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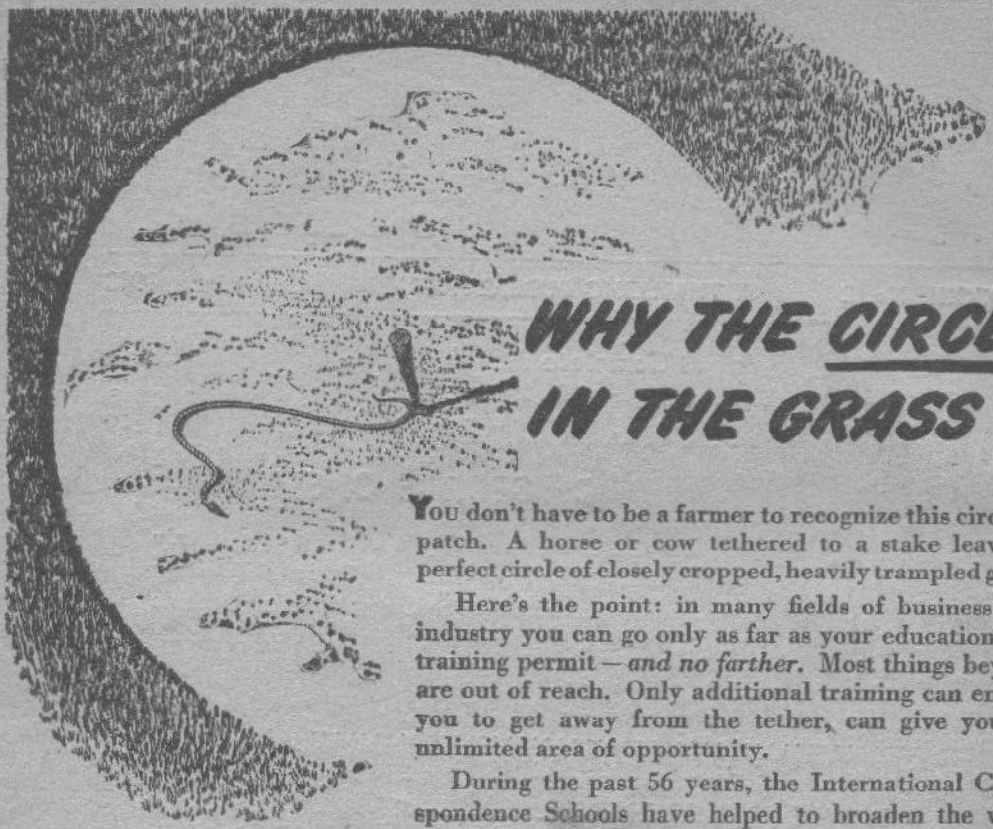

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THRILLING WONDER STORIES

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A Complete Novel

THE TRANS-GALACTIC TWINS

By GEORGE O. SMITH

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Three Complete Novelets

Short Stories

Features

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INCREASING worry is being more and more often publicly expressed by our leading intellects, especially in educational and general science fields, over the inability of even the most mentally favored among modern men and women to profit by the rapidly-growing sum of human knowledge.

Since such public worriers include Dr. Karl Compton, President Conant of Harvard University and Dr. Vannever Busch of the nuclear physics field, to name but a few, it seems to us that the cause of their alarm commands respect.

Not even the most arrogant of humans, confronted by the vast unexplored areas that lie ahead in virtually every field of art and science, can honestly lay claim to belief that mankind has more than faintly scratched the outer frontiers of learning. But even so slight an achievement has piled up such a dizzy tower of techniques, theories and needed records that it threatens to snow under the ablest of scholars.

Man, in a word, is threatened with becoming mentally land poor. Like the farmer in such sorry case he has the land—the achievements of his predecessors and contemporaries and their records of same—but to farm it profitably is beyond his resources.

Progress and Specialization

Just how serious this situation may be can be understood by a brief summary of what progress is. Progress is the ability of man to move ever forward toward further achievement by utilizing the gains of his forebears. If he has to spend his entire life learning what these gains amount to, he isn't going to progress very far.

The result, in this instance, is stalemate and ultimate stagnation.

One answer to this growing menace is, of course, specialization. Because it is the simplest direct reply it is the method which has, to date, been most commonly used. In essence the idea behind specialization is simple—since the colossus of research has become so overpowering, let each man study exclusively in the field to which his talents best direct him.

Let him be a dental anesthetist, a molecular physicist, an expert upon how wheat can be shot from guns or a geopoliticist exclusively. He can then progress in his chosen line as his fellows must progress in theirs. Thus, since progress is being made in all fields of science, progress as a whole is being made.

'Tain't so, honey, 'tain't so. It's like Aesop's old fable about the mice who decided, in view of recent feline depredations upon their population curve, to put a bell on the cat. That made sense, too—but no mouse could be found possessing the ability to hang the bell on kitty.

To ensure any real progress, some persons or agencies must be possessed of sufficient general as well as specialized knowledge to coordinate new achievements and techniques in the various fields. The psychiatrist, for instance, studying man from the inside out, must meet the psychologist studying him from the outside in or the two might well pass each other like a pair of upper-bracket Abbot and Costellos. And both should know much of what the purely physical neurologist and pathologist are doing.

And this is only a tiny segment of one field of current scientific study. The same requirements must be met in all fields and then—ever more complex—in attaining the proper relationships between new studies in all the sciences. The student of cosmology, for example, working out of general astronomy, might stumble across a vibration from outer

space which would affect all study of living things.

A Difficult Question

No, specialization, unregulated and uncoordinated with other fields, is not the answer. In fact, it's a tough question.

If a modern-day Leonardo da Vinci or Ben Franklin were forced to spend fifteen or twenty years digging into books to learn the whys and wherefores of what they are trying to solve, it seems highly probable that even this most versatile pair of western intellects might have been sharply curtailed in their achievements. They could hardly have spanned so many fields.

However, a number of our most thoughtful and highly trained citizens are currently working day and night upon what may be the most serious obstacle currently in the way of human achievement. Dr. Busch, not long ago, writing for the Atlantic Monthly, proposed a number of remedies.

In gist, however, his demands were for a weeding out of the vast welter of research, a reduction of libraries to microfilm size for easy access—in short, a sort of digest of the whole affair. However, as he himself points out, there is no ensuring that some tremendous discovery, unimportant by current levels of progress, might not be unalterably lost.

Ruefully he cites the burial of the all-important Mendelian laws of genetics and heredity for almost half a century. At the time Dr. Mendel made and wrote of his famous experiments, the rest of science was not advanced enough to accept them. Result—disappearance until an almost entirely fortuitous rediscovery, decades after their principles, had been set down.

What may seem trivial or irrelevant today may be the law of life tomorrow.

Furthermore, the student under this system is faced with the old belling-the-cat problem. Somebody has to do the weeding out and that somebody must be human and prone to error.

Background for Achievement

At St. John's in Annapolis, Dr. Stringfellow Barr, the president, conducted an interesting experiment in an effort to provide a sound general background for achievement in the arts and sciences. With the aid of other

(Continued on page 124)

JOE NABBED THE CROOKS AND THEN...

THE TRANS-GALACTIC TWINS

On the eve of making the first spatial trip aboard the Star Lady, Barry Williams finds himself inhabiting another man's body on a strange and unknown planet!

