn't the eye-shutting kind. Instead, she was smiling like a gleeful and excited child, as Bennion swung her out over the abyss.

When she got out at the bottom, he made the upper end of the rope secure and then slid nimbly down it. A short brisk walk across the chip-strewn quarry floor brought them to the door of the fence. Bennion unlocked the padlock and took her inside the enclosure.

"She's a beauty," exclaimed Katherine, gazing up at the gleaming metallic vessel that had been erected within the frame of a launching cradle. The daylight was fading down here, but the fine, graceful lines of the ship were evident. The sheen on its special phosphor bronze hull plates glowed brightly.

"I've named her the *Katherine*, in honor of you," Bennion said, pleased with her delight over his handiwork, for he had spent all his spare time for three gruelling years in building the craft. "Climb that ladder and I will show you what it is like inside."

The ship rested at an angle, looking much like an airplane bomb, nose pointed up. Entry could be made through a port a little over half-way forward that led into the control room. Although she gave the impression of possessing tremendous power and speed, the ship was a tiny one, hardly exceeding forty feet. Therefore the climb was an easy one. Bennion waited at the foot of the ladder until the girl had reached the top. He gave one final proud glance toward the as yet useless driving tubes clustered about the sharp tail-tip of the tear-drop-shaped vessel. Then he climbed the ladder behind Katherine. He inserted another key and let her go in.

"It's even duckier inside," she remarked, surprised, as he snapped on the lights for her to see.

The room was circular and switch-boards and instrument panels lined the walls. Kitty noticed a cabinet where cooking could be done. Two spring-slung hammocks indicated where its two passengers would sleep. Overhead there were a number of optical instruments for observations of the stars that would be seen through the many round lucite ports that faceted the domed ceiling.

"Anrad?" she inquired, pointing at the black curtains neatly folded back beside each of the viewports.

"Yes. The first man to hop into space is likely to get a lot of surprises. We can't know what fierce radiation is loose up there above the screen of our atmosphere. I'm taking no chances. The material of those curtains is Anrad."

"Anrad" was their abbreviation of the fuller term Anradiaphane, a substance not unlike rubber in appearance and texture, though far different in its qualities. Its composition was their own well-guarded secret, for it was one of his more recent inventions of which Steve Bennion was most proud. Anrad possessed the miraculous virtue of being able to stop the terrible Gamma rays far more effectively than even lead. A thin sheet of it, made into a garment, was a safer screen than clumsy and ponderous armor made of several inches of lead.

Bennion frowned momentarily. Mention of Anrad reminded him of unpleasant things. Given an incorrupt government, he would have patented this invention long ago. But sad experience had made him cagey. Three times before he had made application for patents on other important ideas and processes, only to have them rejected with the curt statement that the identical idea had been patented a day or so before by the powerful General Atomics Corporation.

Other independent research workers had had similar experiences—much too often to be explained away as coincidences, even if the great electronics combine did possess wonderful laboratories of its own and had many brilliant scientists on its payroll. Thus Bennion had come to the conclusion that something was radically wrong with the Patent Office. This had driven him to secrecy and taught him to keep notebooks in cipher.

For, ironically enough, he was actually paying to General Atomics exorbitant royalties for the privilege of using some of his own stolen inventions!

"Have a look below," he said, more soberly, trying to dismiss the subject from his mind. He lifted a trapdoor and showed her how to climb down.

Under the floor of the control room were the recoil cylinders that let the floor above spring back under sharp acceleration and thereby cushion the shock of the takeoff. Below them were storerooms, air and water recovery machines, and the spare fuel bins. Lowest of all was the motor room. Up into this chamber projected the butts of the driving tubes. On top of them was built a compact little cyclotron, actuated by its own motor. Its job would be—when suitable fuel was supplied—to start it into atomic eruption.

"Well, honey, you've seen it all," said Bennion at length. "Perhaps I have been too optimistic—building the ship before the final rocket fuel has been prepared—but I know that is merely a matter of time now."

"I hope you are right, Steve," the girl said earnestly. "But something worries me. I don't know why—or how. But I do, too! I've been wrong not to tell you before. But you've been acting so much like a kid at Christmas that I hated to spoil things. Steve, a car was driven out to the lab yesterday morning and stopped near the gates. Four men got out and studied the building for a long time through glasses. And they made a lot of notes."

Bennion frowned down at her troubled face. Then he smiled.

"So they spied, eh? And what did it matter? It will take more powerful glasses than any I know of to reveal what goes on behind our lab walls. Don't let it bother you."

"I wouldn't have—only one of those men was Farquhar," she admitted reluctantly.

"What?" ejaculated Bennion. "Come on! Let's get out of here!"

The name of Farquhar startled the electronic engineer. And with good reason. Farquhar was the vice-president and general manager of the greedy General Atomics Company. Whenever he showed a personal interest in a plant or a man, that plant or man was as good as gone. He was ever anxious to acquire brains as well as equipment and completed inventions—always on the cheapest terms.

Thrice already had Steve Bennion been cheated of the just rewards for his work. Now, one of the few surviving independent research engineers, Bennion thought of that overdue bank note. One of General Atomics' favorite tricks was to catch a man in a neat financial trap and then give him the choice of ruin or going to work for the monopolistic company that wrecked him.

More deeply concerned than he wanted his secretary and assistant to know, Bennion hustled her out of the ship and down the ladder. Hastily padlocking the heavy fence door behind him, Bennion left the girl to follow and bounded across the quarry in great leaping strides. By the time Katharine reached the waiting sling chair, he was almost at the end of his feverish overhand climb up the rope to the top of the pit. Without waiting for a breather, he began hauling her up.

Within two minutes they were careening down the rough mountain trail, heading back toward the laboratory at a furious and dangerous speed.

"When I came up here with you today," the girl explained breathlessly, "I left Billy on guard at the gate. I instructed Mike not to leave the office until we got back. They would die for you, Steve. Please, why the great hurry?"

Bennion laughed shortly, harshly.

"You don't know that pirate Farquhar like I do, Kitty," he said grimly. "No, danger of Billy and Mike having to die for me. Those General Atomic burglars are too smooth to do things in such a clumsy manner. Their strong-arm squad is made up of clever lawyers and grasping bankers. I thought I was preparing an ace in the hole in building the *Katherine*, and I may have been asleep on a more important job."

The car was on the paved road now, and the going was smoother. Bennion's foot was pressed hard against the accelerator, and the car fairly roared down through the foothills.

"Oh!", exclaimed Katharine faintly. Then: "If things do get bad, Steve, could we get together another stake by selling the little space ship?"

"No!" he shouted fiercely. "Nobody could use it without proper fuel, and those leeches have drained my brains long enough. I'll destroy the *Katherine* with my own hands before I'll let those bloodsuckers go crawling around through her. We can't afford to let General Atomics have the *Katherine*. They must never know, even that she has been built! The *Katherine* is ours alone; I won't even proceed with my fuel research as long as she is in jeopardy!"

Thirty minutes later they roared around the last curve and came into view of the research laboratory. What they saw sent a foreboding chill through their hearts!

CHAPTER II

Whipsawed

Several cars and trucks were parked before the plant gate, and that stood wide open. Most of the vehicles displayed the arrogant trademark of General Atomics, but two of them were police cars. Several policemen were guarding the gate, and, overall strange workmen swarmed in and out of the building.

Bennion brought his car to a screaming stop and leaped out. He strode over to the nearest policeman.

"What is going on here?" he demanded.

The cop shrugged, but pointed to a typewritten notice wired to the fence. Bennion gave it only a glance, for its heading told him what it meant. The document was entitled, "Notice of Execution Of Foreclosure and Dispossession." Bennion stormed past the grinning guards and into his own front yard. Four men on ladders were affixing a sign over the door of the laboratory. The sign said, GENERAL ATOMIC CORPORATION—BRANCH PLANT 571-A. Coming out the door was Mr. Price, the assistant cashier of the bank. Price tried to avoid Bennion's angry glance, but could not, so instead he sheepishly tried to explain.

"You mustn't blame us for this, Mr. Bennion," he whined, "We had no choice. After your last renewal the bank examiner ordered us to get rid of your note. So we sold it to one of the big city banks. General Atomics must have bought it from them. I swear—"

"Save your breath," interrupted Bennion bitterly, "though you might have told me sooner."

"It would only have worried you," said the other. "We knew you didn't have any money and couldn't do anything about it, anyway—"

Bennion planted a hand against the man's chest and shoved him out of his way. He was licked and he knew it, but that did not compel him to be polite to liars and hypocrites. Then he was face to face with his real adversary.

Farquhar, massive and overbearing, was the next to step out the door.

"Ah, Bennion," he declared with an oily smile, "I've been expecting you. Although your mortgage was a blanket one, covering as it did land, buildings, equipment and furnishings, we do not want to make things hard for you. I'll give you a few minutes to gather up any strictly personal belongings you and your most delightful secretary may have left behind."

Bennion stopped dead in his tracks and looked the man over with boiling scorn. He never wanted worse to sock a man, but he restrained himself. Farquhar was perhaps fishing for it, and he had witnesses and cops around him by the dozen. So Bennion took firm hold of himself.

"I'll be out of here in five minutes," he said. "But get this, Farquhar. You haven't seen the last of me."

"Why, of course not, my dear boy," exclaimed Farquhar. "Naturally you are excited how, and a little disgruntled. But I do expect to see you again. After you have cooled off we want you to know General's latchstring is always out. You can keep on running this laboratory if you like and without the pain of worrying over expenses. We take care of those and pay you a good salary, too."

Bennion did not bother to answer that. Followed by the girl, he just walked by the man. Inside the office they were treated to a still more disgusting revelation of General Atomic's methods. A photostat machine had been set up and a gang of operators were busily photographing the pages of Bennion's diaries and notebooks. Not that it made any real difference, for Bennion had long known of their practice and was prepared for it.

His file cases—even the locked ones marked "Special and Confidential"—had been carefully stuffed with harmless and meaningless records of routine laboratory. His real records he kept in his head, or else in the four or five compact notebooks that he and Kitty never failed to keep on their persons. And even those were in a cryptic code of their own devising, and the key to that they carried in their heads. The only item of real value still in the laboratory was the roll of blueprints covering the construction of the *Katherine*.

It took Bennion only a moment to dig that out and have it firmly in his hand. It had been left on a table in a workroom in full sight all the time. But no one had molested it, for the outside was plainly marked, "Plan for New Heater Unit to be Installed in Watchman's shack at the Gate." Farquhar's spies were hunting for bigger game. Meanwhile Kitty had packed a brief case with a few things from her own desk. After a brief word to their former employees, there was nothing to do but go.

"Where to?" asked Kitty, taking the wheel. She had refused to let Bennion drive, knowing his furious mood. She did not relish road travel at a hundred and more miles an hour.

"To Northburg, I'm taking you home to your father. There are also some matters I want to talk over with him."

It was late at night when the car rolled through the tree-shaded streets of Northburg, the sleepy town that was the home of Northburg Tech. It drew up before the rambling brick house where Dr. Pennell lived. He was the director of the Institute of Electronics and had been Bennion's beloved and respected teacher. He met them at the door, for they had stopped long enough to phone him they were coming.

The two men sat until late in the library, talking.

"You are up against a hard proposition, Steve," Dr. Pennell was saying. "There are some government jobs, but they are poorly paid and the work is dull routine. I would gladly give you a professorship here, but you couldn't stand that, either. A year ago our trustees accepted a fifty-million-dollar endowment from General Atomics and since then we've been their pawns."

"But surely, there must be a few independent labs still operating?" said Bennion, savagely. "I simply must find a place where I can work on the atomic fuel for the rocket."

Pennell stared at the rug. That was not an easy question to answer. There were a few, to be sure, but they were run by men of mediocre caliber and he knew that they would not want to have under them a man of Bennion's brilliance.

"There is Elihu Ward's workshop," ventured the old man after a long pause, "but I hesitate to recommend it. I know little or nothing about the man or what he is doing, but rumors reach me. I understand he is playing with the transmutation of elements. One report even has it that he is scheming to construct elements of higher atomic number than Uranium."

"Pretty ambitious," remarked Bennion. "Why, a man who would monkey with elements up in the nineties and hundreds might set the world afire. My own belief is that if such elements exist at all, they are in blue dwarf suns. Who is this guy?"

"Hallam, one of your classmates, is with him. And young Carruthers. They seem contented enough."

It was Bennion's turn to stare at the rug. The old man's recommendation was only lukewarm, but Ward might be an out. Bennion had to have a job, and quickly, for he must start saving money for the new stake.

"I'll take a shot at it," he announced abruptly, snapping out of his reverie. "Where is his place?"

"It is on a high hill near the Catskills, not far from the town of Foxboro. But I had better give you a letter. They say he is a hard man to see."

Foxboro was the next stop, the bus conductor told him, many hours later. Bennion started. He had been daydreaming again. Half his thoughts were behind him with his loyal Katherine Pennell. Just before that last passionate embrace of farewell he had entrusted her with his secret notes and blueprints.

Now he was clean of anything that would be of value to a competitor except for the undersuit he carried tightly rolled into a small package. That was a union suit of Anrad, complete with head hood. He brought it along to ensure his own personal safety. In this new place he might bump into radiations too powerful for standard lead suits to shield.

The bus drew to a stop in the center of the town. It was a pleasant town and larger than he expected to find. But he did not linger around sightseeing. He made inquiries at once how to get out to the lab. The reactions to his questions were astonishing. Several men said they didn't know, and hurriedly walked away. Another man mumbled something angrily and turned his back. After a number of such rebuffs Bennion found a taxi driver.

"How do you know you can get in?" asked the driver suspiciously, giving Bennion a hard look. "I don't want to soak you five dollars and then have you squawk."

"I can get in," said Bennion, quietly.

"Humph," the driver sniffed. "A lot of 'em say that, but blamed few do."

"I've got a letter to Mr. Ward," explained Bennion, and sat back in the cushions.

The surly driver slipped in his gears and they were off. After a time they came to a narrow side lane down which the car turned. Then the road began to climb. In many places it was too narrow for two cars to pass, so when a descending car was seen just ahead, the driver pulled over to the side and waited for it. The other came on slowly, for there was scant clearance between the two. It was then that Bennion got a surprise. There was a man in that, car of familiar face and build. And the man was Farquhar!

Farquhar locked glances with him. Evidently he thought he had not been recognized, for he suddenly went into a paroxysm of faked coughing. He clapped a handkerchief over his bowed face and kept it there until after the cars had separated. Bennion leaned over and asked his driver what else was up this road besides the Ward plant.

"Not anything," growled the driver. "When Ward built his castle, he bought all the land for miles around, evicted the people and tore down the houses. That's why Foxboro folks don't like him. And I tell you, mister, if it was night now I wouldn't be taking you there at all. It ain't safe. You might get shot at." He shook his head dubiously. "Funny fellow that Ward, and a screwy outfit he must have. Most guys like you don't get let in, and those that do don't ever come out again. That heavy set man we just passed is the only one I know that comes down again after he goes up."

Bennion accepted that information in silence. He was trying to digest what he had just heard and explain it to himself. Ward's desire for extreme privacy was understandable enough. Hard radiation is destructive to life and difficult to shield completely. Unless he deliberately made the country a desert about him, he might be ruined by damage suits. The reason for strict rules as to entry into the plant was equally clear. Experimental work was not only dangerous, but confidential. But what of Farquhar? For Bennion was certain it was no other. Was he casing Ward's place as a preliminary to another squeeze play here, or was there an alliance between the two men? The answer to that Bennion could not know, but his curiosity was excited.

They began to pass signs that said "Slow—Danger," and "Stop When Bell Rings—Blasting Ahead." Bennion guessed that that was used when the super cyclotron was in operation, and that approaching cars were to halt where they were until it stopped. Then they turned the shoulder of the hill and he caught his first view of the laboratory. He gasped, for there was nothing like it in the world—not even Atomic's giant plant in Kansas.

The driver had referred to it as a castle. It did look like one, though a bare and featureless one. It resembled a huge near-cube of lead, perhaps three hundred feet square and half that tall. There were no openings in it, but up one face climbed open work iron stairs like a fire escape. These terminated about halfway up in a room that jutted out on brackets from the leaden building proper. Later Bennion was to learn a group of bungalows and other buildings consisting of living quarters, offices, auxiliary laboratories and such, stood farther down the hill, protected by another leaden wall.

"Phew!" whistled Bennion, trying to gauge the tens of thousands of tons of lead that had gone into the structure, and of its cost. How could a man like Ward get such backing? And what monstrous super-machine did such a colossal shell house?

"Shall I wait?" asked the driver, coming to a stop at a sign that forbade further passage by vehicles. It was still a good quarter of a mile up to the gate.

"No," said Bennion. "Don't wait. I'm staying."

CHAPTER III *The House of Dread*

Then Steve Bennion received another jolt. The closer he drew to the flood-lighted, high-voltage-guarded, woven barbed wire fence, the more the place before him looked like a prison or a fortress. The four hard-faced guards inside grimly watched his approach with wary interest. Two of them carried tommy-guns at the ready. But when they called him to halt a few paces outside the gate, and demanded his name and business, he was amazed by the sensation his name caused. The guns were lowered, and one of the men jumped to unlock the gate. Another went off at a trot toward the nearest of the brick buildings of the office group.

"Excuse us, Mr. Bennion," apologized a guard, "we didn't know what you looked like, that's all. The boss told us to expect you."

"Yeah?" said Bennion, but he walked on in. He relinquished his bag to another guard, but chose to keep his packet in his hand. Then he let them take him to Ward's office.

"How are you, Bennion?" greeted Ward, rising and offering a hand. "Ever since I read in the papers of your hard luck out in Tennessee I have had a hunch you might show up. A good many of the men who've been frozen out by General Atomics come here. I don't talk to many of them, though. Elihu Ward wants only the best. Your reputation, naturally—"

"Thanks," grunted Bennion. His brain was racing. To begin with there had been no mention of the foreclosure in any newspaper he had seen. Nor did he care for the man before him. Ward was a stocky, bald individual of the high pressure salesman type, and Bennion was not fond of the glad-hand, back-slapping technique. And that business of Farquhar's recent visit—

"I presume you are looking for a new connection," Ward said, going straight ahead. "If that is so, you've come to the right place. I am proud of my plant—the finest in the world—and the gang of real experts associated with me. I say associated, for this is a truly cooperative venture—share and share alike. I am sure you will be happy here. I am so sure of that I have already prepared a contract. Here it is. Sit down and read it. Take your time, my dear boy."

Bennion took the long legal document and noted that the bulk of it was in incredibly fine type. It was a thing that would require an hour to read and probably deserved a month's scrutiny by a keen lawyer. The only salient features of it that stood out in readable type were: that he was offered a five-year contract with the Elihu Ward Associates Inc., and that his salary was to be one hundred and twenty thousand a year plus all

expenses. On his part he was to contribute freely of his services, and the product of his work was the property of the group.

"All that fine stuff is practically meaningless," said Ward hastily. "Actually we live here like one big family. One for all and all for one."

Bennion's lips narrowed. For his eyes roving the sheet picked out one line buried deep in the text. It was to the effect that he would live in guarded quarters and have no communication with the outside world except through the censorship of Ward himself. An inch below that he found the startling news that a hundred thousand of his annual salary was not to be paid until the end of the five-year period. Then it would be paid in stock! Bennion would have accepted a lot less—if it had been in cash. This contract was tricky and unfair.

"Before I sign anything," said Bennion, without revealing his thoughts. "I'd like to see your plant and how you work. Five years, you know is a long time."

For a moment Ward did not look pleased. Then he forced a grin.

"Of course I can't expect a man as clever as you to sign up without seeing how you live or what you are to do," he said. "By all means look the place over. When you see the fascinating work laid out for you, you'll probably be willing to come with us for nothing but your keep. Look!"