An Amazing Novel by GEORGE O. SMITH

CHAPTER I

Broken Power Line

BARRY WILLIAMS emerged from the YMCA entrance, his head still damp from his swim in the pool. Outside, the heat of the August afternoon was like the torrid waves of heat from a furnace. The stagnant air was soggy and the sun still glared upon the street into shimmering waves, making the sidewalk burn the soles of the feet right through the soles of the shoes.

One of the loungers on the YMCA steps looked up and nodded. "Hot, ain't it?" he said.

Williams nodded. "Hotter than," he answered grimly. "Almost better to be at work."

The other man agreed. "At least, at work you can get your mind off of it," he added finally.

Barry's cheer faded. "We've still got that problem."

"Not finished yet?"

"Nope," said Barry. "The *Star Lady* stands there, sort of champing at the bit to take off into interstellar space—but there's no one to put on the bridle."

"Better keep her there," said the other man. "No sense in taking off if you are almost certain to burn up in space."

"We'll lick it," said Barry. "Some day. I hope it is within my lifetime. I'm slated to go, you know."

"I don't know whether you're lucky or not," said the lounger on the steps. It's mostly a matter of opinion, I guess. Your meat, Barry, is my poison." At which the lounger's eye caught sight of a pleasant girl in a printed silk. She kept his attention for moments.

"Nice," he said as she passed out of sight.

Barry nodded.

The lounger looked up in astonishment. "Yet you'd leave gals such as she?" he said. "Barry, are you sure you want to go off into space for a couple of years?"

Barry lifted one eyebrow, looking back at the now empty corner as though the corner had been somehow altered by her passage near to it.

"Uh-huh," he said absently.

SLOWLY Barry left the YMCA and continued on down the street. The lounger on the steps turned to a half-dozing companion and said:

"Old Books begins to sound human."

His companion stirred. "They all fall sooner or later," he said laconically.

"I wonder what's the matter with him."

"Look, sport, there's men and there's men. Barry never really got interested in women. You are. Ergo, neither of you see eye to eye on the subject. I predict that eventually you'll both end up married, reasonably happy, and raise families."

"Morbid thought."

"Well, you have too many irons in the fire to settle to one, and Barry has too few to know. But don't think that because he doesn't go overboard at the rustle of a skirt that he might not have what it takes."

They both looked down the street at the retreating figure.

Barry was walking with a long stride, his mind working on the problem of keeping the atomic engines from consuming themselves once they reached the critical level of output. That danger point was only a twelve percent or so above the output required to drive the *Star Lady* into interstellar space at a velocity that made such travel practical.

A cluster of motor vehicles awaited the change of the light. A street car was poised at the intersection, and a traffic cop stood on the curb, watching the cross traffic.

Barry came up to the curb and stopped. He decided then to cross with existing traffic and made the change in his course. It put him outside of the lane of walkers, all alone on the point of the curb. He stepped into the street, and at that instant he caught the eye of a passing motorist.

The man's face was starting to register fear. His mouth was opening to shout. The car was starting to go out of control. The man's eyes were staring fixedly above Barry's head, with bulging, terrified eyes. This registered on Barry's mind in the camera-shutter instant of an eye swing.

Barry's' head continued on around and his glance fell on the face of a girl in the street car. Her hand was approaching her throat and her chest was raising in a tremulous intake of breath. Fear distorted her perfect lips and had whitened her face under the make-up.

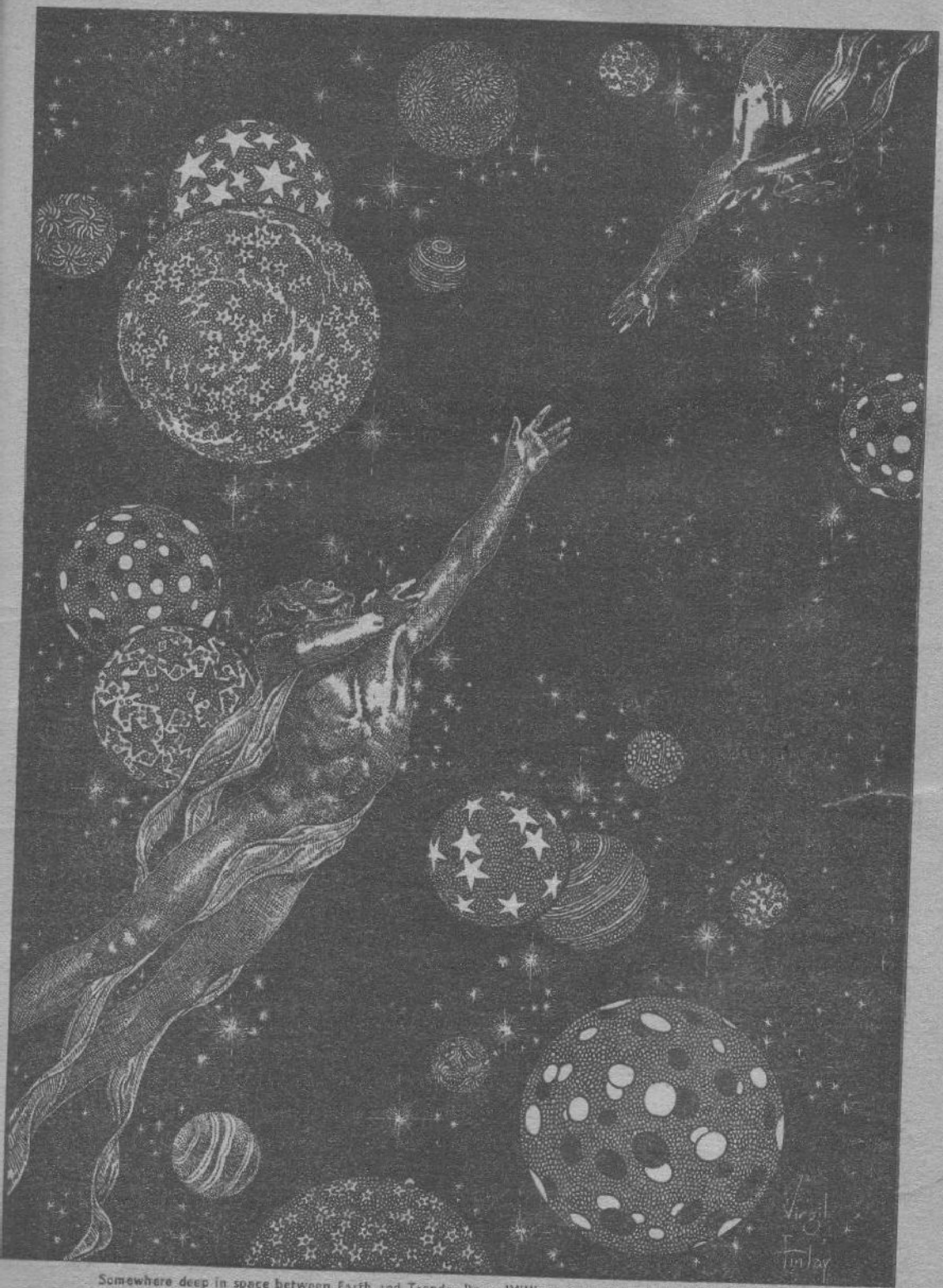
Not many steps away, the traffic policeman was turning toward Barry, the instinct to protect a citizen coming to the fore. His mouth was opening, too, and Barry noted swiftly that in another instant there would be a volley of shouts. As Barry's head continued to turn, he saw that all eyes were staring fixedly at some spot above his head.

He looked up and saw a dangling high-tension wire swinging down from a fresh break, the free end heading for the top of his still-damp head.

Terror came.

And Barry's muscles fought against the inertia of his mass to get him into motion. In maddening slow-motion, he started to move away, but it was not enough.

Down upon his cheek fell the ribbon of copper wire. It was slightly greenish-black from the corrosion of rain and smoke, he saw, excepting the broken end, which was a



Somewhere deep in space between Earth and Trenda, Barry Williams encountered Johntha (CHAP. V)

copper-frosted area of crystallization. It landed.

* * * * *

Awareness came, a basic, unsatisfying awareness of time and space only. Time, in eons, and space in unthinkable infinities. Universes passed and they were swirling galaxies, a riot of moving color because his time sense was racing madly.

Then awareness of self came, and a wonder of how and why.

HE SAT up, feeling the luxury of a soft bed and knew that he had been taken care of.

"He's coming around," said a voice. It was a throaty voice that stirred an inner pulse with a vital urge to awaken swiftly, to break the bonds of this illness, to recover his youth and his virilty. He did not recognize the urge, but he followed it.

"What happened?" he asked. Shaking his head he cleared his mind and to show his true grasp of the situation he added: "I mean after the car-line feeder landed?"

"Car-line feeder?" asked the throaty voice.

"Delirious," said a pleasant male voice.

"I am not in delirium," state Barry flatly.

"Hallucinations?" asked the throaty voice.

Barry turned and looked at the young woman who sat upon the side of the bed holding his hand.

"Do I sound delirious?" he demanded.

She smiled. It was a bright smile that illuminated the room according to Barry's idea. She was small and dark, with laughing eyes and a wide, good-natured mouth. She sat on the edge of the bed with easy familiarity, swinging one shapely leg that just missed the floor from the high hospital bed. On the other side stood the doctor, an elderly man with a face that showed the wisdom of long years of experience.

The girl answered him: "It is hard to tell." She laughed.

"Vella means that you often sound less lucid when completely in possession of your wits."

"You're Vella?" asked Barry. "Vella who?"

She looked at the doctor. The medical man blinked as though this defied his prognosis completely.

"You speak with lucidity," said the doctor. "You ask intelligent enough questions though about an event of which we know nothing—even of its meaning—and demand whether we think you in delirium. We are about to say we think you cured, and then you profess ignorance of Vella."

"Why should I know Vella?" demanded Barry. "I've never seen her before." He looked at her shyly and then with an inner boldness, he squeezed the hand and said: "An egregious error that I shall rectify."

"Are you fooling us?" asked Vella, pleadingly. She returned the squeeze, which made Barry's pulse skip a beat. "Johntha, are you having fun at our expense? Please, this is no time to play. You've been through enough already."

"What did you call me?" he asked.

"Wha—" she started to echo.

"Johntha," said the doctor.

"Are you sure you have the right party?" asked Barry. "I'm not this Johntha. I'm—I'm—"

Barry stopped aghast. He knew his name. He knew it well. It was on the tip of his tongue, but it stalled.

Because the name was meaningless!

CHAPTER II

New Environment

REALIZATION of a great and drastic change dawned suddenly upon Barry Williams. The discovery numbed him, frightened him. It was some time before he could force his stiff lips to speak.

"Where am I?" he demanded.

"Johntha— If you are not Johntha, then who are you?"

"I know, but the words have no proper syllables," said Barry hopelessly. "My tongue will not form them. It is as though the words were never uttered before."

"Partial amnesia," said the doctor. "With a willingness to face it. That helps, Vella. Perhaps we can complete the cure right now."

"Cure of what?"

"You were a victim of neurophasia. Complete loss of capability. You've been here for a long, long time, Johntha. So long I dare not mention any real terms. Vella came daily, hoping to help. Miraculously, you seem partially cured."

Vella put her free hand on Barry's shoulder. "Johntha, help us? We can cure you.

But not without your help."

"Vella, maybe I am suffering from a long-term mental illness. I—would hate to try and determine the truth of life, whether I am awake or dreaming at any instant. I don't recall you, ever. I'm sorry that I do not, if I should." He smiled. "I shall try to correct that, and make up for the error with all my heart. I do not recall you, Doctor."

The doctor smiled. "I am Kendon."

"Doctor Kendon?"

The other man nodded strangely.

"Now, to complete the record," said Barry, "who am I, where am I, and what happened?"

"You are Johntha. You've been working on a method of sub-etheric communications. You are, of course, on your home planet. While working, you became stricken and they brought you here where you've received the best of care because interplanetary communications are still suffering under the limitations of the speed of light, and you probably know more about the subject than any other physicist on Trenda—or in the whole system, for that matter."

"Trenda?" echoed Barry hollowly. "Where's—where's—" But the word "Earth," like the words "Barry Williams" refused to be formed by his lips.

"Johntha, what happened to you?"

"I was struck on the forehead by a falling high-tension wire," said Barry. "One of the car line feeders. It came down and hit me. That's all I remember before I awoke here. Previously, I'd been working on a means of keeping the atomic engines from eating themselves up. The *Star Lady* is about ready, save for one factor, you know."

"Interesting," murmured the doctor. "You, of course, recall details of this interstellar ship?"

"Certainly," said Barry, and went on to describe it roughly.

"A complete hallucination, with a finiteness of detail and almost perfect rationalization. You'd almost think the thing would work."

"It will and does," stated Barry. "We made test-flights in it."

The doctor shook his head.

"Look, Dr. Kendon, the newspapers have been following this thing for years. They've even mentioned my name—" and again that blankness came, that refusal to form the proper syllables. "You read papers?"

"Yes, but nothing of this nature has ever been mentioned. By the same token, Johntha, you claim you do not recall me?"

"Not at all."

"Nothing of the front-page articles on my classic spinal operation on Anthree?"

"Who is Anthree?"

"Complete amnesia," said the doctor. "Doesn't remember Anthree either."

BARRY pressed his forehead. "All these names are strange. They are as unaccustomed to my mind as my own name is unaccustomed to my lips. But wait—I might form the syllables. I'm—Baris—Varry is about as close as I can come to the first name. The second name is Wiayoms, Welloms, Walyahms. Make it Varri Wallyamze, I think."

"A strange name," said the doctor. "Completely alien."

"You like it?" asked Barry of the girl.

"It is interesting," she said. "So long, and complex."

"Simple, I've called it."

"Not as simple as Vella," she said.

"Not at all," he said. "But though the name comes easy to my lips, it is alien to my mind."

Then he blushed and looked up into her eyes. He said uncertainly, "How am I related to you?"

"Why, I'm your sister!"

"Oh," said Barry, and he felt crestfallen. "But I have no sister."

"Haven't you?" she asked.

"Not that I've ever known."

The doctor grunted unhappily. "I think this has been enough," he said with finality. "We'll return tomorrow morning. Vella, you come along. I want to talk with you."

Vella nodded, and then leaned forward and gave Barry a sisterly kiss that was quite unsatisfying to the young man.

"We'll be back," she promised.

Barry looked around the room in a puzzled fashion. "I'll be here," he said with humor. "And if I'm not, I'll be back. You see, Vella, I have no sister!"

Vella laughed, and then became nervous at the intense look on Barry's face. She was a little glad to leave. After they went, Barry thought for a long time. There was obviously something completely wrong here and he was not yet certain what it was. He began to doubt himself.