He pointed to some heavy metal pigs in the corner—cylindrical chunks about three feet high and nearly that much across. One was gold, another silver, and the third a metal that Bennion did not at once recognize.

"We poured those yesterday. One is synthetic gold—think of it. Made out of an equal weight of common dirt dug from the hill here. Down in the vault we have an equal amount of pure metallic radium. That was this morning's run-off. This afternoon we are going to be bold. We intend to jump way up in the atomic table and try a really breath-taking piece of synthesis—Eka-Gold!"

"That ought to be pretty strongly radioactive," remarked Bennion.

"Violently so. Look, here is what Hallam computes its properties to be—liquid at ordinary temperatures, like mercury. Luminous and orange-colored. Then follows a long list of rays that are predicted to come out, and its half-life will be but a matter of a few days. Why, radium will be as harmless as putty compared to it."

"I would like to see it made," said Bennion. He would have felt a lot easier about being present at this daring attempt if he had Hallam's figures, for a quick once-over first. But he knew that that was out of the question. He would not be let into any deep secrets until after his name was on the dotted line.

"Here comes Carruthers," said Ward, glancing out the window. "I'll turn you over to him until we put the big show on."

It should have been a good lunch they had in the officers' dining room. Present also were Hallam, two lieutenants of the guard, an analytical chemist, and a couple of engineers from the power house. But though the food was excellent and well served, everyone wore a strained air. Hallam became so jittery he got up and stalked out of the room in the midst of the meal.

There was absolutely no effort made by any present to keep up a conversation. It made Bennion think of a bunch of condemned men waiting for their turn to do the last mile. But the depressing meal was soon over. Bennion, on the pretext of washing up, went to his room for last-minute preparations. He wanted to get that Anrad garment on next to his skin, for he had the growing conviction that there would be not a few casualties before the day was over.

While he was slipping his clothes off his mind flashed once at the tight spot he was in. It was a safe bet that he could not get out the gate now on any terms.

Bennion shrugged. A curious blend of scientific interest and plain curiosity drove him on. He drew on the tight fitting undersuit, and then proceeded to cover it with his ordinary clothes. It was hot and awkward to wear such a garment, but not so awkward as to be caught in a beam of fifth order Gamma rays without it. Bennion had seen more than one fried remnant of a man dragged out of a heavy lead suit.

"All set?" called Carruthers, through the door.

"Rarin' to go," replied Bennion, and went to meet him.

They ducked through the zig-zag opening that pierced the first barrier wall. From there they climbed to the foot of the iron stairway that lead up the side of the main building.

"How thick are those lead walls?" asked Bennion.

"A hundred feet," replied Carruthers in a matter-of-fact tone. "Not all of it is lead, only a foot on the outer face and nine for inside lining. The rest is barium concrete. Figuring barium cement at one tenth the resistance of lead, it comes out to twenty equivalent feet altogether. It stops most everything, though leaks do occur."

Bennion could only blink. He had worked on some grand conceptions, but nothing that equaled Ward's project. Either a madman or a genius had thought this one up, and Bennion had seen too little to be sure of which.

The square iron box at the top of the stairs proved to be a large locker room, subdivided into smaller compartments. An attendant handed Bennion a lab suit which bore a prominent number. He went into one of the booths, slipped off part of his ordinary clothes and into the lead armor. It was thicker and heavier than any he had seen. There was a radio-power pickup on the shoulders and a small motor box.

Bennion found that he could move about in the suit quite easily; due to some magic of inner levers and gears.

The helmet matched the suit. It was a straight globe, without eye-panes, and as blank in front as behind, except that two small horns stuck up out of the crown where the eye-panes would have been. After Bennion had it on, he found it a marvel of comfort, barring the feeling he was on stilts. For he saw through periscopes that ran up into the little horns. He heard and talked through regular helmet circuits. He found the air good and plentiful.

He joined the gang of robot-appearing monsters waiting at the yawning door to the inner passage. Like himself, each man there was numbered—for ready identification. They tested phones and found out who was who.

"Let's go," said Hallam, but his tone was more that of a man in desperation than of a man selected to make cosmic history. Without a word the metal monsters shambled after. Again they traversed a zig-zag tunnel through the mighty wall. At the end of it they did not come out into a great central hall, as Bennion expected they would, but to a "T". It was a transverse passage—a lateral running around the hall. Hallam and part of the men went one way, Carruthers and Bennion the other.

"Along here there are still nine feet of lead between us and *it*," said Carruthers in a tense, hushed way. The way he pronounced that fateful "it" was enough to make a man's skin crawl. There was awe and horror in his voice.

They went on, turned a corner, and started down a long passage. Halfway down it they came to another offshoot to the right. Carruthers slowed down as he approached, and at that point he came to a dead stop. Bennion looked at him curiously, for he seemed to be swaying on his feet. He put out a hand to steady him, but Carruthers brushed it off.

"I'm all right," he muttered thickly. "Just a little nervous, that's all. You get that way after awhile. Three more steps and we'll be in the booth, with nothing between us and *it* but shuttered lead-glass lookout ports. You'd better leave the shutters up and stick to the periscope."

"Okay," said Bennion. He was plenty nervous himself, but he wouldn't have admitted it.

Bennion heard Carruthers catch his breath with a quick panicky sob, and then the click as he shut his transmitter off. After a moment, Carruthers started forward again. Then they were in the booth. Bennion focused his periscopic eyes on the switchboard that stood there. Then he knew exactly what to expect. For it was his own design—one he had made several years before when he was younger and less experienced. It was a big idea he had had that time, but it wouldn't stand rechecking. He abandoned it and laid the papers away. Later he had missed them, but thought the loss of little importance. He supposed that General Atomic's spies must have stolen them, but he didn't care. This particular invention was more of a hazard than an asset.

A loud speaker on the wall blared.

"All guards have manned their stations in the corridors. Engineers and operators please take theirs and make reports. We pull the switch in five minutes."

Bennion stepped to the doorway and looked out—by the way they had come. Two armed guards were in the long corridor at the turn.

"Well," he thought, as he twiddled with the eyepiece of the booth's periscope through which he hoped to watch what went on in the great hall below, "Maybe this is it."

Carruthers' trembling voice came in. "West wall booth manned, and ready."

There was a long, tense wait.

"Alert! Stand by!" came the raucous warning over the loud speaker.

CHAPTER IV

The Fat Falls into the Fire

When the signal buzzer sounded, Carruthers began throwing switches and pushing buttons. Bennion shifted his attention to the outside. He applied his helmet periscopes, and began sweeping the hall.

It was a rectangular room, and he could see into all parts of it. The huge machine that sprawled in the middle of the floor, on a circular disk, he knew at once was a giant hyperspiro—a development of the one stolen from his files. Waiting for the warming-up currents to have effect, Bennion studied it with intense interest, especially the added features. The machine resembled a snail laid flat, or rather a colossal French horn on its side. It was a coil of tapering tubing, diminishing inward from a huge bell muzzle until toward the center the tube was no thicker than ordinary garden hose. At irregular intervals on the inspiral were attachments of wires for the reception of booster current.

Up to that point there had been little alteration of the fundamental invention. It was a new-style cyclotron, operating on a different principle than the earlier models. A bank of powerful tubes—giant tubes standing eighteen feet high—fed streams of electrons into the bell muzzle, where they were caught up by systems of magnets, boosters, and other expeditors and sent whirling inward at ever-increasing speed and pressure. The taper of the tube caused the whirling electrical particles to bunch together densely, and that, combined with the effect of the continual addition of power, resulted in their being delivered completely scrambled, formless, and raving with disorganized energy.

"They made no alterations to the disintegrator element," thought Bennion.

It was the other features of the machine that puzzled Bennion. Where the central plate should have been, there rose a complicated system of bright helices, one coil of silvery wire within another. Enormous electromagnets dangled from traveling cranes overhead, and these were grouped around the rising coils of wire. Above the last helix a slender pipe curved up and over in a sort of gooseneck.

Bennion took that to be the delivery pipe, for a smaller crane running on a lower craneway was poised over it with a pot ladle hanging from its hook. From his higher position, Bennion could see that the ladle was lined with some whitish substance, probably a special fire clay. Remembering the ingots Ward had shown him at the office, Bennion was confident that the finished product was expected to pour into this bucket.

"I see," he concluded, just as he heard the warning signals preparatory to turning on the main electron stream. "This big gadget they have added is the reintegrator. It takes the scattered particles of the busted up atoms and rebunches them to fit whatever atomic structure they want. I guess they made their gold and silver all right, and maybe some radium. But how the heck can they be sure that they really know how an atom of Eka-Gold is arranged? Once the curve runs off the paper, nobody knows which way it will turn."

Bennion took his attention away from the machine outside. He was worried about Carruthers' jumpy nerves and the convulsive way he was operating his switches. Since the whole dangerous performance was delicate in the extreme, the slightest slip on the part of any of the control operators might mean an explosion of indescribable violence. Once that torrent of pushing, angry electrons got out of control anything might happen—the demolition of the entire mountain, perhaps even a raging, unquenchable atomic fire that would spread inexorably to engulf and destroy the world.

"JK circuits four and five," came the order over the annunciator, "using billion-volt increments."

"JK four and five in," acknowledged Carruthers shakily, as he cut in the current. "One billion—two billion—three—four—"

"Stop at five," directed the voice of Hallam. "When needle is steady, throw in the whole Q series in numerical order, voltage according to plan."

"Check," said Carruthers. He seemed to be getting a grip on himself.

Bennion turned back to the periscope. The men who had been working on the floor were now huddled behind lead barriers in the corners. The cranemen overhead had ducked into their own special hiding places. There was no sign of life except the drone of the great transformers and the continual flickering of multicolored lightning as leaking current raged from point to point. The giant tubes glowed angrily, and at some points on the incurving spiral the metal was white with the heat of the fierce rushing atom bits within. At the center, where the disintegrator met the reintegrator, the machine was so hot as to be unbearably incandescent. Bennion marveled at Ward's having developed an alloy that would not instantly vaporize under the intolerable heat that it must be exposed to.

"Attention, men," called the annunciator voice again. "The first stage of reintegration is stable. Stand by to throw in the special circuits. As soon as that is done, boost all pressures one hundred per cent."

"Now it comes," thought Bennion, as he saw Carruthers cringe, despite the bulky leaden armor he wore about him. This was the moment they all feared. It was now, if ever, that someone would break. Bennion never took his eye off the man at the board.

The signal came, and Carruthers went through most of the operations correctly, though at times his hand jerked as if uncontrollable. What worried Bennion most about the rattled operator was that in his agitation he had thrown off some of the safety connection. The safeties hampered quick operation, but they prevented an accidental or erroneous combination of circuits. When untold amperes at billions of volts meets a like current of opposite polarity, something has to give!

"Start specials!"

"Specials started," whimpered Carruthers, "f-ffour g-gee:—t-ten AX—eleven AX—now five G—"

He reached across the board to shove in the 5-G button when one of his fits of spasmodic jerking seized him. His awkward leaden arm brushed against a row of open switches that should have been protected by the safeties. Bennion's horrified eyes saw them being slammed home to their connections. In another tenth second there would be no laboratory—no hyperspiro—no Ward or Bennion or anybody. There was only one thing to do and Bennion did it. He launched himself across the room like a thunderbolt and yanked open the master switch that fed juice to the entire board.

It was a drastic step to take, but there was no other remedy. The wailing of tortured circuits and the thunderous crash of the no-current circuit-breakers popping out was hideous and deafening. But Bennion knew that whatever damage had been done could be repaired. The other way there would have been nothing left. He carefully reset the switches as they should be for picking up the current again, attached the safety connections, then opened the main switch again. For an instant he had some doubts as to what would happen next, but the instruments and gauges went at once to normal. The momentary cessation of current apparently had done no serious harm.

"It's all yours again," he said to the terrified Carruthers, who was sagging helplessly in his saddle. "But watch your step, kid. You blame near killed us all that time."

Carruthers pulled himself together somehow and went on with his switch-throwing. Bennion turned away, to go back to the periscope. As he did, he found himself face to face with another man. The suit of armor bore the numeral one.

"I saw that, Bennion," came the harsh voice of Ward. There was a metallic sarcastic ring to it, as if he were gloating over a personal triumph. "I thought an experienced lab man like you would know the law. Did you ever read what it says about unauthorized persons tampering with electronic switchboards? Don't you know that interference with a qualified operator may bring life imprisonment? Or death? Think that over, Mr. Stephen Bennion."

"Death?" laughed Steve Bennion, scornfully. "Execution couldn't make me any deader than we all would have been if I hadn't interfered."

"That will be your story, of course," aid Ward coldly. "Let us see whether you can make it stick. The law—"

"You are playing with cosmic fire, Ward," broke in Bennion, his voice full of loathing for the man, "and that is a dangerous game. Cosmic fire knows no law but its own. If you expect to live much longer, you'd better learn some of those."

Abruptly, Bennion wheeled, stalked to his periscope and looked out again. He was angry then, too angry to say more. But the moment he looked but he forgot his anger. Things had changed. The incandescence now enveloped the whole machine, and bubbles of purple vapor kept coming from the downcurved delivery spout of the reintegrator. Bennion then thought he saw what every electronics engineer had always dreaded—the beginnings of collapse of the monster cyclotron. It was slow and gradual, but in another moment he saw it was happening. Parts of the tubing were sagging, others puffing out in huge blisters. One of the vertical helices melted in places, and fell apart with a blinding shower of sparks. Before he could see more, his attention was diverted by the bedlam that was breaking loose over the inter-communication system.

He listened. The news was incredibly bad. Generators were running away, distribution panels were melting under intolerable overloads. Units were blowing up, hurling torn men outward with their own fragments. Switchmen died of heart failure at their stations, or fainted.

Circuit after circuit was failing. All hell was loose.

Carruthers had fallen face down on his panel. He did not answer when called to.

Ward had scurried into a corner, where he stood, trembling. Bennion did the only thing he could. He opened the master switch again and watched the few remaining meters die. Then he took another look at what was happening on the main floor.

The hyperspiro was still collapsing. The towering reintegrator had fallen, and now lay in a semi-molten mass on top the cyclotron. Now that the current was off, that had cooled to a dull red, but at the center there still existed a spot of intense brilliance. Slowly that spot contracted until it was only a few feet across, then but a dozen inches, then no larger than a dime. Yet as the incandescent area grew smaller, it grew more intense.

The tiny spot poured forth an unbearable brilliance that hurt Bennion's eyes, even though it was filtered through several thick lenses and underwent several reflections.

It was amazing how such intense light could emanate from a blob of cooling metal.

The aspect of the thing changed again. Bennion saw now that it was not a hot spot on the metal, but a little pellet of intensely luminous substance that danced about or floated in a small pond of molten metal in the midst of the wreckage of the hyperspiro. It reminded him of the behavior of a particle of sodium cast upon water. And it seemed to be consuming the stuff it swam in! The puddle of melted metal slowly dwindled and its level sank.

"What do you make of it?" asked an anxious voice behind him. It was Ward's voice.

"Ask Hallam," said Bennion curtly. "This is his show."

"Hallam is dead," said Ward. "It's your show now. Write your own ticket, but extinguish that bright thing down there." His voice rose shrilly toward the end, and Bennion knew that the man was scared. "Look again ... see if it's growing ... no, let me look."

Bennion relinquished the periscope. Ward had no more than put his eyepiece to it than he broke down in sheer fright.

"We're lost," he screamed, "the world's lost! We've set an atomic fire!"

Then he lumbered blindly from the booth, muttering hysterical gibberish.

CHAPTER V. *Atomic Fire?*

Now the incessant rattle of the Geiger counters had risen to a roar. Other special instruments were recording rays of unprecedented intensity and of strange composition. Gamma, X, S3, and Z-rays predominated, but there were others. Atoms were disintegrating in vast numbers. Bennion read the ominous warnings and was thankful for his protecting undersuit of Anrad. No wonder the men on the floor had died. Which caused him to think of Carruthers.

Carruthers was still slumped across the switchboard, but low mutterings came through his transmitter—gibberish, drooling sounds. No doubt his brain was fried, but he was still alive. Bennion managed to get him up and out the door to the better protected inner passage and behind nine feet of honest lead. There he let him slide to the floor, thinking that the guards would take him away. After which he returned to the empty booth.

What he saw through the periscope was profoundly disturbing. The spot of dazzling light which at first appeared to be hardly bigger than a pin point was larger and far more intense. It fluctuated irregularly, and at times it changed color in its pulsations, though for the most part it was a blinding, bluish white. Bennion thought to slip the lead lens covers over, and to his astonishment he found he could still see it clearly.

What could the thing be? He studied it through the lead filter, for he could actually see it better that way. Through the lead it could be seen to be about the size of an ordinary marble. He hung there watching it for nearly an hour. It grew visibly, often by fits and starts. He saw also that it lay much deeper in wreckage of the hyperspiro. That wreckage continued to melt in the vicinity of the object, feeding it with its molten juices. For Bennion was sure that was part of the explanation. If it grew, it must grow at the expense of something else, and there was certainly no more power being fed to it.

Bennion guessed from the silence on the phones, that everyone else had fled from the building. He knew he was risking his life by staying in the fearful radiance, but he wanted to know the explanation of that fierce sparkle. Probably the fate of the building depended on it—perhaps that of the nation. Yet he felt reasonably certain that it was not atomic fire.

He resolved to go closer to it, but when he reached the passage he found that Carruthers still lay where he had put him. Bennion ripped a length of copper cable from the now useless switchboard. He fashioned a drag noose and towed him to the dressing room outside the heavy wall.

Thoroughly frightened attendants helped Bennion get the man's helmet off, but Carruthers was dead. There was no skin on him—it had been cooked away, leaving only the raw underflesh. And the penetrating rays must have wrecked his inner organs.

"That makes twenty," said the attendant, "and all the rest badly burned. You'd better go down to the dispensary, sir, and let them look you over."

"Oh, I'm all right," said Bennion, though he lied when he said it. Hard radiation is insidious stuff. You don't feel it when it hits you. It is like lying on the beach on a cloudy summer day, only to discover the next day that you are blistered from head to toe. Bennion was now beginning to feel the tell-tale tingle of skin burns, and his throat and eyeballs felt dangerously dry. The closefitting Anrad suit was hot and sticky, too.

"I'll strip and have a shower," said Bennion, "and then take a little rest. Please bring me a sandwich and ask Mr. Ward to come up here. I want to know more about the layout of this plant."

The attendant moved off promptly. It seemed odd to Bennion that he, a stranger, should be the one to hang on and try to think a way out of the catastrophe that was sure to come. For there was no doubt that something terrible was in the making. But Ward had abdicated, rushed off screaming that this was Bennion's pigeon now.

It was good to get clean again. Bennion lay on a cot, resting. Now that he had unguents on his burns, he began to realize how great the strain had been. Shortly he would go back into the plant. Indicators on the wall showed that some radiation was leaking through the hundred foot barrier and was mounting in intensity all the time. When Bennion went in again, his task would be far more dangerous.

At length an engineer came. Ward, he said, had left the plant.

"What is the situation?" asked Bennion bluntly.

"Bad," said the fellow, hopelessly. "The cranemen went out like lights. Nobody knows what happened. Some of the men in the booths are going to die. The rest will be cripples or idiots. The men want to run away, but the boss won't let them."

"Ward went away, didn't he?" asked Bennion with scorn.

"He said he thought it best to report the matter to the home office."

"Home office, eh?" growled Bennion, his suspicions fully confirmed. "That couldn't be General Atomics in New York by any chance?"

The engineer shrugged.

"At any rate, when he left he said that if you could think of anything to do, we were to give you all the help you needed."

"Thanks," said Bennion dryly. "I'm in charge of the plant and a prisoner in it at the same time, huh?"

"Well," said the engineer, doubtfully, "you are getting off easy at that. According to Ward the whole blow-up was your fault. He said you got excited and pulled the wrong switch. He says what he intends to do about you will all depend on how you pull us out of the mess. You can't laugh off twenty or thirty corpses, you know."

"No, you can't," said Bennion thoughtfully, thinking of the three or four billion prospective dead. If that gleaming, growing spherelet inside was really out of control, it might mean the doom of the race—perhaps even the world.

"All right," he added, rising from the cot. "Bring me the plans of this laboratory at once so I will know how to get around. Then I'm going to have another look."

This time he dressed with greater care than ever, taking especial precautions with the adjustment of his hood and the taping of his face. He found an extra heavy suit of outer armor and put that on. Then he walked boldly along the corridor formerly taken by Hallam. Beyond the booth entrance there was a circular staircase. Bennion walked down to the main floor.

Here Bennion could see the extent of the wreckage. The great machine had melted completely away, and left the abandoned magnets and ladle dangling foolishly far overhead. Where it formerly stood there was now a yawning crater full of bubbling, incandescent metal where the dazzling object continued to dance. And to grow. Now it was the size of an orange, and emitting a fierce radiance that meant certain death to anyone less well shielded than Bennion. In the far corners lay the bodies of several men.

Bennion stood on the edge of the crater gazing down at the shining thing through two inches of helmet lead. Yet it was almost unbearable to look at. Yes, it was a fire of a sort, and its fuel was the metal it bathed in. Bennion could see it swirling around the fierce sphere and being sucked into it. The level of the molten mass was sinking. He wondered whether the object had a special affinity for metal.

He picked up a heavy sledge and chipped out a hunk of the concrete floor. He tossed the piece into the cauldron, and watched the currents take it to the center in a series of tightening spirals. But the fiery mass seemed to reject it. The bit of concrete was not consumed. Perhaps if the fiery thing could be fished out and placed on the bare floor, it might eventually burn out.

Bennion searched the tool rooms and found what he wanted, a pair of long-handled tongs of thermadont, an alloy with the highest melting point known.

Then he set himself and fished for the fiery object. He caught it finally, in the jaws of his tool, and tried to drag it to him. Then he got the surprise of his life. It came, but with ponderous sluggishness. At length he pulled it near his side of the pool, and prepared to haul it out.

Strain as he might, and he was a powerful man, he could not budge it. He tried again, until he felt his veins and muscles would burst. The result was the same. And the answer was all too clear. The thing was incredibly heavy!

The tongs were beginning to melt. Bennion retrieved what was left of them, and sat down to pant. He glared down, more baffled than ever. Yet what he had just discovered was not unreasonable. If the fireball was feeding on the hyperspiro and incorporating its substance into itself, it must weigh nearly as much. Some of the great machine was still undigested, and a certain amount had been thrown off in the feverish radiation. But he knew the stark truth then. He simply could not lift those hundreds of tons with his own unaided muscles.

He thought of the cranes, and looked upward. They still stood with magnets and ladle dangling. But there was no longer any juice in the building, and the crane operators had all died. He must get power and men to help him.

Bennion arose and gave a final glance at the fiery ball below. He saw his chunk of concrete. Half of it had been eaten away. Yet it was

more resistant than metal. Perhaps there would be other substances even more so.

"I've simply got to fish that incandescent baby out and isolate it," said Bennion, and then made for the stairway.

Outside he found a changed situation. The dressing room attendants must have fled. Bennion slipped off his clothes and did the necessary things to alleviate his minor burns, then put on a suit of light armor and descended the stairs. From this high vantage point he could see the buildings between the barrier wall and the outer gate. The surviving employees of the plant were gathered there in anxious groups: Along the fence a cordon of guards was strung out. Beyond it a small crowd of townspeople—all men. Their leader was talking with the captain of the guard. That man wore the star of a peace officer. He probably was the sheriff from Foxboro.

"This is worse," thought Bennion. "Once the public starts to interfere we are sunk."

CHAPTER VI

The Net Tightens

Realization that it was morning came to Bennion like a blow. The time had passed swiftly. The first breakdown, his long rest, and second visit had consumed the night.

He passed through the barrier wall but could not find the young engineer he had spoken to before. Most of the silent, anxious employees drew away at his approach. Blank despair was on all their faces. At length he found a man who seemed in charge. It was Hartley, a decent chap who had charge of one of the generators. Hartley had just come up from the gate where there was still a great hubbub going on.

"Oh, hello," Hartley said. "I'm glad to see you got out alive. The captain will be glad to see you. Maybe if you show yourself at the gate you can help calm that mob outside. Listen to 'em yell!"

"What's the row?"

"One of the guards on the fence skipped out. You can't blame him much. Anyway, he ran down the hill and shot off his mouth in town. He must have spilled all he knew, for they're sure buzzing."

"That's bad," muttered Bennion. The situation called for cool heads and clear thinking. "What are they saying?"

"Plenty. There are ambulances and hearses out there, and police cars. The sheriff and the county health officer and the coroner want to get in and find out how many are dead and injured and how they got that way. The captain won't let 'em. They're threatening to use force. The mayor is yelping for the militia. But Ward hasn't come back yet and the captain's sitting tight. Something ought to break pretty soon. Look, here is something a newspaper reporter handed through the fence to show us our secret wasn't so secret."

Bennion took the clipping and read it. It was from that morning's edition of a large New York newspaper.

Leakage of the news of a serious explosion and fire at the Ward Plant near Foxboro threw that town into a furore last night. Little is known as to the extent of the damage or the number of lives lost, since the plant operates under a special charter and is outside the jurisdiction of local authorities who have been denied entrance. But in view of the gravity with which the situation is viewed both in Washington and New York it is feared that it may be disaster of major proportions. Some estimates give the number of dead or badly injured at fifty, and the property loss is expected to run into millions.

It has been learned that the Ward plant is a subsidiary of General Atomics, but the officials of that company refused to be interviewed. Instead they handed put the following prepared statement:

"Late yesterday, during the course of a routine manufacturing operation an independent engineer who was being shown through the plant, became excited and knocked open a nearby switch. This rash action caused a battery of exciters to blow up, and in the subsequent fire several men were killed and a number injured. Prompt action was taken at once to isolate the fire, and the injured men were evacuated.

"In proper time the company will take appropriate criminal and civil action against the responsible person, but at present it is more concerned with getting the plant back into operation. Mr. Elihu Ward, its superintendent, is now conferring with the home office on extensive repairs and alterations. He is not expected to return to Foxboro for several weeks. During that time the plant will remain in an inoperative status."

"I'll say it is inoperative," growled Bennion, and read on.

When questioned as to the wave of other atomic fires that are said to have occurred throughout the country, Mr. Farquhar, spokesman for GA, dismissed the stories as unfounded rumors. He said that a board of the company's best engineers would leave shortly for an inspection of the Ward plant, and that later their findings would be made public. Mr. Farquhar further declared that there was absolutely no cause for alarm.

"The term atomic fire is misleading," he said. "There is no such thing. It is the invention of writers of thrilling fantasy. Fires occur in all industries, and that of atomics is particularly hazardous. This is just another one. It is safe inside concrete walls a hundred feet in thickness. Since the current is shut off it will go out of itself in a few days."

Bennion frowned. "Nuts," he observed. Hartley grinned.

It was announced in Washington, however, that Senator Harold MacChaney was ready to go to Foxboro along with other members of the Committee on Atomic Control. Dr. Isherwood Tutweiler, Director of the Bureau of Electronics, and Elmer Dillwood Futtingham, the noted writer on the subject, were prepared to go along as advisers in the event a governmental investigation seemed to be in order.

"Sweet, huh?" asked Hartley.

"Lovely," replied Bennion bitterly. "A commission of crooks to lay on the whitewash, and a committee of stuffed shirts to gum up the game. If we haven't got a national calamity already, we'll have one when Dopey Tutweiler and the senators take charge."

Bennion spat disgustedly.

"That's not my funeral. Not yet. My job is to get a stranglehold on that fireball. I need help. First, tell me what the hyperspiro stood on."

"The substructure is a heavy cribbing of steel columns, over battery rooms, cooling system pipes, pump rooms, transformer banks and a lot of other auxiliaries. It goes seventy feet down to bedrock."

Bennion groaned. That made the need for haste imperative. He had hoped the object might exhaust the supply of metal about it and come to the more resistant concrete. Then it could not grow so fast. That would give Bennion time to study it.

"Listen, Hartley," Bennion's tone was urgent, "we've got to get that baby out now! I'm beginning to get a line on it. It isn't a raging atomic fire, but something a whole lot worse. That dazzling lump is a greedy, hungry thing. It feeds on whatever is nearest to it, tossing the rest away as fierce radiation. Maybe there is something it cannot touch. If there is such a substance, we might be able to bury it in the stuff."

"What would it do then? Die out of its own accord?"

"Who knows?" Bennion shrugged. "More likely it would start to disintegrate. How fast that would be is anybody's guess. It might explode and take this end of the state with it. But it is a cinch that the smaller it is the less damage it will do. We've got to keep it from getting bigger. If we fail it may sink down into the mountain where nobody can get at it—maybe clear to the center of the earth. If it does that this planet may turn into a blue star."

"Yes, yes," agreed Hartley frowning, "it is easy to say we've got to get it out. But how? Nobody can live in that lab now. How you do it is a mystery. I'll help you all I can, but—"

"Here is how you can help," said Bennion. "I want the wiring to the cranes put in order, and juice sent up to the them. That can be done without going inside the nine-foot inner wall. If your men wear heavy armor and don't stay more than an hour they will be safe enough. I'll handle the inside stuff. But I've got to have a crane to work with, and a man or two to run it."

Hartley shook his head. "The crane circuits were not burned out. All I need to do is throw a switch. But there aren't any cranimen left. They all died."

"Get me two good men and I'll teach 'em," said Bennion grimly.

"I'll try," said Hartley, hopelessly, "but the men are in a blue funk. They would run away if it wasn't for the guards."

"Try," said Bennion.

Hartley was right. Not a man inside the plant would volunteer. The engineer brought the word back to Bennion. Whatever was to be done Bennion would have to do it singlehanded. Bennion looked up from the blueprints about the capacities of the cranes and their equipment. With one resolute helper he could do the trick. With out an assistant nothing could be done. It was no use to ask Hartley to come. Hartley must stay in the generator room providing the power.

Bennion said nothing. Pawing the air and cursing would accomplish nothing. He slid off the stool and paced the floor. He simply must have a helper Where was such a one to be obtained?

Bennion knew that he had been over-optimistic when he said it would be safe for a man to operate a crane for short periods. Only one clad in a suit of Anrad could be considered reasonably safe. Even Anrad might not avail against that dazzling object. And there was no other Anrad suit but one—one made especially to fit an individual, Kitty Pennell.

Kitty Pennell!

Bennion knit his brows, fighting a tumult of conflicting desires and fears. Dared he induce Kitty to come to this dreadful place? Why should he allow her to run such a horrible risk?

Yet he needed her. She had been his assistant for a long time. They worked together as a perfect team. Each contributed what the other lacked. He was analytically minded, her methods were intuitional. Kitty was his inspiration, while he acted as a brake on her exuberant nature. Moreover she knew atomics as few men did, and on top of that, possessed the only other shield in existence potent against the deadly radiation of the ball of fire.

It was a hard decision to make. He thought of Ward and Farquhar and their cheap, miserable plottings. Putting the fire out was only a preliminary job. After that Bennion saw himself entangled in a mesh of conspiracy. Should he drag Kitty into the same net? The answer was no. Yet right or wrong he had to have her. What were he and she as weighed against the existence of the entire race?

His jaw was set in grim lines as he wrote out the terse message, fully understandable to only him and her.

COME AT ONCE. FLY. BRING EMERGENCY KIT 43B. VITAL. STEVE.

She would come, he knew. For it told her that atoms were running wild and that cataclysmic happenings were in the offing.

"Get this off at once," he said crisply, handing the telegram to Hartley, who had come by.

"Not a chance. Not without Ward's approval."

"Then ring him up and tell him. I get my assistant or I quit. The rest is up to Ward."

Hartley took it dubiously and went off in search of the captain of the guard. He came back with a look of astonishment on his face.

"He okayed it," said Hartley. "He told me to have the big car waiting at the airport for her."

Bennion grunted. Then he looked anxiously at the clock and sat down to endure the several hours that would pass before she could arrive. To ease the tension he figured furiously, drew curves and wrote out complicated formulas.

By the time the messenger came from the gate to tell him that Kitty had landed and was on the way up to the plant, he had completed his preliminary computations as to what the fiery enigma might be.

He hurried to the gate just as the heavy car rolled through and came to a stop.

An instant later Kitty Pennell leaped out. Bennion's arms had hardly enfolded her when another figure stepped out of the car.

He was a large man and carried a brief case. By now he was an altogether too familiar figure.

Bennion whirled and glared at him.

"A touching reunion, isn't it?" said Farquhar, with an oily smile. "The last time we had quite a little misunderstanding."

"He who laughs last, Farquhar, laughs best," said Bennion coldly. Then he spoke to the girl. "We'll have to work fast. Hell is loose up there. Did you bring your Anrad?"

"I'm wearing it," she said, and hurried after him.

CHAPTER VII

Fresh Hazards

Even as they hurried along, Steve Bennion glanced apologetically at the girl.

"I hate myself for dragging you into this," he said.

She did not answer him until they entered the dressing room.

"I would have hated you if you hadn't," she replied. "What are we up against?"

"Concerning Farquhar," he said, "I don't know. Up here we have to deal with—well, call it inverse disintegration."

"That doesn't make sense."

"No," he said, "it doesn't. But we have to deal with it just the same. The fools tried to make Eka gold, number One-hundred-and-one in the atomic table. They didn't get it, but they got something up in the high numbers. Anything they could synthesize above uranium would probably behave the same way. You see, there is an excellent reason why uranium is the heaviest atom we know."

"And that is?"

"There are a handful of elements at the top of the table which are all radioactive, gradually breaking down into lower forms of atomic structure and giving off radiation. Atoms still heavier would behave in the same way, only at a greater rate and in a different direction. That is why I called it inverse disintegration. This thing we have to fight is a super-atom—an *integrating* atom. It doesn't break down. It builds up. At the expense of everything it touches."

"The answer is to keep anything from touching it."

"Yes," he said, with a wry smile, "it is as simple as that. Suspend it in mid-air by magnetic force, build a box around it and exhaust the air. Then leave it there, hanging from nothing in a vacuum. If it responded to magnets that would work. But we haven't the magnet. We have to think of something else."

"You poor boy," was all she said.

He helped her on with the cumbersome outer armor, and told her she wouldn't need to use the periscope eyes after she was in the presence of the thing. It was hard for her to believe that there were visible rays intense enough to penetrate lead, but his earnestness convinced her.

"Now come. I'm going to teach you to handle a crane."

If an uninformed outsider had watched, those two massive leaden monsters stagger through the crooked passage he would never have guessed they were human beings. Bennion led her up the stairs, onto the crane platform: Then they paused, and both gave a gasp of astonishment.

The picture had changed, surprisingly. Where the hyperspiro had been was a lake of dancing fire. The molten remains of the huge cyclotron were burning in the same lazy way that alcohol burns. In the midst of the lake of fire still lay the great atom, dazzling with even greater brilliance. It was larger, too, as big as a basketball. Its weight must have been tremendous.

They climbed to the highest craneway where the big five-thousand-ton colossus lay. That crane was used to lift the cyclotron when repairs were needed on its underside. It was much too heavy for ordinary use. Its hooks were massive and the cables thick, running in heavy sheaves. Bennion took the controls and ran the crane to a spot already selected. Underneath was a giant ladle used for heavy mass metal production.

"You take over now," he said, climbing over the edge of the cab. "I'm going down on the big hook. I'll get hold of that ladle down there, and when it is on the main hook, send down that number two hook. Watch my signals."

A moment later he was astride the hook and descending. He caught the bail of the giant ladle—had her take up the slack. Then he dropped to the floor and waited for the smaller hook to come down. That one he secured to a ring on the bottom of the ladle.

"Hoist away," he called through his transmitter, "evenly on both. Then run us down over the burning pool."

She handled the controls as if she were a veteran. The heavy ladle rose high enough to clear obstacles and began moving down the long hall. When it stopped Bennion was clinging to the outside of the bucket and poised above the pool of fire. Then he gave her crisp instructions. She hoisted the smaller hook until the ladle tilted sharply. Bennion crawled up to its highest point.

"Lower away now, and scoop that thing up. Take as little of the soup as you can. Never mind me. If you're quick I'll be all right."

She acknowledged, but with something like a sob. It looked terrible down there amongst those lurid flames.

The bucket lowered. Bennion could not feel the heat through his heavy armor but he was fearful that it might catch on fire. He sank into the flames, seeing nothing now except the dazzling brilliance of the thing he was after. He threw out a word now and then to guide Kitty's hand. Presently the lip of the bucket dipped into the flaming liquid and swept closer to the bobbing ball of fire. She let it sink a little deeper and inched it forward. The dancing ball of furious energy floated into the ladle.

"Straighten up and hoist away," shouted Bennion. "You've trapped it."

The straightening up was easy. The lesser cable went slack. The ladle lost its tilt and hung upright. In its bottom were several feet of flaming liquid metal, and swimming in it was the giant atom. She threw the controller over to full hoist, but nothing happened except a groan from the overloaded motors.

"It won't pull," she reported, her voice hard and brittle.

"Throw in the emergency," he directed. She did. The ladle began rising at a pitifully slow rate.

"Skip it," called Bennion. "If I hang here any longer I'll cook. Run me down to the end of the hall over concrete."

A minute later Kitty eased the bucket down to the pavement. Bennion looked down into the interior. As he had expected, the molten metal was being rapidly lapped up. Shortly it would be all gone. Then they would see. How would the giant atom behave when it had only air and the refractory lining of the crucible to feed upon? Could it survive?

That would take a little time to discover. In the meanwhile it was best that he and Kitty get behind heavier armor. He asked her to send down another hook and, shortly after, joined her in the cab.

"It will be a half hour before there is anything worthwhile to see. The metal is nearly gone now and the thing is gnawing slowly at the ladle. We can come back."

There was a crash. The roof sagged, broke, and whole panels of it fell in. The roof, unlike the massive walls, was the ordinary factory roof. Slender steel trusses held up glazed skylights. It was the skylights that had collapsed.

"Good Heavens!" cried Kitty. "What has gone wrong now?"

Bennion looked down at the flaming pool. The flames were higher and more vigorous. That meant a more abundant supply of oxygen.

"I think," he said grimly, "our little friend now craves nitrogen. Take nitrogen from the air and there is not much left but inflammable oxygen. We had better get out of here and broadcast a warning. The interior of this place will burn out shortly, and then there will be an excess to feed into the general atmosphere. If the oxygen settles to the valleys the Foxboro fire department is going to have its work cut out."

The girl became worried.

"Have we improved things any?" asked Kitty. "If it shows the same appetite for nitrogen that it has for metal, pound for pound, how long before all the air will be gone? We can't breathe pure oxygen. The race would burn itself up."

"Right," he said, and peered down at the monster atom. There was not another drop of molten metal left there. But the thing was growing still. Then he saw that it was only partly at the expense of the air. It was sinking through the bottom of the ladle. The lining, while not preferred fodder for the ravenous atom, was acceptable, it appeared.

Bennion's hand went to the control lever. He put a strain on the lift. The bucket now came up with ease. The giant atom had eaten a hole through its bottom! Bennion ran the crane and ruined bucket out of the way.

"We made a good try," he said, soberly, as he looked down at the fiery lump on the concrete floor, "but it still is not good enough."

They climbed out of the crane and made their way to the stairs.

"We have to do something about this air business, though," he added.

They went to a nearby storeroom, carried a big bag of barium sulfate to where the giant atom lay and dumped the contents on it. The heavy powder did not stop the fierce rays, but it did cut off its air supply.