After all, he had to accept the medical statement that he had been ill. Perhaps all

that work on the *Star Lady* had been a dream of amnesia. Maybe his name really was Johntha, and the all of his life for the past twenty-seven years was a false belief, painstakingly built up over a period of years, complete with false memory supplied by a mind that was hiding from the truth.

That was entirely possible, for he had heard of such cases. Amnesia and such mental ills were actually what happened when the mind went into hiding from an unpleasant future.

Barry wondered why. Even to—to the building of a completely new personality. He'd never felt the twinge of heart over a woman before, but he was feeling slightly warm inside from the thought of Vella.

But be that as it might be, there was still something wrong. More than merely his "amnesia." That might be mind-hiding, but there was much more that he did not grasp. If his previous life were a myth, then Earth was non-existent. So was the *Star Lady* and the YMCA and the hope of interstellar travel. And instead of trying to reach the stars, he had been trying to communicate between the several inhabited planets by subradio. Did he know anything about sub-etheric wave propagation?

He found the answer slowly, haltingly. It was like the slow memory that came from re-reading a book that had once been read and almost completely forgotten. He had to reach every point, and yet was prepared for the next point before he came to it, yet he did not recall the entire problem as a whole.

Yes, he knew about sub-etheric wave propagation. The force fields and the barrier potentials and the wave mechanics all came to him one after the other.

HE SAT up in bed with a quick cry, only to lie down again unhappily. For the force fields and the barrier potentials would be the proper answer to the problem of keeping the atomic engines from burning themselves out! But—the *Star Lady* was only a dream.

Or, his mind asked shrewdly, Was this the myth?

Which was which?

His brain whirled. If this were myth, Vella was not real, and he felt a long-term attraction for the girl. He did not want to lose her. If Earth and all were but myth, then he himself was Johntha and Vella's brother and the long-term attraction merely a brother-sister relationship and could be nothing more. He recognized both lives, now. And if he never returned to that Other Life on Earth, he'd ponder the weight of his own mind.

The problem came more clearly. How could he be sure?

Night came, bringing a double moon, which he seemed to recognize. And when the stars emerged, he called them off into constellations which were nothing like the constellations he knew from his—well, was it really a myth-life?

Then he grinned. Barry Williams or Johntha, and whichever life he entered from here on in, he hoped he'd remember the details of the *Star Lady* in one life or the sub-etheric wave mechanics in the other one. They'd be mutually interesting. And supposing both lives were myth, somewhere the stuff should come in handy.

He drifted off to sleep and he dreamed of a vacant place, filled with whirling vortices of intangible forces that did nothing but whirl and whirl and whirl.

CHAPTER III

Second Interchange

VOICES awakened him. Johntha opened his eyes slightly, and peered from beneath half-lowered lids. A white clad doctor and another man were standing beside the bed.

"Electricity does perform freaks," admitted the doctor, looking down at Barry Williams' quiet body. "Why he isn't dead I'll never know."

"He's coming out of it, Dr. Edwards?" asked the other man.

"Yes. He'll be all right in a few hours. Who did you say you were?"

"Jim Evans. Gosh, I was sitting on the YMCA steps talking to him just a minute before."

"I think perhaps your swift action may have helped. You didn't waste any time."

Jim Evans smiled in an abashed manner. "I was once a Boy Scout," he suggested helpfully.

"A first-class one," said the doctor succinctly. "No one but a good man would have

known what to do."

"Look, he's stirring."

The doctor filled a hypodermic and drilled Barry's arm with the needle. "That'll help," he said, stepping back to watch the awakening.

"Awake?" muttered the man on the bed. "Am I awake?"

"Certainly," smiled Doctor Edwards. "And you can thank your friend Evans for it, too."

"Evans? Do I know an Evans?"

"Not too well," admitted Jim. "But well enough to talk to."

"*Um*. What did he do? I've always been told that neurophasia was incurable."

"Not familiar with that one," said the puzzled doctor, discounting it as a warped pronounciation due to medical ignorance on the part of the untrained patient. "You did have a bit of luck, though. You got tapped on the head with a five-hundred-and-fifty-volt car-line trolley feeder."

"A what?"

"A car-line feeder. They run heavy cables alongside of most trolley lines to supply the trolley wire itself, you know. One of them dropped on your head. Should have electrocuted you. Instead, it merely stunned you."

"I'm not certain of the meaning of 'car-line,' " said the invalid. "You say it stunned me? Perhaps it cured me."

"Of what?"

"Some time ago I fell ill with neurophasia and fought against it right to the point where I went under. Instead of dying, I now feel much better—almost completely cured, I'd say."

Mind telling me what you were doing all this time?" asked the doctor.

"Why, I've been working on a means of interplanetary communication on the sub-etheric level."

The doctor looked at Jim Evans. Jim shrugged. "I've heard of such. But mostly its strictly double-talk, when applied to anything practical. There have been a few highly controversial papers presented before the Terran Physical Society on the theory and so-forth of such. It's like mental telepathy right now. No one has been able to prove it exists to the satisfaction of every one, but no one feels firm enough to stand up and say it does not exist because 'No, no,' has all too often been followed immediately by someone then demonstrating the idea in practise. Me, I'm an electronics engineer and I'd like to

Johntha was still struggling as Dr. Edwards thrust a hypodermic into his wrist (CHAP. VII)

know more about such."

"I can imagine!" said the doctor. "Barry, can you give any details on this sub-etheric stuff?"

"I think so," said Johntha, and gave a rather sketchy picture of the complete sub-etheric wave mechanics.

DOCTOR EDWARDS looked at Jim Evans helplessly. "I'm a physician, not an engineer. It does sound plausible."

"It is either strangely plausible or someone has gone to a lot of trouble to build up a sophistic science. But it sound too pat for a fake."

"I don't know," said the doctor. "I've known men who were mentally avoiding something that could build an entire false memory to erase a terrifying period from their minds."

Johntha looked up at the doctor. "You called me—?"

"Barry Williams."

"I am not. I am—ah—"

"Who?" prompted Doctor Edwards.

"Strange—strange. It as as though the words and syllables of my name were alien. As though, for instance, someone were asking me to pronounce a name in some tongue that included a—raspberry—sound as a common syllable. I cannot pronounce my name, though the name of this Barry Williams comes to my mind easily and I can say it clearly. Are you certain that you have the right man?"

Jim Evans smiled. "They can't tag me with losing the body," he said with a grin. "When that wire started to fall, I leaped off of the Y steps and headed for you. I gave you artificial respiration until they called the ambulance and then I rode with the boys in back until we landed here, and I've had you in my sight ever since. Period."

"You claim that you were speaking to me and knew me before the accident?"

"Definitely."

"And what was the conversation?"

"The heat, a common topic. Then we discussed your work, which was not on communications but on the atomic engines in the *Star Lady*. Then we discussed women—a usual ending among men of intelligence."

The doctor grunted something about it not being restricted to any age, intellect or environment.

"I do not remember," said Johntha with a smile. "What was said about women?"

"Nothing much. You are usually too busy to notice them."

"There's a conflicting note there, somewhere," said Johntha. "I don't believe I've been like that always."

"We've been on the *Star Lady* project for about four years and you've been no different."

"*Star Lady?*"

"The interplanetary ship."

"Never heard of it. Really, now. The possibilities of interplanetary travel are in about the same state of the art as you've recently claimed interplanetary communications to be. I know your statements are not true."

"And we suspect yours," said Jim Evans. "Though I'm going to look into them myself."

"I'll show you the way."

"Thanks," said Jim drily. "You've never professed anything but puzzlement over the subject up to now. Did that electrical whap on the bean screw up a neurone or two?"