"That's all just now," said Bennion, much discouraged. "Let's get out. We don't dare stay here any longer."

CHAPTER VIII

Defeat

For three days and nights Bennion and Kitty worked and rested in short spells. Hartley brought them sandwiches and news from the

outside. Since no one else would come near them, he made a handy messenger. He reported anxiety throughout the nation was growing.

Some leaders feared panic might break out at any moment. Though the administration kept on issuing reassuring statements, members of the opposition were yelling for positive action. Fantastic and conflicting prophecies put out by rival scientific groups, added to the excitement. And the yellow section of the press did its utmost to fan the flames. Every silly rumor was aired under bold headlines.

Bennion ignored all this. He had troubles of his own. The burial of the giant atom in barium sulfate had not proved to be the answer. The atom consumed that, too. The stuff only retarded its growth.

He rigged scaffolding above the cone of powder that hid the dazzling sphere, then with a long iron rod made a hole down to the atom. The ruddy cone then resembled a model of a volcano. Into that tiny crater Bennion dropped measured quantities of various substances. He and Kitty timed their rate of disappearance and entered the results in a book. They fed in many things, all sorts of compounds. Ultimately they almost exhausted the list of elements.

"Nothing works," said Bennion dejectedly. "Barium salts are the best, but they aren't good enough."

"Perhaps we ought to try gases," suggested Kitty.

"You may have something there, Kitty. First we had better see if there is a gas that is inert to it."

They spent some time prowling about the lab, looking for a suitable hood to use for their gas trials. Bennion took a middle-sized ladle, drilled two holes, screwed a pressure gauge into one and fitted a check-valve to the other, and then welded a carrying ring to the top. Next he fitted a heavy rubber gasket to the bottom.

"Sort of a cross between a diving bell and a candle snuffer," said Bennion as he viewed his handiwork. "Let's cover up our bright friend and see what happens."

By the time they finished bringing steel bottles of compressed gases, the giant atom had burned away all the barium sulfate. Now it was eating at the floor. Bennion hurriedly hooked up his first cylinder and let the oxygen discharge into the bell. He watched the gauge. It climbed. The gasket was holding. Now the atom was bathed in pure oxygen.

The gauge began to drop. He fed in more gas, but still the gauge kept dropping. They made notes. So many pounds of oxygen per minute. That was the rate of consumption. Oxygen was not the answer either.

Next they tried nitrogen. It was absorbed about three times faster. This would not do. If the atom was to be brought under control it must be surrounded by an inert substance.

They tried hydrogen and helium. These behaved like nitrogen. Argon was a trifle slower than oxygen, but in the end it went. The same was true of neon and krypton. Acetylene and ammonia went rapidly. There was no gas that was any good. They ruled out radon at the outset. It would break down into polonium and go the way of the other metals.

Steve Bennion scanned the lists they had made.

"Looks like a choice between bad and worse," he remarked grimly. "Like putting out a fire with kerosene and naphtha."

They ate their lunch in moody silence. Hartley joined them. Bennion told him how things stood. Hartley looked troubled.

"I'm afraid that tears it," he said, gloomily. "If you could have licked the thing it might have saved you. As it is, you're sunk."

"What do you mean?"

"I mean you are in bad. The Foxboro people are all worked up. They'd lynch you if they could."

"More of Farquhar's dirty work," remarked Bennion, indifferently. He had been so fully occupied with trying to smother the giant atom that he had given no thought to his own plight. He had not yet realized the extent of his difficulties. Hartley refrained from telling him he was being called a traitor, mass murderer, and worse things.

"That's not all," continued Hartley. "A lot of big bugs are on the way. A Congressional investigating committee and a commission of experts. Boswell, chief engineer for Atomics, is already here. He wants you to talk to him. He wants to build a bigger cyclotron and bombard it with electrons. He thinks it will start disintegrating and then the trouble will be over."

Bennion and Kitty Pennell looked at him in amazement. Kitty giggled, Bennion gulped.

"Is it a gag?" he asked, incredulous. "Doesn't the fellow know anything about atoms? If it took a machine the size of this hyperspiro to knock ordinary atoms to smithereens, how big a gadget would he build to hammer at this one?"

"Not any sillier than most of the projects they are talking about," said Hartley. "You ought to see the mail and telegrams that are pouring in."

"Aw, skip it," said Bennion. "Come on, Kitty, let's go back and dope out what to try next."

They removed the snuffer from the blazing atom and resmothered it with barium sulfate. Then they stood looking at it and trying to make up their minds what new tack to try. Except by means of the phones, they could hear little through their helmets. Consequently a sudden inrush of men took Bennion and Kitty by surprise.

"Great Scott!" yelled Bennion, as he saw what was happening. "Get out of here, you fools. You'll all be dead in five minutes."

Incredible as it seemed, the Foxboro fire department, in full regalia, had taken over! Dressed only in their customary oilskins and fire helmets, a dozen of them swarmed into the room dragging fire hoses. The chief was bellowing orders through a speaking trumpet. They ignored Bennion. It was doubtful whether they recognized the twin lead monsters as human beings. Some one raised a hand and the water came on, tearing away the piled-up barium powder and slamming against the fiery atom itself.

Then the invisible, impalpable radiations began having effect. The men faltered, placed their hands across dazed eyes, staggered, and fell. Bennion and Kitty Pennell stood aghast. For by then every fireman was dead. Their optic nerves were blasted, their brains addled, their vital organs ripped through and through by hard radiations.

"We've got to stop this massacre," yelled Bennion, and sprang for the nearest doorway. Steam and purple gases were welling up from the spray of water on the atom. Bennion knew in the presence of water the giant atom emanated a heavy radioactive cloud. Should it flow down the hillsides, it would make a desert of the valleys.

"Back, back; you fools," he shouted to the firemen in the wing passages, guarding the long lines of hose. "Cut off that water."

"The chief said—" began one of the men.

"The chief is dead, fried to a crisp. So is everyone else who went in there. So will you be if you stay here. Get out quick."

Angrily Bennion strode to a wall phone where he plugged in an extension jack. He dialed the office.

"Tell whatever jackass is in charge out there," he shouted angrily, "that he is committing wholesale murder. Unarmored men can't live in this place. Half the firemen are dead already. Call the others off, and shut off that water!"

"I don't like your tone," came a petulant voice from the other end of the wire; "Are you Bennion? If so, report to me at once. We are tired of your bungling. The time has come for men of action to take charge."

Bennion groaned. If this was action, the less of it the better.

"Who are you?" he demanded.

"I have the honor to be Major Wilbur Wilberforce of the Foxboro Home Guard, temporarily in command of this emergency."

"Good gosh," said Bennion weakly, and hung up.

CHAPTER IX

Thrown to the Wolves

On emerging from the lab, Bennion and Kitty Pennell found the dressing room filled with young soldiers. A lieutenant asked Bennion to accompany him at once to his commanding officer.

"Nonsense," said Bennion curtly, removing the heavy helmet. "I have to take a bath and put salve on my burns. I'll see your commander then, and not before. Better not hang around here either. There is more radiation leaking through that wall than out of any X-ray machine you ever saw."

The lieutenant bridled, but just then he saw the procession of burned firemen stumbling out of the entrance passage. The skin was peeling from their faces and hanging down in gory tatters. Their hair was gone. Most of them were nearly blind. These were the survivors. Half their number lay inside.

Bennion shucked off his lead, had a shower, and anointed himself. Then he made a tight package of his Anrad and took it to the door of

Kitty Pennell's dressing-room.

"Take care of this," he called. "I don't know what is coming up but you'd better keep my stuff until I come back."

She opened the door on a crack and took the Anrad suit in. She understood. This stupid interference made intelligent search for the solution of the problem impossible.

Kitty Pennell joined Bennion shortly and they made their way down the stairs and out of the laboratory. Here they paused to survey the remarkable scene laid out below them.

A long train of heavy army tanks was lumbering up the hill and through the gate. The tanks were plated on the outside with lead, prepared especially for this duty. Columns of infantry marched beside them. The soldiers were a curious sight, for they also were especially outfitted for the occasion. Their uniforms were covered with sheets of heavy lead foil, and the rifles they carried appeared curiously anachronistic when seen together with the glittering, flimsy mail. Below, among the buildings, other soldiers were swarming, while at the flagstaff streamed the Stars and Stripes. Over the administration building flew the flag of a major general.

"The regular army has come," said Bennion. "That lets me out of having to deal with the Wilberforce sap."

He could see no civilians below. The Home Guard also was gone. Ambulances were being loaded with the injured firemen and the now useless fire equipment was following.

"If it is the right kind of general," said Bennion, "I get a break. If he's not, I don't. Come on, Kit. Let's face the music."

The music was not melodious. It was no general that Bennion had to face but a formal Court of Inquiry, convened at the special order of the President. The composition of the court was not cheering. When Bennion was ushered in and took his seat in the witness chair he looked the members over carefully. Except for two army officers and the man from the Justice department—who were unknown quantities—they were as choice a collection of fatheads and stuffed shirts as could be found. Senator MacChaney, a blatant mountebank, presided. On either side of him sat Dr. Tutweiler and Elmer Dillwood Futtingham, self-styled experts on atomics.

Tutweiler was reputed to be a good appropriation getter for the Bureau of Electronics, but it was doubtful whether he had spent an hour in a laboratory in the last twenty years.

Futtingham's many books had done much to popularize—and also misinform—the public on what was what in atomics, but it was doubtful if he knew one end of a cyclo from the other. Then there was Crosby, chief of the legal department of General Atomics, who seemed to be directing the inquiry. Several others Bennion recognized as professors in jerkwater colleges. The outlook for an intelligent hearing was not bright.

It started out badly. There was a flurry of flashing as press cameramen took flashlights of Bennion. Reporters spread out their notebooks and poised their pencils ready to record the first words. Tutweiler started the ball rolling.

"Start at the beginning, Mr. Bennion," he said. "Tell us why you came here and why you did what you did."

"I recently suffered the loss of my own laboratory through foreclosure," answered Bennion. "I had to find a job. Ward offered to hire me and was showing me the plant when the accident occurred. Afterwards I hung on, doing what I could do to minimize the effect of the explosion. That is all."

Tutweiler waited until the clerks had scribbled that down.

"All right," he said, "but too sketchy. Describe how the accident occurred, what happened, and what state of affairs exists now."

Bennion told his story, omitting nothing of importance. He outlined his theories as to the nature of the giant atom and tried to demonstrate how inverse disintegration would work. All the time he talked he kept his eye on the F.B.I. man who seemed to be the only one at the table who was trying to follow his reasoning. At length he concluded.

There was a rustle of papers. Bennion saw that they were consulting the records of other testimony taken at previous sessions.

Bennion did not like it. Ward and Farquhar had already been heard, and he could imagine what a pack of lies they swore to.

"You say there is no atomic fire, only a giant growing atom," asked Futtingham with his exasperating superior smirk. "If it consumes everything it touches, gives off fierce heat, light and other radiation, what is that but fire?"

"I won't quibble over definitions," said Bennion. "Call it an atomic fire if it suits you better. It does not behave as we expected an atomic fire to behave, that's all. An atomic fire would be uncontrollable from the outset. I have kept this one under reasonable control for several days."

"You say you tried everything on it. Everything?"

"Everything in reason. I didn't try buttering it."

There was a rustle of agitated whispering. Crosby spoke out.

"Make a note of the flippant response."

A dozen pencils jotted that down.

"Did you say that the fire is inextinguishable?" asked the Senator.

"No. I said that so far I had found no way to extinguish it."

That went down in silence. Then they went back to the original accident.

"You were a stranger to the plant," asked an army colonel, "and confronted with equipment that I am told has no duplicate elsewhere. Why did you interfere with the deceased operator Carruthers when you couldn't have known what he was doing?"

Bennion turned the question over in his mind before answering it. It was packed with dynamite.

"I believe myself to be more familiar with that equipment than Ward or any of his men," he answered slowly. "I invented it."

Several present gasped at the effrontery of this explanation. Ward had sworn it was his own invention, and a secret one. But Crosby took it serenely.

"Perhaps Mr. Bennion would like to tell us how his invention came to be installed where it was. I am sure it will be illuminating."

Bennion shot him a look of contempt. He saw the bait and the hook, but he did not intend to sidestep. The world might as well know the truth.

"I invented the spiral cyclotron a number of years ago. Early tests revealed its dangerous weaknesses. Later the plans were stolen from my files. Since other of my inventions had been similarly stolen by General Atomics I presumed this one went the same way. Since it was valueless I didn't care. I also knew it was highly dangerous. I thought Atomics would discard it for the same reason."

A deep murmur ran through the court.

"Ah," breathed Crosby, relaxing and sitting back. "I've made my point, I think. But ask him one other question. Whom does he blame for the loss of his plant?"

Senator MacChaney looked at Bennion inquiringly.

"General Atomics," answered Bennion calmly. "They bought my mortgage from the bank and never gave me a chance to renew it. That is standard practice with them. That is the way they acquired most of their plants."

Crosby was positively gleeful.

"You see, gentlemen?" he said, addressing the members of the court. "Here you have a man with a persecution complex. He blames his own financial incompetence on my company. What does a man like that care whether he sets the world on fire if he can only carry out his petty little revenge for imaginary wrongs? He convicts himself with his own words."

"This is a court of inquiry, not a trial, Mr. Crosby," reminded the member from the Justice department. MacChaney rapped on the table.

"Any other questions?"

There were none.

"Very well. We adjourn. Ask the sheriff to step in."

"Now what?" thought Bennion. He did not wait long for the answer. The sheriff stepped up and extended a pair of handcuffs.

"What are these for?"

"You. You have been indicted in Foxboro for the murder of John Hallam, George Carruthers and others. Come along. We're going downtown."

Bennion looked swiftly around the room. Most of the faces turned toward him were cold or savagely vindictive, Only the army, colonel and the F.B.I. representative showed human understanding. General Atomics' lying propagandists had done their work well.

CHAPTER X

Jail

Kitty Pennell sprang to her feet as she saw Bennion coming out, handcuffed to the sheriff. Her eyes were blazing. She started forward, but the army officers restrained her.

"Take it easy," one said. "You will be allowed to see him. Just now the court wants to hear your version of the catastrophe."

A file of soldiers interposed themselves before Bennion could make a move. Meantime the sheriff tightened his grip on his arm.

"Keep your shirt on, bud," growled the sheriff. "Starting something now won't buy you anything. I'm taking you out of here for your own good. You don't know yet all that this bunch of snakes has cooked up for you. So play the game. It'll pay you in the long run."

By that time they were out of the anteroom. The door of an armored car was snatched open and Bennion pushed in. The sheriff and a soldier sat down beside him on the back seat. Two other soldiers with tommy-guns at ready climbed onto the running-board. A sergeant beside the driver fingered a light machine-gun.

The car rolled away. Bennion saw that it was preceded by three others, similarly ready for hostilities. Upon looking back he saw that they were followed by more guards. A half-dozen motorcycles with soldiers in each, hovered on the flanks. It was an imposing cavalcade.

"They must think I'm a hard guy to hold," remarked Bennion scornfully after tallying up his guards. Even the Dillingers and Capones never were so plentifully surrounded.

"You still don't get the idea," said the sheriff, grimly, "but you will."

On the road they passed numerous outposts and lines of sentries. It was hot until they crossed a small bridge that marked the boundary between the Ward domain and the township of Foxboro that they had to halt. At that point Bennion began to understand. A double skirmish line of soldiers lay across the road and hastily erected pillboxes stood in the fields on either side. Ahead of the skirmish line stood the front ranks of an immense crowd of silent, sullen men—and determined looking women. Many carried shotguns or rifles. A few blue uniformed state troopers and deputies were trying to keep the mob in line.

"Gangway!" called an officer in the leading car. "We're coming through."

The answer was a hoarse and blood-curdling roar. The mob charged, screaming shrilly. It did not get far. The well trained soldiers knew what to do. Gas bombs were thrown. The mob leaders turned and tried to get away, but the unhurt rear ranks pressed them back. Then the armored cars charged—slowly but inexorably. The weeping, howling throng gave way despite themselves. Dismounted soldiers were flailing about them with clubbed rifles. A lane was quickly made. Bennion's car was tooled swiftly through it.

Beyond the mob were more escort cars. These formed a new cordon. The sheriff said nothing, but Bennion guessed why. The crowd behind was the advance reception committee. Uptown there was probably another!

Field telephones must have been at work, for when the reformed motorcade reached the center of the town it found the streets cleared. The little square before the jail was literally lined with soldiers holding back another mob that booed and hooted as Bennion was brought past. A few rowdies managed to hurl stones before the watchful patrols could slap them down.

"You'll be all right now," said the sheriff as the car drew up before the jail. He waved his hand at the sandbagged lower windows from which the muzzles of machine-guns protruded. It was a dazed Steve Bennion who entered the grim doorway of that jail. He knew what it was to have enemies—such as Farquhar and a few others—but it amazed him to encounter blind, unreasoning cruel hatred such as this. And from so many. He asked about the last.

"They've been pouring in here as fast as the trains and roads could bring 'em," answered the sheriff. "They are camped for miles around. You better be glad, mister, that you're in my hands."

All night the yelling and catcalling kept up and once there was a burst of firing. Bennion heard it dimly from the hard bunk in his narrow cell. But after the first shock wore off he disregarded it. His thoughts kept turning to Kitty Pennell and what had happened to her, and again to the giant atom now burning itself unchecked into the hill-top.

He felt sure, however, his turn would come again. He was equally sure that, given time and help enough, he could solve the problems. So he threw off his worries and fell into a troubled sleep.

His breakfast was brought by a surly turnkey. Later the same man gave him a watery stew for lunch. It was not until mid-afternoon that Bennion had any news from the outside. The one who brought it was the prison doctor. He seated himself on a stool and began asking questions.

"I have some more patients," he began. "They are in a bad way. This stuff is new to me. What do you do for ray-burns?"

"What do you do for an amputated foot?" asked Bennion, with a hard laugh. "You make yourself as comfortable as you can. The treatment is to avoid them in the first place by not staying exposed to them too long."

"Oh," said the doctor. "That explains how you and your helper stuck it out when everyone else was bowled over."

"Yes, we have worked with dangerous stuff for years. We know how to handle ourselves around it." Bennion chopped his words off short. What about his helper? He asked the doctor for news of Kitty Pennell.

"They spirited her away in a plane last night. Her father came for her. She will have to go in hiding for awhile. The mob is as hot after her as it is for you. That isn't what I came about. Now, as to these burned men—".

"Give 'em hypodermics and make it as easy as possible. They probably won't live the day through."

"I see," said the doctor, rising. "I guess you told the truth about the fire still raging. It's a humdinger. Here are some newspapers for you."

Bennion took the roll and waited until the door clanged shut behind the departing medico. Then he flipped off the rubber band and began scanning the headlines. It was incredible reading. They ran like this:

VENGEFUL MANIAC SETS WORLD AFIRE

GRUDGE-FIGHT SETS ATOMIC FIRE

BENNION'S MOLL DEFIES COURT

Helped Her Boy-Friend Fan Blaze But Won't Talk

Bennion gritted his teeth until they ached. His hands itched to wring the neck of the reporter that composed that gem. He went on.

END OF WORLD IN THREE MONTHS

So Says Famous German Atomicist

PROMPT EXECUTION SEEN FOR FIRE-FIEND

There were others, all on this same line. Now Bennion understood why the mob was so thirsty for his blood. He also understood fully, for the first time, the deep villainy of the men behind General Atomics. There was nothing personal—or at least was not in the beginning—in Farquhar's persecution or subsequent vindictiveness. Now there was something far more sinister behind it.

General Atomics had been playing with fire for a long time—and knew it. They were smart enough to realize sooner or later, there would be a slip. When that fatal day came they wanted a man on their payroll either to pull them out of the hole, or be the goat.

That was it. They were hopeful he would fall into the snare, go to work and iron out the bugs in the hyperspiro. He had to admit grimly that if Ward's approach had been more subtle he might have fallen for it. He never had the chance. The blowup took place at once. Ward promptly turned tail and ran, leaving him to hold the bag. All that followed was according to plan. One smear after another. Now it was all Bennion's fault. Atomics' skirts were clean. They had passed the buck and made it stick.

"Ow-w," moaned Bennion, staring at the hard floorplate, "what a fool I've been not to see it before. Now where do I get off?"

CHAPTER XI

The Army Tries—and Misses

Monotonously five days went by like the first. No one came to see about Bennion except a local lawyer, hoping to be chosen as defense counsel. Bennion did not like his looks and turned him away. Other than that visit he had none. Each afternoon the turnkey brought him fresh

newspapers, but in them he found scant comfort. The vicious attacks on himself and Kitty Pennell were becoming more bitter. No news was released by the military as to how things were going inside the Ward plant.

Then Bennion discovered that the howlings of the mob were becoming less frequent and less loud. One day he woke up to the fact that there was silence outside. He missed the cadence of marching soldier feet as well. He asked his jailer about it.

"They have evacuated most of the town and the country for miles around," said the attendant. "They are setting up another defense line at a safer distance."

Bennion could think of no truly safe place within the orbit of Jupiter, but refrained from saying so. Until the appetite of the ravenous giant atom was checked, there was no assurance that its growth would be stopped short of the consumption of every other atom that went to make up the earth.

On the following morning a great bustling in the corridors told Bennion other inmates of the jail were being moved out of it. By the time his own cell was flung open he found himself to be the last. Sheriff, jailer, turnkeys and all had gone. There was only a captain and two privates.

"The army is in full charge now," said the captain, "which includes the custody of you. The general wants to see you. He would like your opinion about something."

"It is about time," thought Bennion.

They did not offer to put irons on him, so he walked along with the captain. Outside there was a jeep waiting. The town was a ghost town. Many windows were boarded up. Stores appeared emptied of their stocks. Not an inhabitant was left.

A string of ambulances rushed by, southbound.

"Casualties," explained the captain. "We had to evacuate the Ward plant altogether. Too many men burned up. Even the aviators on sky patrol got burns. They have lead-lined cockpits now."

"They have given up trying to control the—uh, giant atom altogether?" asked Bennion, somewhat startled. He did not expect it to grow as fast as that. It certainly would not if they had kept it buried in barium compounds.

"Not quite. But you'll see."

The jeep lurched around the corner and set out for the country. It was not the same road that Bennion followed to get to the Ward lab. This one went more to the northwest. It was also a hill road, winding and climbing steadily. They passed a number of sentries, a barbed-wire obstruction, and a little way beyond it, came to their destination.

It was a roomy pit, lined with thick slabs of lead and with a leaden parapet above which a number of periscopes were sticking. Lined up along the parapet, but unshielded by it were a number of radiation-recording devices. The general and his staff occupied the pit.

As he entered it Bennion glanced at the radiographs. They showed a tremendous volume of strange rays, not dissimilar to cosmic rays, in addition to the ones the giant atom formerly, threw off. From that Bennion knew that the object had entered a new phase.

"Ah, Bennion," grunted the general, looking around, "I wanted you to see this. You started it. I'm finishing it. Scientists say nothing can be done. They don't know the Army. Watch!"

An aide motioned to Bennion to take a periscope. Bennion did. He saw that the post he was in was located on top of another hill some two miles distant from the Ward lab. That appeared to be entirely deserted and he noticed the rest of the roof was caved in and gone. Where the outer buildings had been were now only gaunt, fire-blackened walls and heaps of ashes. Bennion did not need to be told what had happened to make the place untenable. The giant atom must have loosed clouds of heavy oxygen while exposed to air. In an atmosphere where a castoff cigarette butt would blaze like oil-soaked cotton it was small wonder the army had been burned out.

He was puzzling over what it was the general wanted him to watch when he heard the drone of coming aircraft. He looked up and saw them. A large number of bombers was directly overhead going toward the ruined laboratory on the neighboring hill. They flew in a succession of V formations.

Around the hill a number of cannon had been set up.

"Surely, general, you aren't going to—" cried out Bennion, but the general cut him short.

"Silence!" the officer cried.

It was too late to protest. Immense eggs—at least five-ton bombs—were already falling from the leading V. Before they hit another flock was on its way down. Bennion held his breath wondering what would happen as the result, though on second thought he was doubtful if much of

anything would happen. Then came the heavy concussions, geysers of fire and smoke and debris. Then more and more of them, and it was over. The planes had done their work and gone.

"That's the way to smash atoms," remarked an aide, gleefully. Bennion's answer was to point to the raymeters. They were clicking away as vigorously as ever—perhaps more so.

"That is to soften it up," said another.

"Stick around and see what happens when the army decides really to get tough."

Meantime another group of planes flew by. They dropped no bombs, but in a moment a message was coming through on the radiophone.

"Observation squadron ten reporting. Damage to heavy walls slight. Brilliant object apparently unaffected, though has shifted position slightly."

The phone clicked off. The general frowned.

"What kind of thing is it that two hundred tons of TNT won't budge?" he demanded irritably.

"Anything that is as small as four or five feet in diameter and weighs five or ten thousand tons is pretty dense, general," replied Bennion dryly. "Its cohesive strength must be incalculable. I doubt if all the TNT on earth would have any appreciable effect."

"We'll see about that," snapped the general. Savage determination was written all over his face. He turned to his Chief of Staff.

"If the air is all clear now, shoot!"

The colonel's finger reached for a switch and heavy field guns began to thunder, hurling high explosive shells at the atom. The Ward plant was instantly blanketed in clouds of smoke. An aide spoke hurriedly to Bennion.

"We also drove a gallery deep underneath the thing. Trainloads of high explosives are packed in there. Look!"

That time the hill they stood on rocked like a small boat in a gale. For one dizzy instant Bennion thought a mistake had been made and a mine set off beneath their feet. Then he steadied and looked at the other hilltop. At the moment it was crowned with a dense cloud of dust interspersed with flying boulders and hunks of Ward's massive walls. He saw that there was no brilliant object in it—the giant atom was far too heavy to lift. It would roll into the hole blasted out and the ejected matter would fall back on top of it. It would be buried deep, too deep to get at again. The disintegration of the hill would then proceed unchecked.

The dust settled. There was no trace of the Ward structures. The entire contour of the hilltop was altered beyond recognition. Gone were the ray-filtering walls of lead and barium concrete. The radiation was now worse than ever, for though it came through hundreds of feet of earth and jumbled rock, there was no thick lead to soften its impact. A medical officer, wearing the insignia of the radiologist corps, called attention to the meters. The general scowled.

"Complete the evacuation according to plan. Report to Washington that all steps have been taken without avail. Mysterious fire beyond control. Declare a general emergency."

He stalked out of the pit and climbed into the big staff car. As an afterthought he shouted back:

"Put Bennion in a bomber and fly him to Washington. They will know what to do with him there."

The captain touched Bennion's sleeve.

"It's tough, fellow," he said, "but duty is duty."

"Yes," said Bennion dully. He had a duty to perform, too. He meant to do it, but this was not the time and place to begin. He walked to the jeep and took his seat.

The captain strapped on his parachute. He did not offer Bennion one. He motioned for him to climb into the plane. Once inside he was told to go on aft into the bomb bay. The pilot and his assistant were already seated in the cockpit. The captain who had charge of him followed to the rear compartment. The motor roared to a higher pitch as it revved up. They were off, lifting easily into the air.

The captain, an infantry officer, was obviously interested in his new surroundings. He wandered about the bomb bay examining this gadget and that. Since his prisoner had no parachute, he evidently saw no reason to be extra vigilant.

"I hate to do this," thought Bennion. He braced himself, waiting for the split-second chance he would have the next time the captain brushed past him. The opportunity came within a minute. Bennion uncoiled his husky right and felt it land exactly where it was aimed, the point of the

jaw. He caught the unconscious captain before he hit the deck. Then he eased him down.

It was but the work of a moment to appropriate the parachute and strap it on. Next Bennion opened the bomb doors and looked down on moving hill-tops thousands of feet below.

He jumped, but delayed pulling the ripcord. It was still a long way down and there was lots of time. He glanced up at the fleet plane. It was going serenely on its way. Evidently he had not been missed. He must be out of sight before he opened up the telltale chute. But the ground was rising to meet him fast. He dared not wait longer. Bennion yanked the ring.

He had luck. He barely missed the edge of a thick grove of high trees, was dragged a number of yards across a field, then came to rest. He sat up and looked around.

CHAPTER XII *A Changed World*

Desolation reigned. There was not a living soul to be found in the territory. A quarter of a mile away lay a deserted village. They must have taken their livestock with them, for Bennion saw neither cow nor dog nor chicken. He extricated himself from the parachute, burned it and buried its ashes. Then he cautiously approached the village.

It had been an artists' colony. Half the cottages were studios filled with a disordered array of overturned easels, scattered paint tubes, and abandoned sketches. At the far edge of the hamlet he came upon a barn which still bore a banner announcing it to be a summer theater. Upon inspection Bennion observed that it had been abandoned in great haste, the actors apparently leaving in the midst of their act, without taking time to change their costumes.

"What a break," he exclaimed, as he prowled through the dressing rooms. There were five suits of men's clothes to choose from, two of which fit. In the pockets of one he found cigarettes, matches, and a wallet containing enough money to last him for days. Best of all were the make-up kits, which he knew how to use, together with wigs and toupees, false mustaches and beards. He got busy at once.

At last Bennion backed away from the mirror well satisfied with his disguise. He wore a straggly, sandy beard, and a pair of glasses that appeared to be thick-lensed, but in reality were as easy to look through as ordinary plain glass. When he was finished he was the perfect counterfeit of an eccentric inventor.

He smiled at that. Already he had conceived a means to save the world from the menace that overhung it. Yet the idea was vague and nebulous.

Bennion took the road. He must get out of these hills before he was missed and multitudes of soldiers came beating the bush for him. He also wanted to find out Kitty Pennell's whereabouts and communicate with her if he could. Aside from his human craving to have her at his side again, he needed her to help him in his daring plan.

It was the next day, after he had trudged over thirty miles and camped for the night in a vacated farmhouse, before he came across the first man. The fellow was pulling out of a farmyard with a loaded truck. He offered a lift. Bennion thanked him and got in.

"I thought they was all out except me," said the man. "How come you didn't run with the rest?"

"I was out in the hills doing research work—" began Bennion. Surprisingly the man cut his engine and slammed on the brakes.

"Oh, you're one of those blasted scientist fellows that started all this trouble? Well, you can get out and walk."

Bennion laughed, sizing up his man.

"Wait a minute," he said. "I'm not that kind of a scientist. I'm an entomologist, a bug hunter—Japanese beetles and that sort of thing."

"Oh," said the man, mollified, and started up his truck again. It taught Bennion to beware. The state of the public mind made it open season for atomicists, he judged.

By the time they reached northern New Jersey they were passing numbers of houses still inhabited, though in many places people were preparing to move. Few soldiers were to be seen.

"I heard the army had this area shut off," remarked Bennion.

"They did for awhile, but not any more. You couldn't hire anybody to go up near Foxboro nowadays. They say the army engineers are driving a tunnel deep under Fox Mountain. Going to explode a bigger mine, somebody said."

Bennion considered that bit of news for awhile. In one way it was bad. It fitted his still foggy plans. He had to get at that big atom again if he was going to do anything with it. A horizontal tunnel would serve the purpose, provided the army did not explode another charge.

Near the Jersey end of the George Washington Bridge the man of the truck turned west. Bennion dropped off, saying he was going to New York.

There was no possibility of crossing the bridge. It couldn't even be approached. The torrent of frightened refugees struggling to get west was too strong to be breasted. They were the poor of the Bronx and nearby New England hunting safety elsewhere. Some were on foot, others in cars and trucks, but all carried what they could of their possessions. A weary policeman suggested to Bennion that he try the river. There were plenty of boats, he said.

Bennion thought that odd until he finished his climb down the Palisades and saw the explanation. People were coming over from Manhattan in all sorts of boats and rafts. Once, on the western side they would abandon their means of transport and light out for the interior. Bennion selected a handy skiff, sat down, picked up the oars and began to row.

It took him some time to row across, but longer to land. The Drive was lined with people clamoring for the boat. Men pushed through to the water's edge, dragging their women with them, shouting bids and waving handfuls of money. Bennion disliked cashing in on their frenzy, but he might need money and they thought they needed a boat. So, after rowing up and down awhile, he accepted an offer of five hundred dollars and handed over the skiff to its buyer.

New York had altered strangely. It was a sickening spectacle of what panic could do. Once inside the inevitable queues that Bennion later found were at every exit from the city, the scene changed. Physically, the town looked much the worse for wear. Many of the windows had been knocked out, doors battered in, and there were signs of looting everywhere.

He walked far enough to get a picture of the city as a whole. Then he boarded a subway train and went downtown to the financial district. It presented strange contrasts. Legitimate business was dying fast. Banks were closing. The stock market was hit hard. Long time bonds were not worth the paper they were printed on. Good stocks were to be had for a song.

It was the quack promotion racket that was booming. Fortunes were to be made overnight in backing fake rayburn ointments, or manufacturing cheap ray-resistant armor. The choicest racket was a new one to Bennion, and it was a startling find. "Arks" was the catchword of the day! Yes, arks—spaceships of impossible and fantastic design supposed to move the earth's population to other planets. Or at least remove those far-sighted enough to subscribe early to the stock.

He left the neighborhood still at a loss as to how to finance his project. He could not appeal to the government for money as he was being hunted on criminal charges. He could not go there. He took another subway uptown and got out in the Fifties.

Bennion had not proceeded more than a block or so when he had the queer sensation of being followed. He set several traps for his tail and eventually spotted him. There was something vaguely familiar about the man, but he could not place him. A General Atomics spy, or an FBI operator? Not that it made much difference. Being spotted by either would result the same way. Bennion hurriedly sought for some method to shake the shadow. Then he thought he had it.

CHAPTER XIII

A Weird Proposition

Bennion had seen a church across the street into which the crowd was thronging. It was a big, reputable midtown church of a staid denomination, but like others of the hectic times, carried a broad banner across its front, PREPARE FOR THE EVIL DAY THAT COMETH.

Bennion squirmed into the crowd, ducked behind a group of pillars, and then found himself in the vestibule, being pushed forward by the enthusiastic worshippers. A corps of ushers were handling the crowd. Before Bennion could protest he was hustled down the main aisle. The seat given him was directly in front of the pulpit and in the first row.

Presently the services began. Finally the pastor began his sermon. Bennion recognized him as an old pal and classmate, Buck Turner, once a fledgling atomic engineer who had dropped the course and gone into theology instead. Bennion relaxed. He still had confidence in his disguise, despite the possible recognition of the man who had followed him.

The sermon was probably typical of the times. It dwelt at length on the shortness and uncertainty of life. It wound up with an urgent exhortation to avoid the fleshpots and wastrel life of the panic-maddened city. The preacher said it would be more profitable to give over their wealth to the church.

The collection was huge. As the plate was passed Bennion saw that it was heaped with bills of high denomination, deeds to real property,

and loose jewelry. When the ushers laid the plates before the altar, one whispered something to Turner. Turner nodded and whispered something back, at the same time glancing significantly down at Bennion. Bennion's skin began to crawl. Was he being betrayed?

As the organ pealed out the recessional-march and the congregation stood up to leave, the same usher blocked Bennion's way.

"The Reverend Turner would like to see you in his study," he said, politely indicating the way. Bennion looked at the backs of the crowd jamming the entrance. There was no quick way out in that direction. Well, if it was a trap it was already sprung. Bennion went to the study.

"Come out from behind those phony whiskers, Steve, you big fraud," said Buck Turner the moment the door was closed on them. "I knew you the first time I looked at you." Then more soberly. "I heard you were in trouble...."

"Who hasn't?" said Steve Bennion, bitterly. Buck didn't answer that one.

"My usher tells me," he said, "he noticed several plainclothesmen among the crowd in the vestibule. I presume you ducked in here to lose them. Well, Steve, I have no intention of letting them have you until I've heard your side of the story."

Bennion felt relieved. Buck hadn't changed despite his clerical garb. Bennion told his story from the beginning, briefly, but in enough detail to make his points.

"So I suspected," said Turner, thoughtfully, drumming his fingers on the desk. "Rumors reach me that the FBI is giving General Atomics a thorough going over. It is too bad that nobody in the government has the brains to turn you loose and let you work the thing out. It is the only chance we have. I'm not an electronics shark, but I learned enough to know that if there is an answer, you're the lad to find it."

Bennion flushed slightly. It was good to hear praise after such an avalanche of condemnation. Until this moment he had felt, that all the world but Kitty Pennell was against him.

"Thanks," he said, brightening. "You've asked a flock of questions. Now let me ask some. How come you're pushing this 'gimme' game just like the phony evangelists on the street corners? I thought you turned preacher because you wanted to preach—not for the dough that was in it."

Turner's face clouded. For a moment he looked embarrassed.

"It's true I'm reaching out for their money," he admitted. "I have a good reason. Did you have time to look around? All right. You know what is happening to the others. These would behave the same way if they didn't have faith. I am taking this money for safe-keeping. It is a trust. If and when the day of security returns I intend to return every cent of it, for I do not believe the world is lost."

The disguised inventor nodded.

"I do believe you," said Bennion, staring at the wall. Yes, old Buck Turner would be just that sort of a preacher. A squareshooter! It made Bennion hesitant about springing the fantastic proposition he had conceived.

"Well?" asked Turner impatiently. "What's on your mind?"

"I have half a hunch," said Bennion, picking his words, "that, given a few breaks, I may knock that dazzling giant atom into a cocked hat yet. It's half hunch, half hope."

"Steve Bennion's hunches are worth a lot any day," remarked Turner.

"This hunch calls for backing," said Bennion seriously. "I need money—scads of it, perhaps millions. More than that I need an organization above suspicion that I can manipulate without my identity being known."

"All that can be arranged," said Turner. "Let's have the details, please."

"It—it sounds preposterous," fumbled Bennion. When it came to putting his idea plainly, the words came hard. "I am afraid I can't reveal the details. You'll have to take me on faith. I can't promise results. What I have in mind is such a gamble that it will even be necessary to fool your own people—"

"What in thunder are you driving at?"

"I want you to finance and be the spokesman for an outfit that is phony from the start. We can't do any of the things we promise to do, and we won't try. Have you heard of the Ark racket? Well, my idea is like that."

Turner sat up straighter and a shrewd hardness came into his face.

"Yes, I know the Ark set-up. It's crooked. Unless you can assure me that the vessel you have in mind will—"

"Fly? No, I cannot. The Ark idea is absolutely screwy. We can build ships of course, but there is no known fuel that will lift a ship free of the earth's gravitational attraction and carry it to any other planet. No one can know what conditions are in space—what kind and intensity of radiations or what temperatures will be like. To set off for Mars with an entire community aboard would be taking a worse chance than going over Niagara in a barrel. We all might be burned up or frozen within an hour. Lastly, we know nothing about living conditions on Mars or any other planet."

Bennion talked on vehemently. Turner listened gravely as he unfolded the main thread of his plan. It was audacious. It was skating on thin ice. Any weak link in the chain would nullify everything. Worst of all, the whole idea did not make sense.

"Stop!" said Turner, after ten minutes. "Let me get this straight. You are to pose as Professor Sven Lundstrom, an eccentric inventor. You've sold me on an Ark proposition. The ship is to be constructed by you. It is to be big enough to contain my entire congregation, plus their relatives, plus supplies for a trip to Mars and a surplus for a start on the new world. My people are to foot the bills, and also do labor on construction. Then, when it is finished, they are to be told it is a flop! Do you really expect me to lend my aid to a proposal like that?"