"I'm wondering. I'm wondering who am I. Or, if what Doctor Edwards says is true, what am I hiding from."

"I wouldn't worry," said the doctor calmly. "Electrical current does things to the mind, we know. It will clear away. Give it time—and we're going to give you time. I'll have the nurse give you a shot that'll let you rest. We'll be back in the morning. Perhaps you'll be feeling less confused in the morning and we can figure out what's going on."

Johntha nodded.

ONCE outside, Doctor Edwards said to Jim Evans: "Hallucination. The electrical shock has crossed up his memory momentarily and has given him a completely false replacement for it."

"That's difficult, isn't it?" wondered Jim Evans. "A complete memory?"

"Not at all. No memory is either complete or chronological. When the mind finds itself required to produce a memory in order to prove itself sane, it will produce very nicely. Electrical shock has fouled up Barry's memory badly. Yet his mind insists that the good, logical memory of the man's experiences be reproduced or shown as evidence of his sanity. The fact that real memory was either destroyed or—snowed under, say—for the moment makes a logical reproduction impossible. Ergo, the insistence on this new life

and new theories. Such can be done with lightning swiftness. Comes tomorrow and the initial glimmerings of real memory will come up through the mental threshold and he will then mend swiftly."

Johntha heard and agreed, in part, that what the doctor said might well be true. This was strangely terrifying, to have your own memories, so vivid, so clear, refuted by people of certain authority.

Were he not speaking their language perfectly, he might suspect that he had become another person, on some alien planet, rotating about an unknown sun in a strange galaxy.

Or had this happened?

Johntha stopped thinking; for this new line of reasoning might be a line of unreasoning used to explain why his memory and his life obviously did not jibe.

He hoped the doctor did not know that he had overheard. Yet, Johntha wondered whether the doctor had spoken loudly, knowing the explanation coming from the medical man would tend to explain his mental trauma better than his own unaided mind. If he could recall some of the things he was supposed to have been working on, he would be convinced.

Atomic engines, burning themselves up because the critical power level was too close to the operating energy of the interstellar drive. Yes, he recalled some of it vaguely, falteringly, but with the solidity of foundation, or building in which each new brick is a matter of conquest and uncertainty until it is installed, but then to become firm and logical. Bit by bit and detail by detail, he built up his atomic theory until he recalled it all.

His memory of this work confirmed his suspicions. Whatever he might have believed, it must be like the too vivid dream that starts upon the clang of a chime and builds up backwards, actually furnishing a memory of events leading up to the ringing of the chime and explaining it with clear logic based upon an error.

He—must be—Barry Williams.

The thought of the alien mind-transfer returned briefly. Supposing that he had been that. He spoke with the men of this planet. Logically, he was using a body and a mind really trained in thought and speech to their ideas and customs. His inability to form, properly, the name of his supposed entity might be due to the alien quality of the sound.

More self-justification, he thought.

A momentary question passed his mind. Bodies! Then he laughed. If he were alien mind in normal body, inspection of the latter would show nothing. For, which was mind and which was memory and which was thought? Knowledge, memory, thought, ideas, who really knew? Was knowledge and mental sharpness a matter of the extrapolation of experience? How then could it possibly be that a mind could enter another—brain—and recall, if the mind and the brain were one?

Who could know?

Johntha inspected the symbol for which he could find no syllables, and decided that the doctor was right. He must put aside any thoughts of—of—that planet. They must be false.

He slept, finally. It was the dreamless sleep of a man who had made up his mind that the moment was right, and that memory was faulty, but could be corrected in the morning. Nothing invaded his mental privacy, for Johntha, accepting the name Barry Williams, did not dream.

His final thought was pleasant, for the idea of interstellar travel was infinitely more interesting than mere high-speed interplanetary communications. He thought that he could have both, for from the quick scanning of the problem of Barry Williams, a solution of his difficulties had occurred to him.

If the barrier potentials and the force fields he dreamed of were of any logic, he could solve the problem of the atomic engine.

CHAPTER IV

Meeting In Space

ALTHOUGH their separation in distance might have been anything from a few mere light years to a hundred megaparsecs and there was no way of determining the distance, Barry Williams and Johntha slept simultaneously.

How fast is the propagation of thought? One can think about, really contemplate, Sirius and his dark companion without a wait. One may visualize in his mind the shape and size and distance of the Spiral Nebula in Andromeda, far outside of our galaxy. Thought, therefore, must propagate

at an unthinkable velocity. Projected minds must move at this speed, for the mind is but a focal spot for thought.

The men slept dreamlessly for many hours. They rested both their minds and their bodies, and when both were rested, they encountered, not a dream, but mental actuality.

Out of the whirling vortices of nothing that filled Barry's mind with a faint unrest, there came a wisp of something he knew.

Call it coincidence, but in all the universe of minds, these two were attuned closely enough to meet once the unknown stimuli had been applied. Somewhere in the deep of space between Earth and Trenda, the minds encountered one another and recognition came.

"You are Barry Williams."

"I am. And you are Johntha."

This was not speech. This was more than speech. This was dual thinking with each mind in turn drawing the other along in perfect track as it formed its thoughts, and then following the other as the answering thought-pattern demanded understanding.

"What happened?"

"I was struck by high voltage."

"I was a victim of neurophasia."

"At the same time."

"We—have changed minds."

"It is very vague. Then there *is* an Earth, and my memory of a long and happy life there is not false."

"It is no more false than my own memory of Trenda. Tell me when you awoke—was Vella pleased?"

"She was. Though she and her doctor friend were dismayed at my inability to remember them."

"You find my sister—attractive?"

"I do. You are a lucky man."

"To have an attractive sister? Perhaps so."

"I see your reasoning."

"Barry Williams, we may return to our own bodies at this instant."

"I know, and I am puzzled."

"I am not. I do not care. If any, I would prefer to remain upon Earth. I can study interstellar traveling and I find that it offers more interest than communications. Your mind is filled with the knowledge of atomics, and though I find trouble in recalling the factors of sub-etheric wave propagation, the subject is not a complete blank. It will come to me."

"I find that I know much more about that than I know about the atomic engines." This was in mental complaint. "Yet unless I understand the sub-etheric, the atomic engines will never be safe to use at interstellar speeds."

"Then what do you plan?"

"I would prefer to learn."

"As I would."

"Yet unless we return to our own bodies, we may never have an opportunity like this again."

"I know. Yet I have no ties to bind me to Earth."

"Nor have I a great desire to return to Trenda. My only great tie there is my affection for Vella. That seems to be in good hands."

"That I swear—"

"You need no protestation. I see your mind."

A GREAT peace welled up in Barry Williams' soul. He said: "Yet it is a problem that I must solve. If I remain on Trenda, I may learn the answer to the atomic engines and sub-etherics. We, I should have said. I—would court Vella. Where is Trenda with respect to Earth?"

"Who can possibly tell. There are a million million stars."

"If I return to Earth, then, what are my chances of retaining the rudiments of the sub-etheric level?"

"Remote. Using your mind, I know atomics. I recall vague inklings of sub-etherics because I was trained in that field. The thought-pattern is like a pre-formed mold which tends to warp into that pattern though now conforming to the new shape. Similarly, your atomic-trained mind is superimposed upon my sub-etheric experience. If we return, the minds will be immediately re-molded into their intrinsic patterns and nothing will remain."