"I do," said Bennion earnestly. "What I am secretly shooting at is the development of a rocket fuel that will work. That fuel has to be atomic fire—real atomic fire, but under strict control. You know how the world feels today about atomic fire. It would be worth a man's life to mention experimenting with it. But we have to have it if the Arks are to work. Since I can't get money in a straightforward way, I'll pretend to build an Ark, though all the while I am skimping on construction and diverting money to develop the fuel. Can't you see?"

Turner shook his head. That was the screwy part of it. If you had a ship and no fuel for it, it was no good. What use, then, was such a fuel?

"Here is what I am driving at," Bennion went on, insistently, "if I can develop a good rocket fuel we won't need the ships!"

"Huh? Say that slow."

"That's right. With genuine atomic fire, but under control, I can knock the spots out of that baby blue star being generated in the bowels of Fox Mountain. Nobody will want to use their Arks then. They can be scrapped."

The preacher stared at Bennion.

"But, Steve, what if you fail?"

Bennion shrugged. "If I get my fuel, the earth is saved. If I don't get my fuel, we'll only be back where we started."

"I don't like the deception. It is hypocritical."

"Yes? What about your 'trust fund'? Are you strictly honest about that?"

Turner shook his head. Bennion had him there. But Bennion had more to say. "I'll go you one better. If I succeed, not one investor will lose a cent. That sounds wacky, but it's a promise."

Turner rose and paced his study. There was too much mystery to suit him. But he believed in Steve Bennion. Furthermore there was nothing to lose by trying, everything to gain by venturing. At last he stuck out his hand, and grinned.

"Let's go," he said.

"There is one more detail," added Bennion. "I must get word through underground to Kitty Pennell where I am. Can do?"

"Yep. But the first thing I am going to do is fix you up so nobody will know you—not even your Kitty."

"Please," pleaded Steve Bennion, "not that good!"

CHAPTER XIV

A Fresh Start

Yet a full month slid by before Bennion had anything tangible to show. In that period—with the assistance of several discreet members of Turner's flock—his new character as an eccentric Swedish scientist had been put across. At the same time Turner was busy whipping up the enthusiasm of his congregation for the new project. He used the same line that was in vogue elsewhere—picturing the coming earth doom as another deluge. It worked. Turner was swamped with contributions.

Meanwhile, Bennion had been in communication with Kitty Pennell. He sent her huge sums with which she and her father were to equip a secret laboratory and take up the work on the atomic fuel where he and Kitty had left off. In return she sent him the blueprints of their model ship that still reposed undiscovered in the old quarry. After thus dividing the task, each went to work in his own way.

Professor Lundstrom's New York office swarmed with structural draftsmen who worked night and day getting out the plans for the magnificent super Ark. They worked largely with pantographs, for Bennion was content with his earlier design and saw no need of taking time out to design another. The hull and tubes of the larger ship were the same as those of the smaller model except that the dimensions were colossal. The control room was a replica of the earlier vessel. What changes were to be made would be in the subdivision of the main body of the ship. The ship was gigantic—much larger than the largest ocean liner afloat.

Bennion let the contracts early. As fast as tracings could be made, he sent the plans to the steel and fabricating companies so that production on the parts could start. At the same time he was buying equipment so that the Turner congregation, under his direction, could assemble the ship themselves. In a little while the office work was completed. A committee of the faithful came with Turner, thumbed through the plans and pronounced them good. One foundation stone had been laid.

Progress on another was reported. Kitty's letter carrying the good news came just as Bennion was preparing to close his office. She wrote:

Dad and I have been getting very encouraging results. We are up to the last stage. We have developed a stable compound that will break down continuously at any rate desired, but it has the defect of requiring constant bombardment by a cyclotron. The cyclotron uses too much power, and is also cumbersome and heavy. The net power available is still not enough to lift the ship and motors.

I have a hunch, and Dad's theories confirm it, that once we got out into space we could soften up the fuel by exposing it to concentrated cosmic rays. The catch in it is that we have to get outside the earth's atmosphere before we can utilize those. If we could only generate enough cosmic rays here at the surface to free the same energy, the rest would be easy. We could cut the size of the cycle to a tenth.

If we could do that, don't you think we could alter the *Katherine* to make room for a few more people? Dad of course would be one of them.

Bennion smiled gently at that last line. He had no intention whatever of converting the little *Katherine* into an Ark.

The good news lay in the first section of the letter. If it was cosmic rays she wanted, he knew where plenty of them were going to waste. Fox Mountain was exuding them at every pore. It would be an easy matter to test her hunch. He decided to take a day off and look over the ground....

The back of the car contained tins of extra gasoline and cans of food. Buck Turner and Bennion took turns at driving. They sped on until they came to the desolate town that had been Foxboro. Then Bennion veered to the right and made a circuit of the fatal mountain. The concrete road rose to cross a small divide, then gently descended a long, winding valley. When they arrived abreast of where Ward's laboratory had been, Bennion could see what was happening to the mountain.

It had taken on the appearance of a volcanic cone. A vast number of cubic yards of rock must have been consumed by the blazing starlet. Bennion glanced at the raymeter he had brought along. The radiation was as fierce as ever.

He did not drive off, however, until he studied the abandoned military work. A branch road led off to the foot of Fox Mountain, and there it entered as a tunnel. Judging from the great mounds of excavated earth spilled out below its mouth, the army must have gone well inside before giving up their efforts. The heavy pavement and width of the tunnel indicated that they used the mightiest of excavating machinery.

Bennion let the car start down the hill. He kept one eye on the road, the other on the raymeter.

"This is a wonderful site for our Ark," he remarked to Turner. "No one will molest us here. As soon as we are a safe distance from the mountain we'll choose a likely spot. After that we can move your people out here and begin construction."

The grade flattened out and Bennion drove on at a faster rate. At length they came to a place where the road left the valley and climbed through a low notch to a town on the other side of the hills.

"Right here, I would say," pronounced Bennion, looking about him, "is the ideal place. We can occupy the village. There will already be water and other conveniences."

"Yes," agreed Turner. "This is a good place."

The next day he worked feverishly at a new set of plans. By nightfall the sketches were on the way. They contemplated a caravan of six trucks, each especially equipped and all heavily shielded with lead plates. The letter to Kitty-Pennell that accompanied them, after telling of the existence of the tunnel, said:

Transfer your lab and the proof equipment to trucks such as these, and come on to Foxboro. Bring your own staff with you, but you and the Doctor will have to do the heavy work. Let him have my Anrad—it will fit him, I'm sure. In that tunnel you will find all the cosmic rays you want, and then some. I'll attend to the rest of the things.

After that chore was done, Bennion and Turner undertook the transfer of the congregation to the site where the Ark was to be built. In addition they took along a number of skilled workers whom they had induced to go by the offer of fabulous wages. For the rest of the week the roads to the north rumbled with the wheels of the loaded trucks. Other trucks joined them carrying the frames and plates for the giant ship. The name picked for the new Ark was a symbolic one. It was to be christened *Star of Hope*.

Turner assumed the government of the village. Jobs were delegated, and certain trucks assigned to them. An ex-produce merchant from the city was given the task of keeping the community fed. A former contractor undertook to keep the ship parts flowing in. A hospital was set up, using the doctors and nurses of the church. A group of singers and entertainers took over the entertainment field. Life in New Eden, as they renamed the village, became idyllic. It was an oasis in a mad world.

Bennion and Turner had more reasons than one for establishing the community as they did. The news from outside grew more disturbing every day. The first wild wave of panic had subsided, but its disastrous effects continued to grow and spread. The people fleeing from what they regarded as the dangerous zone infected others in remoter parts of the country. The lawlessness to be witnessed in New York were repeated elsewhere. The leaders of the New Eden project formed a conspiracy to prevent still more disturbing news from reaching the ears of their charges. Many of the ill-conceived Arks had already hopped off. As Bennion had predicted, all of them were heart-rending failures.

Some blew up in their cradles killing or maiming everyone in the vicinity. Others caught fire and turned into furnaces that consumed their pilots and passengers. Those that left the ground did so only to fall back from terrible heights, in one instance into the heart of a great western city.

There were other evil aspects of the Ark idea. Foreign countries too far away to be much concerned, were beginning to turn back the flood of immigrants. Where they were admitted freely, as in Mexico, it became impossible to feed them. Those who did not die of starvation pushed on to Central America only to find more miserable deaths, in the insect-infested tropical jungles.

The times were chaotic. New Eden was a good place to be.

Bennion also discovered the animosity against him was dying down. In place of it a strong sentiment against General Atomics was growing. Parts of the court of inquiry's findings had been released, and what was said did the trust no good. For reasons of its own the Government had not seen fit yet to announce Bennion's escape. Bennion breathed a little easier. It would break his heart to be interrupted. Already the construction scaffolding for the *Star of Hope* was rising. Tomorrow Kitty and Dr. Pennell would arrive.

Buck Turner came into the shack from which he was supervising the ship's building.

"There is a man outside who claims to be a government inspector of Ark ships. He insists on looking over the plans and talking with you."

Bennion strode to the window and looked out. A motorcycle was parked in front. The man who came on it was the FBI member of the court of inquiry!

CHAPTER XV

Sparring for Time

Quickly the inspector went straight at the business in hand. For half an hour he scrutinized the blueprints and asked pointed questions. It was evident he knew his subject, for the questions went right to the heart of the weakest spots. Suddenly he wheeled from the table and confronted Bennion eye to eye.

"What makes you think this absurd design will work?" he snapped.

"I don't," said Bennion calmly. He realized that the man knew who he was. There was nothing to be gained by stalling.

"Why do you build it then?"

"To keep a lot of frenzied people employed and happy," said Bennion, indifferently. "They could do worse things with their time and money."

"Ah. On the other hand, Mister—er—Professor Lundstrom, couldn't you be doing better things?"

"It is not always permitted to do the best thing," answered Bennion, meeting the piercing gaze with an unfaltering eye.

The inspector jammed on his hat.

"I'll check you over again. Say, in about—?"

"Two or three months," supplied Bennion, smiling. "I'll be here all the time."

"Good," said the visitor. He went out, mounted his motorcycle and drove away.

When the government agent had left, Bennion went out and cranked his trusty car. A little later he stopped before the entrance of the Fox Mountain tunnel. At that point he put on one of the armored suits he had brought along. Then he switched on his headlights and drove in.

It was a deep tunnel, sloping upward at an easy grade into the middle of the base of the little mountain. At all places it was wide enough for two trucks to pass and there were other slightly larger turning spaces. A half mile in he was forced to turn around and come back, for the radiation was too fierce to be endured unless encased in Anrad as well. But he was jubilant over what he did manage to see.

He scouted the outside more particularly. There he found a large deserted farmhouse with barns that would make an excellent headquarters for the transferred Pennell labs.

Kitty Pennell was driving the leading truck. Bennion met them on the outskirts of Foxboro and guided the caravan to its new headquarters. Kitty was delighted with the reunion, the surroundings, and the work ahead, but Bennion cut her joyful utterances short.

"Save it," he said, "we're not out of the woods yet. Slip into your Anrad and armor and I'll show you where to start."

When both were ready, he selected one of the shielded trucks and drove to the end of the tunnel. As he expected, its terminus was directly under the giant atom. They could see its glow through the many feet of rock ceiling that still supported it. The half-finished explosion chamber was cluttered with excavating machinery the army left behind.

"This is your workshop. Above you is your source of cosmic rays. Go ahead with your own show, but there is also something I want you to do for me. Take X-ray pictures of that giant atom every day at the same time—its own radiation gives light enough. Set up other cameras on the mountain side outside and get shots from those angles. By triangulation we can gauge its present diameter, and by shooting it every day you can determine the rate it is eating its way downward. You don't want to be in here the day it comes through the roof."

They turned the truck around and went back to the farm. Bennion shed his Anrad and handed it to Dr. Pennell.

"I'll come over every night and look at your graphs," he promised. Then he gave Kitty a warm kiss and hurried back to the *Star of Hope*.

A long motorcade had just arrived, heavy drays laden with the bulky stern parts of the Ark. Cranes were already dropping down to lift the massive pieces off. By nightfall two of the giant tubes were in place. The next day the other four were set to and work was begun on tying them together with the heavy hoop that formed the base of the structure to rise above. Like the *Katherine*, Bennion was building it vertically, nose up. The solid parts—which gave and took the powerful thrust of the rockets—served as the best foundation. The forward frame and skin of the ship was light and thin until it tapered at the nose. There, surrounding the control cabin, it would have to be reinforced again to cope with air resistance and meteoric dust.

Day after day the structure rose. In the end it would stand higher than the now empty Empire State Building—a long, silvery cigar-shaped vessel somewhat more slender than the little *Katherine*. Week after week additional parts came—the huge cyclotron and the tanks for fuel. These were installed as promptly as they arrived.

The fuel problem still bothered him. Kitty Pennell and the good doctor were making progress, but the fuels they had produced so far were not as simple or efficient as desired. Unless it was improved, he would have to rip out the cyclo from the Ark and install a much larger one. That night he pored over the curves provided by the Pennells.

"Hmm," he murmured, studying the indicator cards. "Almost, but not quite. How many more tries do you estimate it will take?"

"How can we tell?" said Kitty. "You know as well as I do how unpredictable experimental work is. If you want to know, though, I can tell you the date we'll stop trying. That will be September second, between noon and three o'clock."

"The afternoon of September second, huh? Let's see the other graphs."

Dr. Pennell handed over the curves plotted from the X-ray data. They showed the downward progress of the giant atom. All Bennion had to do was look at the scale and see how many feet and inches it sank every day. Every day it sank a little faster and farther. An acceleration curve showed that rate also. The prediction was an easy one. On September second, the giant atom would break through to the rock ceiling.

Bennion drew a pad toward him and did some fast figuring. At last he pushed the pad away.

"I've got to run down to New York for a few days. By the time I get back you have to have that fuel. No fooling. Try mixing common salt with it. That is cheap and plentiful."

He drove back to his own camp with curiously mixed feelings. What worried him was the shortness of the time left.

As long as the giant atom was there above them it was still accessible. Once it began its descent into the earth proper they stood a good chance of losing it forever.

He had to make haste.

At New Eden he explained to Turner that essential parts of the ship had been held up at the factory, and that he was going into town to investigate the delay. It might take a week or more. It also might take money.

How much was there left unexpended from the Ark fund?

"A little over six hundred thousand," said Turner, looking in the books.

"Better give me five hundred thousand of it. I don't like the looks of things at the mountain. We may have to pay through the nose to expedite what we need, and I want to have the money on me to do it with."

When he shoved off for New York he had the check in his pocket. In the city he went to one manufacturer's office and paid for a strange bit of equipment to attach to the spaceship. Then he went down to Wall Street.

He found a broker that Dr. Pennell recommended.

"How's the market?" he asked.

"Have you a dime?" countered the broker. "If you have, you can buy all New York State lock, stock and barrel with New Jersey thrown in for cumshaw. For a quart of good rye whisky I can let you have ten thousand dollars in Pennsylvania Railroad bonds. If you are trying to sell something, it is the other way around."

Bennion laughed. The world was certainly topsy-turvy. He scanned the last quotations. The broker had not exaggerated much. He made out a list of what he wanted.

The face value came to many millions, the broker figured.

"The heat must have got you, but here you go. The securities come to eighty-three thousand dollars, and adding commissions we get—"

Bennion handed over the money.

"Deliver the securities to the Reverend Tucker at this address. Get them to him by messenger on September first. Thanks. Goodbye."

The broker scratched his head perplexedly as his unexpected customer walked out. It was the first time in months that a buyer had paid the asked price for anything he could not consume on the spot. What a lot of queer nuts there are in the world, was the broker's reflection.

Bennion acted even stranger than that. He checked out of his hotel room an hour later. There was a week when the anxious Turner, who became nervous at his prolonged absence, tried vainly to locate him.

Then he unexpectedly turned up on the job at New Eden, appearing serene and contented.

"It's terrible, I tell you. The people are getting worried," said Turner, urgently. "They are ready to put in the decks and partitions in the forward section and none have come. We cannot find copies of the orders. They had to stop work the day after you left. I am afraid some will crack up if the delay lasts much longer."

"It won't," assured Bennion. "A shipment ought to reach here any hour. Then there will be plenty to do."

With that he hopped into his car and drove up to the Pennell farm.

CHAPTER XVI

Eureka!

Upon seeing Bennion, Kitty Pennell was elated. She was in Bennion's arms and babbling happily before he got well out of the car. The old doctor stood smiling by.

"We've got it, Steve, we've got it!" she told him, jumping up and down. "Adding the salt did it. A few minutes' exposure to concentrated cosmic rays does the rest. It works beautifully."

She led him to the rear of the barn where the proving slide was set up. Lying horizontally on it was a small projectile—three pounds of solid steel; drilled in the base with a fine hole. Back of it rose a massive concrete block faced with sheet steel. A hundred yards away there was another such block. Alongside the projectile lay a small portable cyclo attached to the house by heavy copper cables.

Kitty opened a can of gray powder. She dampened the point of a fine needle and dipped it into the powder. A tiny grain of the powder stuck to the point. This she carefully inserted in the depth of the drilled hole.

"This stuff is highly radioactive since its exposure to the cosmic rays. One stiff jolt from the cyclo will start it to disintegrating at an almost instantaneous rate. Look!"

She slammed in the switch. The cyclo gave a faint hum. All stood well back.

Wham! Presto!

No human eye could follow what happened. It was over even as it began. There was a whiff of ozone in the air; a vague impression that an instant before there had been a flash of unendurable violet light. Their ears still ached with the last reverberations of the thunderbolt that was let loose. The projectile had vanished!

They walked over to the target where a clean round hole gaped in its armored face. Incandescent concrete glowed through the orifice. The hot metal around it graded from a blinding, sparkling white through bright orange to dull cherry red and finally black. Dribblets of molten iron ran down the face of the plate.

"Great Scott!" yelled Bennion. "What an impact!"

"Yes, plenty of power there," said Dr. Pennell.

The fuel was powerful beyond Bennion's wildest dreams. The disintegration of a single grain had driven the small shell with irresistible fury. Its acceleration had been so swift that no one had seen it leave the cradle. Its impact on the target plate had been terrific. The force was too powerful for matter to withstand. The test projectile had not pierced the plate. It had vaporized it, and itself with it.

"It is too good," said Bennion, thoughtfully. "No living thing could endure accelerations of that order. We will have to tone it down. Have you tried mixing it with the earlier fuels?"

"Oh, yes. Look here."

Nearby was another rocket stand. This one held what must have been a shell for a sixteen-inch gun. Overhead was a high pole from which dangled the wreckage of two velocity screens. Pennell dragged the cyclo over.

"You needn't worry about this one coming down again," said the old scientist. "We tried out some little ones first, firing them through those screens. The time between the puncture of the first screen and the topmost one was recorded on an oscillograph that shows when the electric leads were broken. The velocities we get are around ten miles per second. Anything going up with that velocity won't ever come back. Remember, Steve, that anything which exceeds a speed of about seven miles per second will overcome gravitation."

He deposited the cyclo on the stand for it, adjusted its discharge nozzle to suit, then drew away.

"The fuel in this shell consists of one ounce of the old and five grains of the new as a booster. You'd better give it lots of room. The high ones flare a lot."

When the switch was thrown that time they had a repetition of what happened before, though on a grander scale. This time the shell left the firing stand at a sufficiently low velocity to be seen for the first half second of its flight. There was the same ear-splitting crack of thunder, the same vision of an intense violet flash, and what appeared to be a slender column of gleaming steel reaching from the cradle to the zenith. And, as instantly, it disappeared. Overhead all that was left to be seen was a hair-like wisp of greenish smoke trailing from some immeasurable height. The rocket stand was no more. It had melted under the rocket's heel and now lay in a slowly cooling pool.