"Then to achieve interstellar flight I must remain on Trenda, where I may work as though I were really Johntha. I may accept only the sisterly affection of Vella."

"You will not achieve interstellar flight. I, as Barry Williams on Earth, will do that. You, as Johntha on Trenda will achieve interplanetary communications of conversational rapidity."

"And if I return to Earth, interstellar flight may never be achieved?"

"Correct."

"You know what I would prefer to do?"

"Of course. You would like to return to your own body on Terra; you would like to solve interstellar flight; you would like to find Trenda; and finally you would prefer to meet my sister as a man who would be permitted to strive for her affection."

"Precisely."

"It is unfortunately impossible."

"I know. Regardless of any act I may perform, Vella is beyond my reach. If I remain on Trenda, I am her brother. If I return to Earth, we may never solve the atomic problem in my lifetime, and most certainly will never find Trenda when and if we do. Since my own first desire is impossible, it must be discarded. My second desire is to see men achieve interstellar flight. Only by sending you back to Earth as me can that be done. It is important. Therefore, Johntha, return to Earth and take men to the stars!"

Johntha, the Trendan, radiated admiration for him who would put aside his personal ambition to see and do and go for the sake of having it done perfectly by another. With no more than a mental "Luck, Barry Williams, and may we meet again," the Trendan's mind withdrew and was gone. He had returned to Barry Williams, atomic specialist.

With a wistful thought of what might have been, Barry Williams returned to Trenda to become Johntha, an expert in communications which he was not particularly interested in, and a brother to Vella whom he was definitely interested in, but which interest he must destroy.

His withdrawal into Johntha's own mind was simultaneous with his awakening. There was breakfast and beside the bed-table sat Vella.

"Hello," she said brightly.

"Good morning, Vella."

"Feeling better?"

He nodded. "I want to get to work," he said.

"So soon?"

"It's been long."

"About a year or more," she admitted.

HIS Terran memory compared the two and made the observation that the Trendan year was slightly longer though the daily period was slightly shorter and therefore there were considerably more days in the Trendan year in the Terran year.

"Too long."

"Not so very," she said brightly. "Your assistants are still studying your developments. None has matched you. We've just lost a year of development."

"I know," he said. "It is less important that someone surpass me in that year than it is to know that a year of zero advancement has passed. I would have preferred to know that great progress has been made." He smiled. "On the other hand, it is gratifying to my ego to know that, despite a year's complete illness and inability, I am still top man."

"May I quote that?"

"Nope," he returned cheerfully. "That is something for me and thee alone."

"A state secret?"

"Very."

"I'll tell no one," she said with a laugh.

Then Vella sobered again and she looked at him wonderingly. "Doctor Kendon tried to recite your atomic theories to a couple of specialists last evening. They were quite puzzled, for your ideas follow a different track than the usual. Yet they admit that there might be something in it."

"Would you try to get me a couple of books on atomic engines?" he asked.

"Certainly," she answered quickly. "But Johntha, is there really something to the superspeed drive?"

"There is, but a few of the factors elude me at present. I must brush up before my ideas will take form."

"Funny," she smiled. "You've never showed an interest in atomics before."

"I'm a different man," he said.

"Oh, not so different," she told him. "You're still my brother."

That was the trouble. He finished his breakfast heartily, to the gratification of both Vella and the nurse who finally came to remove the tray. He was told that until this morning he had been spoon-fed.

Doctor Kendon came after the breakfast tray was gone and went over Johntha's body with a critical eye.

"Amazing," he said, watching the knee-reflex. "Completely dead yesterday, and today it is as alive as ever. I pronounce you cured," he said. "Though I'll never know how it happened."

"May I leave and get to work?"

The doctor nodded slowly. "You may leave any time," he said. "I'd suggest that you spend a day or so resting and regaining your strength. You might go back to work in a few days, though take it easy at first."

Johntha looked at Vella. "Outside," he ordered with a grin. "I'll see you after I'm properly dressed."

She nodded and left.

CHAPTER V

Scientific Savants

MECHANICALLY Barry's mind let Johntha's trained body insert itself into the unfamiliar clothing of the Trendan. As with the paradox of the speech, Barry doubted at the present time whether he could speak any Earthly speech at all without a hard struggle. The words spilled from his Trendan mouth in the proper order to convey the though generated in his Terran mind and transferred to the Trendan brain.

He was, he admitted, more of Trenda than of Earth. So Johntha's body was the outlet of Barry's mind, and though the mind thought in Earth language, the physical output was instantly transposed into the Trendan analogue.

There was an instant of foolish speculation on the fact that Johntha's clothing fit so well, but it was merely the product of his own mind, forgetting for the instant that this was not a case of being an impostor, a substitution. This was the masquerade perfect. The clothing and the life and the experiences of Johntha were his and valid.

Only the sentience, the personality, the ego, had changed and had taken with it the necessary bits of its own experience to maintain its own individuality. Perhaps, he thought, if my mind retained no memory of past experience on Terra, I would truly be Johntha.

The old question: "What is that which is I?" came up to confront him, and he smiled, for the ancient philosophers had propounded it and no answer had come forth over thousands of years of deep pondering. He gave up, for if men trained in studying the ego and the mind could not answer, it was far past him.

He finished dressing and the doctor and he met Vella in the hallway.

"I've no other patients to take my time," explained the doctor. "The problem of Johntha's false memory is of sufficient interest to have all my other cases transferred. You are now my only study."

Barry nodded. This was an interesting custom on Trenda that might well be applied on Earth, or "Terra," as it was sometimes called. Doctor Kendon would lose no income by it, and the entire medical history of the system would benefit.

"I prefer to study you under familiar surroundings," said the doctor. "We're going to your home. I am, unfortunately, not an expert on atomic theory. I could not evaluate your statements of last evening. What little I recalled, I used in consulting with Physicist Tharmane, who seemed puzzled but very interested."

"I hope it is not too puzzling," offered Barry.

"So does he," said the doctor, and then he dropped the subject.

Once on the street, Barry's mind let Johntha's body lead him unerringly to the little vehicle. He did not try to drive, which seemed quite all right because Vella slipped beneath the wheel beside him. The doctor climbd into the back seat and Vella started off into traffic.

Deftly she wound the little car through the maze of streets and other cars, often stopping for traffic signals and making difficult turns through conflicting streams of otherwise-bound vehicles. The tall spires gave way shortly to open country, and the roads that led from the commercial cluster of tall buildings diverged across a rolling prairie.

Close to the building cluster, the other roads leading from the other terminating streets could be seen, but they fanned out radially and soon were lost behind the hills and the distance. Tiny side-roads led from one side or the other at considerable distance apart. These wound in among the small rolling hills that occasionally showed a small house-top.

City life was not known; the cities were only collections of commercial buildings. Residences were entirely suburban.

Then, eventually, Vella swerved off to the left and wound along the small rustic road past several dwellings to their own. It was set in a grove of trees, a complete little haven of itself.

IT WAS all so very familiar, and Johntha's own key, selected unerringly from the keyring, opened the door.

"Hungry?" asked Vella.

Down upon Barry's cheek fell the copper wire, touching him ever so lightly (CHAP. I)

He nodded.

Doctor Kendon said: "By all means, let's eat. I've invited a group which should arrive at any moment."

"What am I supposed to do?" asked Johntha.

"Nothing but be yourself, and honestly. You see, Johntha, there is something rather strange—in that it is perfectly clear—in your ability to produce a concrete technical science during a stage of delirium. What, exactly, is thought? Who can answer? Perhaps your case may solve a minute bit of that never-ending question."

"I'll try," said the man. Though he wondered. There was not a doubt in his own mind that if he tried to explain the full occurrence, they would try to put him away. A complete exchange in personality but with retention of memory. A baffling improbability but none the less evident. To try to tell them that he was Barry Williams, inhabiting the mind of their friend, Johntha, might be hard to swallow.

Statements to that effect following a known mental illness would be strictly discounted as hallucination. If he hadn't met the real Johntha in a mental rapport during the night and had his wonder confirmed, he would be largely convinced that Terra was really the dream of an invalid mind.

Yet he hated to put them on the wrong track. Deliberately to mislead them went against his training in scientific accuracy.

Then his reasoning reached logic. Since they'd not believe him if he told the truth; instead, they'd leap to the other conclusion anyway, he would tell them or lead them to believe what they wanted to believe. In that way he would do little harm, and would eventually arise out of suspicion. Once they thought him mentally capable, he might be able to start an interstellar project.

"Johntha spends much of his time in reverie," said Vella.

"I don't doubt it," the doctor said with a smile. "It is natural. He has been through an illness and has come out of it slightly in mental confusion. Give him time."

"I was merely trying to recall, to marshal

facts in my mind."

"Excellent," said the doctor. "I hope the logic—"

The chime of the doorbell interrupted Barry Williams, and Doctor Kendon went to the door himself to admit three men. He brought them over to Barry.

"Gentlemen, this is Electronician Johntha. Johntha, these men are Physicist Tharmane, Psychologist Crenda, and Atomician Homarr. We invided Mathematician Maradun too, but where is he?"

"He said he would be along later," said Homarr. "He can catch up on any notes."

"He can," agreed Doctor Kendon. "However I'd have preferred to have him here at the onset."

Physicist Tharmane laughed cheerfully. "As a mathematician, he is uninterested in anything that cannot be set to equations. If Johntha remembers anything of mathematical nature, we can set them down for Maradun, who will be just as happy at the cold paper as with the warm man."

Crenda, the psychologist, took objection. "You place too heavy a hand on Maradun's personality," he said. "Just because his mind is mathematically trained is no reason to charge him with preferring figures to people."

This brought a laugh because both men had been joking with one another for years. Then Vella returned from the kitchen with a huge tray of light refreshments, and the doctor introduced her all around.

"Vella," he said, finally, "I've not asked you yet, but I assume that you will take notes?"

"Of course," she replied sincerely. "Anything to help."

KENDON gave her a reassuring glance. He said, "For the record, we've watched Johntha carefully since he awakened. At the initial stage, he seemed baffled by names and places. It was as though he might have been an impostor, placed there for some unknown reason. However, no impostor could have conducted himself with such finality, nor would an impostor own Johntha's personal set of physical identities. He is positively identified as Johntha."

"Being of naturally suspicious nature," queried Crenda, "has anyone considered the possibility of the records being tampered with?"

"We have. But minor items such as fingerprints in this house, in his own laboratory on all his tools, and found in his school-day textbooks all agree. There is not the least doubt."

"I agree. Go on."

"We let Johntha lead us to the car, which he picked out unhesitatingly. He dressed himself and selected the proper clothing for Johntha's personality. But this is wasting valuable time. In the final record, Vella and I will recount the many ways in which we sought to detect fraud. Besides, there is no motive for fraud."

The psychologist nodded. "I'll take exception, but I won't voice it until I've seen more of this case."

"Our reasons for questioning the man's identity were, as I've said, due to a slight unfamiliarity with his surroundings, names, places, and other items. Other things of equal question were his insistence on his ability to devise atomic engines. He mentioned a number of alien things with easy familiarity.

"There was, for one instance, a space craft called the *Star Lady*. This was supposed to be a superspeed ship capable of interstellar flight. According to Johntha, at that time, he had been a man called "Varri Weyaimz," on a strange planet that was called "Yearth."

"His job was developing or improving the atomic engines, which he said were unable to produce sufficient power to reach interstellar speeds without approaching the overload factor. He then attempted to prove his false identity and produced considerable logic of a strange basis."

"I'd like to add that from your sketchy description, I consulted Maradun," suggested Tharmane. "He tried a couple of the equations and shook his head. They didn't add up, or were based on what he called a false premise."

Barry Williams spoke up: "All premises are false until proven."

"Right," Homarr said, chuckling. "And though we've been tinkering with the atom for about a hundred years now, every now and then a new particle comes roaring out of the mess to foul up the mathematicians. Then they have to go all the way back to the beginning and re-build."

Barry looked at Homarr. "You're an atomician," he said. "What do you think of using the total annihilation energy of the

alpha particle as a means of power?"

Homarr's eyes glowed. "The sun makes alpha out of hydrogen. Total annihilation of alpha—what a wonderful dream!"

"Dream?"

"Certainly. It takes a lot of energy to make alpha out of hydrogen. Tremendous input is required to make that reaction go. To get it out—how could you make the reaction self-sustaining?"

"I—ah—"

"And if you had generators powerful enough to blast alpha into complete energy, what kind of stuff would you make the generator out of?"

"Force fields."

"Oh, we've used them—the sub-etheric level—to restrain atomic reactions. But what kind of system could be devised? I'm puzzled."

BARRY WILLIAMS sat there cursing his imperfect memory. Back on Terra the problem had been solved without the use of the sub-etheric levels, though it would require much practical improvement. As things stood, the *Star Lady's* engines did work, but at a dangerously low factor of safety.

"Furthermore," added Homarr, "how would you localize the reaction? Alpha is a high-energy neucleus, and it is a standard rule that when there are two possibilities of reaction, the one with the lowest energy level will go almost exclusively. What would you contain the reaction in?"

That multiplied the problem. There was something about extended magnetic fields in a complex pattern that generated sufficient starting-energy without back-fire. Barry mentioned this vaguely.

"Impractical. How do you develop fields of such intensity? Not in any prime mover I know of."

The door bell rang again, and Vella entered with the mathematician, and he was introduced all around.

Physicist Tharmane nodded and then said: "Homarr has been in slight argument with Johntha. Perhaps you may be able to shed some light on the validity of Johntha's premise."

Mathematician Maradun took several sheets of paper out of Vella's notebook, casually found a large pencil in his pocket and then sat with both the pencil and himself poised expectantly.

CHAPTER VI

Alien Handicaps

IN AN EFFORT to aid his concentration, Barry Williams scowled, and pressed both hands against his forehead.

"The problem is more psychological," said Doctor Kendon. "Crenda, how possible is it?"

"It is quite possible," answered the psychologist. "The subconscious mind never sleeps. The subconscious mind is but a master file-index; a library of facts and experience. Anything handed to the subconscious mind by the conscious mind for tabulation will be inspected and evaluated in terms of the subconscious mind's experience. The answer will then be returned to the conscious mind for use.

"Insanity," he continued, "is when the conscious mind discovers conflicting answers, or dislikes the answers vitally, or is confronted with answers which, if followed, are mutually exclusive."

"Meaning?" asked Tharmane.

The psychologist smiled. "Well, it's like this to give a crude example. A man is standing on the side of a mountain. An avalanche is approaching. The man's conscious mind takes in all the details. The subconscious mind looks over the data and says: If you remain, you will die. If you jump, you will die. There is but one escape and that is to fly like a bird, which is impossible."

"So?"