"Still too fast," commented Bennion, thinking of what it must feel like to travel at speeds where the outer layers of the shell were burned off by friction with the air. "You'll have to cut down the mix some more."

But they had it! The long-sought-after fuel that would drive ships across the universe at any speed man could endure, was theirs.

"That stuff would make wonderful ammunition for a war," spoke up a young fellow named Glover. He was one of the student helpers the Pennells had brought along to handle the extra trucks and part of the lab routine.

"We aren't thinking of war," said Bennion, shortly, giving the assistant a hard, appraising look. Until that moment he had taken it for granted that Dr. Pennell's assistants were trust-worthy. Now a doubt arose. It was an old rule in laboratories where pure research was done that when an assistant began to think of his work in terms of military application it was time to look out.

"I beg your pardon, sir," said Glover, and went about disconnecting the cyclo. "It was just a thought."

"It's all right, Glover," said the old doctor. "I understand what you meant, but this is no time to talk of it."

After the talkative assistant went into the house, Kitty Pennell had a question to ask.

"Are you still planning to demolish the giant by playing a stream of this energy on it? Dad and I figured it yesterday and it looks dangerous."

"It's worse than dangerous, it's impossible," said Bennion. "I figured some myself yesterday. There is no doubt that those fierce violet rays would disrupt the giant atom—swiftly, if we used a heavy jet, eventually if we used a thinner one. I neglected to take into account the back thrust. The starlet is too heavy, its inertia is tremendous. We could build a gun and plant it in the tunnel and let it go at the atom when it falls through. But we'd have to brace it with a mountain range to keep its own kick from hurling it backward over the horizon. If we had thousands of men and the material to work with and the time, we might anchor the gun sufficiently. We haven't any of those things."

"That means," said Kitty, gravely, "that when the giant atom crashes down there will be nothing we can do after all? Then we had better go home and make our plans for taking off in the *Katherine*."

"That can wait," said Bennion, absently. "There is another stunt I want to try first."

"And that?"

"All the details are not worked out yet," he said, evasively. "You'll know in due time."

They turned toward the farmhouse lab. As they did, Bennion glimpsed a man walking rapidly away along the main road. As if he sensed he had been seen, the man ducked quickly into the brush beyond and vanished. He wore the same grayish dungarees that the laboratory assistants wore.

Bennion dashed into the lab and glanced quickly around. He was looking for Glover. He was there, bending over a test tube. Bennion counted the others. There were four present. There should have been a fifth. He called Kitty aside, who had just entered behind him.

"Who is missing?" he asked in a low voice. Kitty turned and looked the helpers over.

"Sid Ellington," she said. "He has been acting ugly lately. He told my father he wasn't going to sit on a volcano much longer. It was all my father could do to keep him from quitting on the spot."

"I think he quit just now," said Bennion grimly. Who was Ellington? And who was Glover, really? He hoped fervently that the next time he had an impossible job to do it would not be complicated by interference and mystery.

"You had better keep a sharp lookout," he warned her. "Something is cooking for us again, and it is something none of us are going to like. What it is I don't know, but I have the same crawly feeling I had the day we drove from the quarry to our old plant. Meantime, I've got to run over to the ship. More stuff is coming in and I have to show the men what to do with it."

He packed several tins of the new atomic fuel, both the high-powered and the low, and stuck them into the back of his car. Then, after a wave of the hand, he drove off.

He drove fairly fast, for whoever had built the road down the valley must have expected fast drivers to use it. Every turn was steeply banked so that a slow driver had the feeling of slipping off the road sideways. As he ate up the few miles between him and New Eden he had little time to think of the events of the day.

On the credit side was a partial victory—now he had the precious fuel. On the red side of the ledger he had several dubious factors. The material for the *Star of Hope* was not arriving as fast as it should. And there were the enigmatic trio—the FBI man, and the two laboratory assistants. Behind all of these the sinister figure of Farquhar loomed. It was still a week until the dreaded second of September came around, ample time for anything to happen.

His spirits rose a few notches as he drew near the construction job, for he saw that more trucks had come and the men were busily unloading them. But the moment he entered his office he sensed new trouble. Buck Turner sat there with a dark scowl on his face. As soon as Bennion was inside and the door shut behind him, he flicked out a scrap of paper and handed it across without a word.

Bennion took it and read the scrawl. The first glance told him the letter was phony, for its lines sprawled irregularly across the page like the scribblings of a little child and the words were deliberately misspelled. An attempt at disguising the hand, obviously. Moreover, the note was signed with the poisonous name, "A Friend." Stripped of its camouflage, it read:

Dear Preacher Turner:

Here is something you ought to know. That man calling himself Prof. Lundstrom ain't Lundstrom but Bennion, the guy that set the Ward fire. Him and the dizzy jane that helped him on that job are fixing to cross you and your sucker gang. Watch out! What they call fuel is *dynamite*—it will blow your ship up. Gang up on him and don't let him come near your ship again. They've got a hideout up the valley from you. The gal's old man is helping out. He is a jerkwater college prof named Pennell.

"What does this, mean?" asked Turner. "I found it stuck under my door this morning."

"I wish I knew," said Bennion, darkly. "Hop into my car and let's take a quick run back to Pennell's farm. I'm getting uneasier every minute."

CHAPTER XVII

The Affair at the Farmhouse

Like a flash Bennion jammed down the gas pedal when he saw that dark blue sedan parked before the door of the farmhouse lab. It was a car he knew too well. He had seen it before. It was Farquhar's. Bennion turned into the lane leading to the farmhouse, and he only needed the two off wheels for it. He slid to a screeching stop and was halfway up the steps when he checked his headlong charge. It was just soaking in that Farquhar had taken the trouble to turn his car around so that it pointed outward, and he had also left the motor running.

"All set for a quick getaway, huh?" muttered Bennion.

He jerked out his jackknife and with two swift jabs punctured the rear tires. Then, while they were still whistling, he plunged into the house with Turner close at his heels.

The laboratory was at the back. Those in it either had not heard his approach or did not care. Bennion dashed on in. Then froze. There were two reasons. One was the tableau before him, the other the cold, harsh voice behind him. In one corner of the room three of the lab assistants stood, whitefaced, with their hands stretched toward the ceiling. The one called Glover had them covered with a sub-machine gun. A few yards away old Dr. Pennell sat half-fainting on a stool. He had a gash across his forehead. Kitty Pennell stood beside him with her arm around him for support, gazing with flaming eyes at Ellington, who in turn, had her covered. The voice from behind was that of Farquhar.

Bennion turned slowly with his hands raised after a crisp warning.

"Stand where you are. Hands up and turn around. You haven't a chance, Bennion."

It was Farquhar with a heavy automatic pistol. Ward was there, too, and his weapon was held on Turner.

"Get over there in front of me, padre," directed Farquhar, resuming his old oily smile. "I can carry double. Ward has his work to do."

Turner looked at the pistols, then moved over nearer to Bennion. Ward pocketed his and started his "work." He scurried about the lab, snatching up sheets of memoranda, formulas, and diagrams. He sniffed bottles, sampled other chemicals, and pocketed some of them. Then he opened drawers and found the coded notebooks. He took those too.

"Okay?" queried Farquhar. "Then scram. We'll mop up here after you've had a good start. We will make our getaway in one of the trucks and bring along the heavy stuff."

Ward ducked out of the room.

Bennion's long suffering patience snapped like an overloaded wire. He had tried to play the game, but this enemy always stacked the cards. It might be suicide. He did not care; if only he could do a little murder before the fatal bullet hit.

Without the slightest preliminary signal, without the flicker of an eye, he dived straight at Farquhar. The gun almost exploded in his face but his impetus and the quickly upthrust left arm knocked the gun upward and the shot went into the ceiling. His right arm hooked up and an iron fist landed an uppercut that jolted out a wounded grunt. In the next instant they were a tangled, writhing, slugging, gouging pair of bodies rolling about on the laboratory floor.

Bennion expected to hear the rattle of machine-gun fire in the room but all that his ears could bring him was the sounds of his own and his adversary's breathing. At last he managed to get a headlock on, and this in turn became a stranglehold. Bennion hung on until the other went limp.

Then he stood up groggily.

His clothes were torn to shreds and he knew that blood was running down his face. He was unaware of it, for an astonishing state of affairs met his eyes. Glover still held the sub-machine gun, but how it was trained on Ellington, who had dropped his and was holding his own arms tremblingly aloft. Dr. Pennell had fainted dead away. He lay slumped on the floor, with two of the assistants bending over him. No one else was in the room. Where was Kitty? And Turner?

Bennion picked up Farquhar's fallen gun and dashed from the room. He could get the explanations later concerning Glover's last about-face. Now he must find Kitty. He must prevent Ward from getting away with the secret of the new fuel.

His heart sank the moment he reached the front door. Kitty was not in sight, but speeding up the road toward Foxboro was his own car, driven by Ward. He was already out of pistol range. There was no vehicle for a chase. One disaster was an accomplished fact. Bennion ran around the side of the house. There he had occasion to freeze again.

"Stand back, Steve!" came the warning scream from Kitty. "Not another step." He saw what she was doing—and nearly choked—with gratitude. She was crouched behind the testing block, squinting over it with her eyes as her hands worried it this way and that. Turner and the missing assistant stood beside her, holding the portable cyclo in their arms. Then Bennion saw her quick nod and saw Turner flip the switch. He whirled in his tracks and shot a glance up the road. Ward, in his fleeing car, was at the top of the divide, beginning to go down on the other side.

A flash of violet, a crash of lightning, then for one blinding instant it seemed as if the world came to an end. Intolerable white light filled the valley from wall to wall; wild, roaring winds whipped down, leveling trees before it. They struck Bennion like something solid and sent him reeling against the farmhouse wall. In the background he could hear the rending of timbers as the barns went out of existence. A frightful force had been unleashed.

A dead quiet succeeded. Kitty Pennell picked herself up from a flower bed where she had been hurled. Turner was crawling groggily in the grass. The lab assistant was out cold. Up the road, where it went over the crest, there was no car, no road, no vegetation, no anything.

"What went wrong, Steve?" Kitty was shivering, awed by the tremendousness of her own performance. "I didn't put in any more than the usual charge."

"Nothing went wrong, darling," he said, putting a steadying arm around her. "You have an eye like an eagle's. What you didn't know was that I had several cans of rocket fuel on the back seat. Ward—"

He stopped short. She had slumped weakly into a faint. He laid her gently on the grass, only to find himself confronting the FBI man whom he had seen twice before. Where he had been during the excitement was a mystery.

"Some gun, Bennion," said the man. "You could go places with that."

"Yeah," said Bennion, tense and non-committal.

"She needn't have gone so strong," continued the government agent, pointing at the prone Kitty. "I had men planted down by Foxboro to pick this gang up on the way out. But I guess it is just as well this way. Ward stole a car containing explosives, didn't he, and the stuff jarred off? Suppose we agree on that. It simplifies things. As to Farquhar and his stooge Ellington, my man Glover is tying them up now. Our books are closed on them. You can forget that crowd from now on. I've been working on the General Atomics case for the last five years. This is the final payoff."

"Say, who are you, anyway?" demanded Bennion. The other man flashed a badge. It was of gold, with diamond insets.

"MacFarland is as good a name as any. I am a Federal investigator. I've learned most of what I want to know, but there are a few things I still need to be wised up on. Come clean. What are you up to?"

"Stick around a week and you'll find out," said Bennion doggedly. He was close to the point where he trusted nobody—far.

MacFarland fished a document out of his pocket. It was a special commission from the President. It authorized him to negotiate with Stephen Bennion and assist him in any way he could in the event he believed him worthy of assistance. Bennion glanced down at Kitty. She was reviving. She sat up, rubbed her eyes, and yawned.

"Let's take a little walk, Mr. MacFarland," suggested Steve. "I've done almost everything, but there are a couple of loose ends that bother me. It is outside interference I am worrying about."

"Why, sure," said MacFarland. "I feel ripe for a little walk."

The work was going nicely when Bennion and Turner returned to the *Star of Hope*. Able workmen were installing the control chamber and strengthening the struts about it. But a puzzled foreman was regarding a pair of long steel members laid beside the road and the various accessories that accompanied them.

Included among the accessories was a husky atomic motor, a twin set of racks and pinions, and other queerly shaped pieces.

"Say, Professor," complained the foreman, "there ain't anything in the plans that calls for this stuff. Where does it go?"

"Sure it is in the plans. The stuff goes in the stern. The motor sits on the forty foot platform. The beams go up on either side through the two hatches we left."

"What are they for?" asked the man, still puzzled. So far as he could see, they were useless.

"To steady the ship when she takes off where there is no launching cradle. They are designed to drop down like legs."

"Oh. But they are too long to get in now. They ought to have been installed before we finished the hull plating."

"I couldn't help that," said Bennion, "we couldn't afford to wait for them. You'll have to dig out a pit underneath. That will give you headroom enough."

"Yes, sir," said the foreman, and blew his whistle.

Turner broke in.

"What else is to come?"

"Lots of things. Furnishings, bunks, galley fittings, food, and the fuel. Doc Pennell and Kitty are working on the last. It ought to be over any day. The rest will take time. Two or three weeks, I should say."

"How much time have we to spare?"

"Plenty," lied Bennion. He knew full well that the deadline was less than seven days away, but there was no use in revealing that. Even Buck Turner, if goaded enough, might turn panicky.

As for the congregation, they were already showing signs of cracking nerves.

"You are the boss, Steve," said Turner. "I've gone along with you this far. I might as well go all the way. We trust you, you know. At the same time—"

"I know," grinned Bennion. "The shindig of this afternoon upset you. It doesn't mean anything. We settled some old grudges there—that was all. It won't make any difference. I will perform as I promised."

Turner looked doubtful.

"Do you remember what you promised, Steve?" he asked, after a time.

"That I would save your congregation if I could," said Bennion, but uncertainly. He had been playing so many parts that for a moment he forgot.

"You said," continued Turner, reproachfully, "that the ship was a sham. That it was designed in the beginning to be a flop. I gathered that our activity was to be a front for something bigger. I've shown my loyalty, Steve. What is up your sleeve? I've got to know before the showdown comes with my own flock."

"Don't you worry, Buck," laughed Bennion. "I can't tell you yet, and it wouldn't do you any good to know. I'll give you a promise, though. Nobody will ever know how far you stuck your neck out, and if trouble comes it won't be blamed on you. Satisfied?"

"No. Not by a darn sight," the pastor of the great midtown church exclaimed, then turned abruptly and walked away.

Bennion looked after him, slightly crestfallen until he remembered the promises of the man who styled himself MacFarland. After that he smiled. It would all come out in the wash. Six more days of playing the game. And then—

CHAPTER XVIII

Darkest Hour

Hurrying matters was not easy. Troubles multiplied. There were delays due to the slow arrival of needed parts, and there were delays caused by grumbling. On the third day there was something closely resembling a strike. The New Eden members quit in a body and marched to their cottages, leaving Bennion to carry on alone with those men he had hired from the outside. Later in the day he was given the explanation. Turner came to the office shack wearing a grave expression.

"My anonymous correspondent did quite a lot of letter writing before he left," said Turner. "The village is buzzing with rumors that you are Bennion—that you are not Bennion, but Lundstrom—that Lundstrom is a crook or insane. They have been told that the design of the ship is wrong, that no one knows how to fly it, and that the fuel is dangerous. I did my best, but their spirit is not the same. They have turned suspicious. They grilled me about the financial details and demanded an accounting. That last check I gave you I couldn't explain. I left them buzzing."

"Those letters were Ellington's work, I imagine," said Bennion. "They can't be undone. We will have to carry on in spite of them."

The work did go on, but haltingly, since some of the volunteer workers refused to come at all. Those that did went about the job in sullen silence. At that, the control cabin was installed and the ship's nose sealed. Structurally the vessel was completed. She lacked only the living accommodations. Trucks brought fuel every day. She was partially fuelled.

The most disturbing news came privately to Bennion in the form of a set of X-ray photos and a note from Dr. Pennell. Bennion stared at the damning pictures with a sinking heart. The giant atom had at last gone through the transformation the world had been dreading. It had suddenly stepped up its rate of growth. No one knew how much the acceleration would be accelerated. When it began doubling itself by the hour the end of the earth was at hand. Pennell's revised curve turned up sharply, indicating that the zero time would be some time early in the day on the first instead of mid-afternoon of the second. Bennion's carefully computed time schedule was wrecked.

He drove furiously to the laboratory to confirm the news at first hand and see what were the newest developments. Again he approached the farm building with growing dread, for he noticed that half the trucks were gone. They had been employed in bringing him fuel and there were none at that time at the ship nor had he passed any on the road. What could Pennell be doing with them?

The ultimate shock came when he ran into the laboratory. Neither Kitty nor the doctor were there. Two of the assistants were working over some X-ray plates, and their faces were ashy white. One came forward and offered a plate with shaking fingers.

"Taken ten minutes ago," he said. His eyes were full of terror.

Bennion needed but a glance to read the picture. The giant atom was raging now in earnest. It was fully twelve feet in diameter—a gain of a foot in half a day. The crash would come soon—perhaps tomorrow.

"Where is the Doctor and Miss Pennell?" asked Bennion sharply.

"They left," said the other assistant. "Went away early this morning in three trucks with Sammy and Ted for drivers. They went off Foxboro way, and they took a big load of fuel with them."

"What!" cried Bennion. It was unthinkable. Something uncanny lay at the roots of it. "Why?" he demanded fiercely. "What for? What happened?"

The two assistants exchanged uncertain glances. Then one spoke.

"We don't know. They wouldn't say. They had a big fight between them last night, and then they talked something over for hours. We couldn't understand what it was about. All we know is that they got out just after dawn."

"Miss Kitty left a note for you," volunteered the other, fumbling for it in a drawer. Bennion snatched at it, and read:

I am worried, Stevie, and I am going to do something about it. You are too darn noble, old dear, and too darn cagey. While you are mooning over saving every Tom, Dick and Harry, I am eating my heart out about us. You are playing a lone hand, now it is my turn. By the time you see this I will be a long way away.

He scowled at the note, cursing softly under his breath. The crazy little idiot, he was calling her. For he knew what she was going to try to do. She was taking some of the new fuel to the old rock quarry and try out the model Katherine. His first impulse was to dash off to the city, grab a plane and head her off. Then he paused. He could not do that. The situation was too grave where he was. He had assumed duties he could not forsake at the last hour. Then again, she was in a far safer place than this valley. Perhaps it would be better to leave things as they were.

The fuel job was done. She was not needed any longer.

"Take this," he said, scribbling off a note and sealing it.

He handed it to one of the assistant's, with instructions as to where it was to be delivered.

"Your work is finished and this place is too dangerous to stay in," said Bennion. "I'll send for the rest of the fuel. You fellows take the other trucks and get out. Goodbye and good luck."

The frightened tenseness of the two men relaxed. They knew something dreadful was in the air, though not exactly what.

"Thank you, sir," said the one who took the note; "We will be out of here in ten minutes."

The note was for MacFarland. Its cryptic wording would tell him what he needed to know.

Bennion's words were:

Climax coming any hour. Shove calendar up to now.

Bennion returned to the site of the *Star of Hope* with trepidation. The streak of luck that had been with him lately seemed to have left him. He feared that upon arrival at his base he might find himself face to face with a new trial. In that he was not wrong.

A thoroughly angry Buck Turner, accompanied by three of his most influential parishioners, was awaiting him in his office. On the table lay an open package, its wrappings speckled brightly with blobs of broken sealing wax. A bushel of green and red and gold engraved certificates spilled out upon the table.

Those were stocks and bonds by the millions, representing part ownership of a third of America's wealth. The broker had delivered too soon.

"What shabby trick is this?" asked Turner with blazing eyes. "Is it meant as cheap joke or as an insult? I asked money to back your experiments and ship; and you do this to me. You spend a quarter of a million dollars for this rubbish while our ship waits for vital parts. And you have the effrontery to have them bought for my account and sent to me. Are you trying deliberately to undermine me with my own congregation?"

Bennion was caught utterly aback. His face flushed furiously. When he tried to speak he found he couldn't bring out the words.

All he could manage was a weak defense.

"I won't try to explain it, Buck," he said. "Don't tear them up is all I ask. You'll understand why I did it in a day or so."

"We are fed up with that 'take it on faith' line, Lundstrom or Bennion, or whatever your name is," spoke up one of the parishioners, owner of one of New York's largest department stores. "You are fired, do you understand? We'll hire another engineer and finish what you began—if it can be finished, which we doubt. You had better get out quietly before the village gets wind of this last transaction."

"I won't do that," said Bennion, defiantly. "Your nerves are shot, and you've let them get you down. You don't know what you are asking. I am staying here through low and high water. That's all. Now I tell you to get out of my office!"

"We will be back shortly," cried another, "and with all New Eden at our backs. We'll see how big you talk then."

After they left, Bennion sat for a long time slumped deep in his chair. It hurt him deeply that Turner should have lost faith in him after trailing so long. He thought once of the bitter expression "like rats leaving a sinking ship," but he knew that that was not fair. All these who were leaving him had been patient and trusting and helpful. They could only stretch their faith so far. He could not honestly blame any of them.

Bennion got up and walked to the window. In the distance there was an increasing roar. Vehicles by the hundreds were coming, and he could hear the rumble of many men talking and giving orders.

What was it now? The mob from New Eden could hardly have been organized and back so soon.

Ten minutes later he knew the answer. The army was intervening again. A dozen armored cars, followed by a string of tanks, thundered past his shack. One sheered out and stopped. An army captain stepped in.

"How many men at work up in the ship?" he asked.

"None," said Bennion, eyeing the man. "They have quit for the day. You will find everyone in this district over at New Eden, just beyond this ridge."

"They'll have to get out," said the officer, "and you too. This part of the state has to be evacuated at once. Colonel Flagg is in charge. It is a

Presidential order. Pack up and get out."

He cast a searching look around and went out. Through the open door Bennion saw other soldiers searching the sheds and storehouses. They were making a clean sweep. Bennion looked at his watch and sighed. One hour! One hour of grace before his plans collapsed like a house of cards. He wondered about MacFarland, whether he would get the note in time and whether he would act effectively and promptly. MacFarland remained his last hope. The other bubbles had burst.

CHAPTER XIX

Taken for a Ride

Colonel Flagg was a tough old egg. He wouldn't budge. Out meant out. All of Bennion's protests were brushed away. When he reached the end of those the colonel lost patience. Two soldiers rushed Bennion and proceeded to hustle him into a car. It was then that MacFarland arrived to save the day.

He called the colonel aside and whispered a few words. The colonel nodded, then grumpily called off his dogs of war. A moment later the staff car whizzed away. That meant the last of the soldiery was gone. Bennion then saw that MacFarland had a number of men with him. Three were armed with cameras, two with portable microphones, and several others with notebooks. There were a couple of huskies along that Bennion took to be plainclothesmen, and, of course, the drivers of the two cars.

"I'll take over now," said MacFarland. He walked up to Bennion and began picking away the items of disguise that he was wearing in his false character of Professor Lundstrom. He flicked off the heavy blond eyebrows, snatched away the mustache. With a few other touches he completed the unmasking.

"All right, Bennion," said MacFarland, stepping back and checking his work. "If you'll wash your face we can proceed with the pictures."

"Pictures?" asked Bennion, aghast.

"Sure. We always take pictures. Hurry."

It was good to wash his face and have it feel natural again, but Bennion did not hurry. He was still stalling for time. Things were not working out quite as he planned them. MacFarland never had shown his full hand. Then came the business of being photographed, after which a movie camera was set up and the microphone.

"Have you any final statement you would like to make?" asked MacFarland. "It will be released immediately to the public."

"Yes," said Bennion proudly. "It is this. From first to last I have done what I have done because I felt it my duty. I apologize for nothing. I shall continue in the same line to the last moment unless I am prevented by forces too great for me to control. That is all."

"Splendid," said MacFarland. "Okay, boys. Take it away. Burn up the road getting back, you haven't any time to lose."

The newspapermen jumped into their car and rushed off. Night was falling. If they drove fast they might still catch the morning editions. Bennion turned to MacFarland after he had sent his own men out to wait in the car. There were explanations due. MacFarland grinned and stuck out his hand.

"I did the best I could," he said. "I rang the army in as being the simplest way to get the New Eden villagers out of your way and in the clear. Now the army is in the clear with them. In a couple of minutes I'll be gone. When does the big pop-off start?"

Bennion shook his head.

"Any time from now on. An hour or so, maybe another day. The atom is pepping up fast. You had better not hang around. But what were the cameras for?"

"The press, man! This is the biggest show of the century! Right now there are fifty press planes soaring overhead waiting for the curtain to rise. I know you didn't order it. The big boss did. He thinks the people ought to be told the truth. It will be a proper sequel to the Farquhar revelations. We released the full story on that less than an hour ago. He broke down and told us the whole sordid business. The wires are already humming with it."

"That's good," said Bennion dully. He had almost forgotten about Farquhar, so much had been happening. Lately he had come to regard the fellow as no more than a minor nuisance, but it was just as well that he was behind the bars.

"Any last messages?" asked MacFarland, more soberly.

"No," said Bennion. "I have said all that is necessary, I think."

"No word for Miss Pennell?"

"She will understand," said Bennion shortly.

MacFarland gripped his hand.

"You're a brave man, Steven Bennion. Good luck to you."

"Cut out the melodramatics, if you don't mind," said Bennion. "I never went out on a limb in my life unless I thought the limb was reasonably strong. I'm not starting now. Believe it or not, I'm having the grandest time of all right now. We will have a good, laugh over this yet. Wait."

"I still think you are a brave man," said the FBI operative.

"Hogwash!" And Steven Bennion meant it.

It was pitch dark except for the mild moonshine from a quartering moon inching toward the zenith. Bennion turned out the lights in his office shack and surveyed the towering mass of the *Star of Hope* that loomed above him. It was an impressive scene and a lonely one, for he knew that by then not a living thing was within a radius of miles.

He made his way to the dark shadow beneath the hull and walked between two of the giant tubes. Carefully avoiding the deep hole that had been dug to permit the placing of the long structural members that were late in arriving, he found the ladder that led up into the interior. He climbed it, found the switch that turned on the auxiliary lighting system, and went about the grim business of the night.

After he climbed two more ladders he came to the lower operating platform. He checked over the raymeters. All were dead except for the occasional tick as an outside cosmic ray trickled in through the earth's atmosphere. He set one auxiliary cyclo into motion and brought it up to speed. Then he stripped and shifted into the Anrad suit, topping it with complete armor except for the heavy helmet. He tested various machines. All were ready. There was nothing left to do but sit down and wait. The next move belonged to the giant atom gnawing at the heart of Fox Mountain.

It was dull in there. Bennion adjusted the two-way periscope through which he could either scan the country roundabout or the ground immediately beneath him. All that was to be seen was the moonlit countryside. To while away the time he put on a pair of headphones and plugged in on the radio. He tuned in AWCS, the recently formed All World Broadcasting System. What he heard made him squirm.

"Folks, stand by your sets—the most momentous moment in human history may occur any second," a well modulated voice was saying. "Here we are, Bill Eddins of the AWCS news staff, and Ted Squivens and Bob Blaufield, ready to give you a minute by minute description of what the eruption of Fox Mountain will look like. We are in an army bomber, five miles up. The sky is full of planes of the press, army and navy. Don't go away. Dr. Schnitzleberg, the eminent atomic expert, is also with us. He says that his computations reveal that the explosion may occur at any time now."

Bennion snorted. He had never heard of Schnitzleberg. Whoever he was, he could not possibly know what was about to happen. Unless, of course, he had been tipped off by MacFarland. Worse was yet to come.

"Four miles away," continued the announcer, "all dark and deserted save for the one heroic figure huddled within it with his secret plans for saving our race, sits the man who may be destined to be the world's greatest hero. That man is Stephen Bennion, the maligned and misunderstood lone fighter of our day. You all heard earlier his noble words 'I have done what I have done because I felt it to be my duty. I shall continue in the same line to the last.'"

Bennion groaned audibly, plucked the earphones from his head and hurled them across the room.

"What a fool I made of myself," he cried. "Why did I say anything to that slimy MacFarland, the double-crosser. Oh, rats!"

Curiosity got the better of him. He salvaged the battered headpiece and put it on again. The voice still went on.

"Throughout the world solemn services are being held and prayers are going up that Bennion's unselfish sacrifice will avail—"

A violent vibration shook the ship, nearly tossing Bennion off his seat. The hull creaked and swayed and was filled with ominous rattlings. It was as if an earthquake was in progress. Then the ship steadied. Bennion took a firm grip on himself. This was it! The giant atom must have crashed through the ceiling of the tunnel and struck the heavily reinforced concrete floor. He corrected the adjustment of his headphone. Everything would depend on what followed.

"—we have just heard a dull boom even above the roar of our motor. A brilliant light is shining on the ridge east of Fox Mountain. It is like a searchlight beam, but it seems to be coming out of the side of the mountain ... we hear a rumbling sound it gets louder. The light gets brighter ... ah-h-h—" the voice ceased for a moment. Then it resumed.

"Folks, we are now looking down at the most marvelous spectacle any of us ever beheld. A great globe of blue fire has erupted from the mountain side, deep down in the valley. It is moving ponderously down the road, and the road is cracking under it and giving way. It sounds like artillery fire. But the blue globe keeps going on, and there is a broad trail of fire behind it where the concrete of the road has melted into slag. The country is lighted up like noon. The trees and houses and shrubs are burning furiously. It is hell down there, folks, simply hell. We are glad we are thirty thousand feet above it. Even here we have to use black glasses—"

Bennion's breath was coming in heaving gasps. He disregarded the radio for a second and swept his glance across the instrument board. The raymeters were showing a distinctly higher activity. He peered into the periscope. Outside it was like daylight. But all he saw was the familiar hills and nearby deserted houses. He listened in again. He had to know what the giant atom would do next. In theory he knew what it would do, but he was worried about the strength of the roadbed.

"The fiery object is rolling slowly down hill. It has come to the junction of the army's tunnel road and the highway between Foxboro and the town lately renamed New Eden. It is following the road, though it hesitates at the curves. But it has made them all so far—",

"Thank heavens those curves were heavily banked," thought Bennion as he listened.

"The flaming atom goes on down the valley," the radio voice was saying. "It is winding and twisting, but it sticks to its course. It is going faster now, and everything it approaches bursts into flame. We are wondering what will happen when the road turns upward. Hang on, folks, and we'll let you know."

Bennion ripped off the headphones and carefully locked his leaden helmet on. It did not matter any longer what the birdseye view was. The giant atom would soon be in his own lap. He jammed his eye against the periscope. The light was growing brighter. Its intensity was getting to be unbearable to unshielded vision. He left the periscope for an instant and started up another cyclo motor. Then he was back.

The dazzling giant atom rolled into full view. It was coming fast. Bennion snapped on the lead filters and resumed his vigil. What would it do next? He was reminded of the grim humor of the old wisecrack about engineers. "Engineers never guess," it ran, "they estimate." That was all he had done. So many miles downhill, building up velocity, then a sharp rise. His car had done it—made the downgrade and then topped the ridge and come to a stop. But the frictions involved were different. He had tried to allow for that, but he did not know how well.

The giant atom, blasting its fiery brilliance in every direction, rolled inexorably on. It came abreast the waiting *Star of Hope*, hit the curve, wavered, and then started climbing up to it. Bennion held his breath as he watched. Any second now would spell the difference between the hope of success and flat failure. The atom came on, slowing gradually. It was almost underneath the ship when it seemed to come to a full stop. But it was still moving ahead—a foot a minute. It rolled out of sight and underneath the giant hull.

Bennion switched the field of the periscopic sight. Now he was looking straight down. The atom hesitated on the brink of the hole beneath, devoured its lips, then tumbled into it with a thud that nearly wrecked the ship. Bennion's hand reached out for the control levers that he had cleverly located long before. The giant atom was within the grasp of the space ship. The question to be decided was the strength of that grasp.

The lower hatches rose on their hinges. The two giant beams that the colonists of New Eden had puzzled over slowly descended through the openings. At their lower ends they were fitted with grapnel like claws of special barium alloys. Bennion pushed other buttons. The claws closed after the manner of the maw of a steam shovel. The giant atom was within their grip. The real test was to come.

Bennion flung his hands to the other side of the switchboard and jabbed savagely at two buttons there. Machinery whined and groaned as the cycles came up to full power. There was no result. The atom was much heavier than he had counted on. He threw in a fifty per cent overload—then a hundred, watching the gauges with an anxious eye. He cut in the last motor he had. It was now or never.

The monstrous tongs began to rise. It was slowly, to be sure, and with groaning protests, but the giant atom was being lifted into the tail of the *Star of Hope*. Bennion waited with an almost unbeating heart until the fiery ball was well up into the interior. Then he slapped on the magnetic brakes. After that he threw a lever which opened a spherical container of gargantuan size. It was lined with many feet of barium concrete. Into that he eased the burden of the tongs. With another slash of the lever he clamped its jaws together and locked them. The giant atom was imprisoned on the *Star of Hope*!

With a clang Bennion closed his stern doors. Then he shut off the auxiliary cyclos. He stepped into the elevator and went skyward toward the nose. Hurdles one, two, and three had been jumped. The voracious atom had taken the road in preference to sinking deeper into the mountain. It had kept the road all the way to the ship, where it had fallen into the pit dug for it. It had been lifted inside. The rest depended on the *Star of Hope*.

He crawled through the door of the control room, and seated himself in the driving bucket. At that height he felt safe in loosening his helmet, for several decks of lead intervened between him and the deadly menace below. He replaced the headphones, then reached out for the main drive switch. The radio voice was still droning.

"Folks, this is the big moment—the pay-off. The bright object, that was going to devour the world has disappeared beneath the ship *Star of Hope*. It was drawn up into it. It suddenly grew dimmer, though we can see it still as a dim glow. Oh, golly ... something terrific is happening ... the entire district is bathed in blinding fire ... the space ship has exploded ... no, NO ... it is taking off...."

Bennion heard no more. His hand had already closed the ultimate circuit. His internal organs cried out in tortured pain as the frightful acceleration flattened him against the back of his bucket seat.

He was smothering from the sheer inability of expanding his breast to take in another breath.

His circulation stopped. He saw fire, then blackness. After which he passed completely out.

CHAPTER XX

Star of Hope

Inky blackness endured for eons. Then it passed. With great effort Bennion opened his eyes. The control room was flooded with brilliant light. Looming big in the lefthand ports was the moon, scarcely twenty-five thousand miles away. Bennion feasted his sight on the sparkling surface, broken picturesquely, by mighty mountain ranges and huge craters. Then he found himself craning his neck to follow the view, for the moon was rapidly drawing aft. The *Star of Hope* was well launched into space, was already beyond the orbit of the moon.

Bennion adjusted the feed flow to the flaring tubes. It was not enough to get clear of the moon. He must make certain that contact would not be made with any other body in the solar system. He threw the propelling blasts sufficiently out of balance to ensure the rocket ship's twisting upward, straight-way out of the plane of the ecliptic. There was no more to do for the time being. Bennion walked to a port and gazed out at the multicolored stars that studded the heavens, now to be seen with magnificent clarity.

"Beautiful, isn't it, Steve?" said a soft voice behind him. Steve spun as if struck by a lash.

"You! Kitty! You shouldn't be here!"

"I am here. I couldn't let you do this thing alone. I—you—that is we—"

He dragged her to him in a grotesque embrace. Unhelmeted, but with bodies clad in heavy leaden suits, they must have appeared to an astonished man on the moon as a species of ungainly turtle, from some alien planet.

"I thought you were safe—on your way down south," he said.

"That is what I wanted you to think. That is why I staged the thing the way I did and left that note. Instead I came here and stowed away. It was just that we are partners in all other things. I didn't want to be left out on this."

"You're a selfish brat," he said, kissing her tenderly.

"What next?" she asked. "Why did you have to come along at all? Couldn't you have fired the rockets by remote control?"

"Yes. I could have. After that I would have lost control. The giant atom must be gotten rid of at all costs, and I mean completely. If the timing had been wrong, it would have hit the moon. If you can imagine the moon shrunk to a fireball one ten thousandth its size but with the same mass, you can imagine also how little benefited the earth would be by transferring the cancer atom from here to there. Think, too, of how much worse it would be if I were to dump the atom here and it should wander into the field of Jupiter and set that enormous planet afire."

"Or let it drop into the sun to turn it into a raging nova," added Kitty. "Yes, I see now why you had to do it this way."

They fell silent, gazing at the jewelled skies.

"Let's have a look at our passenger," said Bennion, after a time.

He pulled over the periscope that gave a view of the interior of the ship. All that could be seen was a field of intolerable brilliance.

"I'm afraid our baby has eaten its way out of its shell. Next it will go for the driving tubes and the hull. A spaceship with a ravenous parasite in its bowels is not destined to last long, my dear."

Her laugh came as a merry tinkle.

"Don't go melodramatic on me, Stevie darling," she said.

"I won't," he cried. "I was simply trying to prepare you for something. That was all."

He reached for a lever and gave it a vicious pull. He jabbed at a dozen buttons. The ship shuddered in reply, seemed to twist and be about to roll over. Then it straightened out and went on before. He took another peep through the periscope. He shoved the eyepiece away and began unbuckling his armor.

"We may as well be comfortable," he said. "Take off yours."

There followed the clankings and thuds as the heavy outer garments fell to the deck. They were left in their gray slacks they wore underneath.

"Now," he said, "how about throwing together some chow? I can't remember when I ate last."

She smiled gaily and opened the pantry door. Then her hand reached for a package of food concentrate. She knew the crisis must have been passed.

It was half an hour before they finished breakfast. He smacked his lips and strode to the periscope. There were a few seconds of twiddling and searching before he snapped on the switch that brought the telescreen into full action. The screen went dark and it was as if they were looking out into the velvety star-studded void.

He shifted the controls slightly and a bright star came into view. It was blindingly brilliant, fiercely blue, and its dazzle made all the other stars pale into insignificance.

He sat down and regarded it. She sat down beside him and nestled close to him, seizing his hand and holding it against her cheek.

"Is that it?" she asked.

"That is it," he said simply. "The *Star of Hope*. There goes our little playmate of Fox Mountain—outward bound, forever and ever. It is the seed, the germ, of a new blue dwarf, but it will have to find its fodder in some other system. What we did was haul it out here into the void and give it a parting kick to speed it on its way. And there it goes, wrapped in the fragments of Buck Turner's Ark. Now we're through. We're on our way home."

She snuggled closer. He placed an arm about her.

"When do we land?" she asked.

"Say," he cried, sitting up and taking his arm away, "you're a cool one. You are as matter of fact about this as if we were out for a spin in a car."

"Why not?" she said. "I got used to the idea days ago when I first tumbled to what you were up to. Don't forget that I can read blueprints too. This control car was too much like the little *Katherine* to be funny. That was what gave me my first hunch. And then the detaching gear and all that. I saw you could unhook it in space and let the rest of the big ship drift on. After that, when I climbed up here yesterday and saw the Anrad lining—"

"You're just too smart," he said, smothering her in kisses. "A guy can't get away with a thing."

"No," she said, when she caught her breath, "not when he tells you right at the outset that he has an ace up his sleeve."

[End of *The Giant Atom*, by Malcolm Jameson]