"Who can predict?" said the psychologist glumly, and spreading his hands in a gesture of helplessness. "All I hoped to explain was that the subconscious mind will hand back data of sheer fact. If it happens to be terrifying data, it is still handed forth. When the conscious mind is confronted time and time again with terrifying data, it begins to pass erratic data to the subconscious. The subconscious mind has no means of accepting data directly, so it takes the false data and uses that to evaluate future information. Store a lot of falsified data, and you have insanity."

"But in Johntha's case?" urged Tharmane.

"We got a bit off the track," admitted the psychologist with a smile. "It is quite pos-

sible for the subconscious mind to come up with an answer during sleep. How many times have we been baffled by a problem; gone to bed in desperation, and awakened to resume the problem with success? That comes because the subconscious mind has been working on the problem all the time. Sometimes the subconscious mind will come up with the right answer and produce it in a very clear dream.

"If the conscious mind doesn't understand it, we get distortion. An erratic mechanism —the problem—may be depicted in a dream as a fractured toy, a carousel running backwards, or a weapon that fires improperly.

"In the case of Johntha, let us examine the motives of the mind. Johntha was ill with a nervous disorder that threatened the mind. The mind as a means of remaining sane did claim that he was someone else. He became this alien on an alien planet which possibly does not have the micro-organisms that cause neurophasia. He built up a complete life, a new personality, a new field of endeavor.

"The new personality must be logical, for Johntha's mind is technically trained. It is quite possible that the uninhibited subconscious mind will accept a problem called impossible by a mind trained to accept the impossibility as such. It may be impossible because of natural causes in which case the entire thought-pattern is false. If it is impossible because of lack of data, then the mind may well leap to the right conclusion and produce something logical."

The mathematician grunted. "In which case the waking mind will reject it because it is not understood."

"Right. To the conscious mind the thing is still impossible."

"I'll withdraw my objections to Johntha's super-powered engines," said Atomician Homarr, "if Maradun can juggle Johntha's cockeyed equation into something real."

"We'll have some unknown terms," warned the mathematician.

"Dig it out and we'll find out what the terms mean," Homarr suggested.

BARRY WILLIAMS struggled to remember his mathematics. Adding to the gradual fade of the details was the difficulty of transposition of the Earthly terms into Trendan mathematics. Their manipulation of equations was different. Their method differed. And though Pi was still the same number, the symbol was different and the means of stating the numerical value of Pi was different.

He took a sheet from Maradun and tried to write an equation. He thought of it in Earthly terms, which was difficult enough in Johntha's mind, but when he tried to write it down with Johntha's body, he ended up in the same block as he'd found when trying to say *Earth* or *Terra* the first time. But a Trendanization of the term *Earth* into the alien form: "Yearth" would not serve for a complex equation upon which depended the development of an atomic reaction.

Especially one that was unknown as to method and procedure. He tried, and he tried, and there were a few distorted scrawls on the paper.

Maradun shook his head. "Meaningless," he said.

Barry tried to explain in words, but Maradun stopped him after several minutes. "We can all theorize," he said, and the atomician agreed that sheer speculation on that problem had been done for years, only much clearer.

"But supposing that I've produced a possibility based on facts unknown to you?" argued Barry.

"Won't do us any good unless we can get these unknown facts."

"But I tell you it can be done!" said Barry.

"Yes?" said Homarr politely—too politely.

"I've seen it done!"

"And once," smiled Maradun pointedly, "I discovered that the square root of minus one could be factored into a simple binomial, a divisor, and a constant; all real identities. I was reading a paper before the Trendan Mathematical Association, and all the members were hanging on every word, completely ignoring the fact that I was standing there on the stage clad only in my underwear. What bothered me most was the fact that I was standing with one foot in a bucket of cold water and one foot in a bucket of hot water."

Psychologist Crenda laughed. "Shall I interpret that dream someday?"

"Not unless you can make that factoring of mine come out even. The man who factors the square root of minus one into real numbers will be the greatest mathematician in the universe."

Barry Williams flushed.

Psychologist Crenda thought for a moment and then said: "It is obvious. Not only did

Johntha's mind create a new personality on a new planet in order to evade the neurophasia bacillus and return to health, but the normal wishful-thinking section gave Johntha an urge to be an atomician with space-craft specialization. You see, the subconscious mind was still aware that Johntha was still on Trenda and still ill. But if he could devise a means of traveling through interstellar space, then the illogicities of the false personality could be erased in fact. The maze of the mind is complex."

Doctor Kendon nodded agreeably. To Barry he said: "This dream of yours is fading?"

"It seems to be," Barry said. "When I first awoke, it was quite clear. But I find myself slipping into the personality of Johntha by the moment."

Then Mathematician Maradun looked up from his paper and said: "Johntha, remember that any mathematician can set down an equation of considerable complexity, assign values, and solve it for all sorts of factors. Your equations are of this variety, what little I can make out of them. The trouble is that you can not recall the proper values to assign to the various unknown functions."

DOCTOR KENDON smiled tolerantly. "I thank all you gentlemen. And I believe that Johntha is cured. Johntha, you may return to your old line of work as soon as you care to."

"Tomorrow," said he.

"As for the rest of us," said Crenda, "I'll say that we've enjoyed the discussion, though nothing came of it."

"It's the wasted time," said Doctor Kendon.

"Not at all. Electronician Johntha is a valuable man to Trenda. We can well afford to spend and hour or two getting him set properly after his long illness." . . .

Hours later, Barry Williams sat in the library, reading. He walked up and down occasionally like a caged animal. He used sheet after sheet of paper trying to recapture the science he had been so apt at on Terra. He failed—miserably. He fought for the symbols and they eluded him. And he found himself thinking in circles.

Vella, unquestioningly loyal, took her small car into the city and returned with several good texts on atomic theory, both practical and theoretical. He took them and pored over them, setting down factors that he was able to decipher and translate. It was all there, right up to the last few weeks of Trenda's work on atomic theory. It parallelled the Terran work, which was of considerable help—but it did not go far enough.

There was a great gap. Not in the theory itself, for the possibilities of releasing the total annihilation energy of alpha particles was discussed as a desirable fantasy. It discussed also the possible means of starting the reaction as well as the theories of how containing such a reaction might be achieved.

This was of no help whatsoever. Trenda had no idea of anything remotely practical. It was merely negative evidence and completely in avoidance of the practical means used on Terra. They ignored the Earth method because they were in complete ignorance of it. As such— Barry Williams failed to learn a single thing from the stacks of books.

Night came swiftly, and Vella prepared dinner.

Barry put the problem out of his mind then. He gave up for the moment because

[*Turn page*]

too much striving was making him stale and he preferred to bask in the pleasant thought of Vella and he together.

This one factor, he noted, was the only thing that seemed untouched by the molding process that was going on in his mind. When Vella entered, he became aware, vividly, of himself as Barry Williams.

It was very pleasant to see Vella in an apron, working in the kitchen. Her presence at the other end of the table pleased him greatly, and after dinner, he ignored his problem, sitting in the deepening night, just talking to the girl. In this, he found little to say, but he plied her with questions about the year or more of his illness and urged her to tell him what she had been doing. He took silent dislike to all males she mentioned in friendly tones and enjoyed with her whatever recreation she had taken that was not of a man-woman kind.

The evening went swiftly, and it was not until Johntha retired to his room that the problem came up again.

It came with a sickening realization that his—Barry Williams's—experience had faded terribly. He had been unable to make anything sensible out of his atomic theory.

He had renounced his Earthly birthright for this. Forgetting Vella as an impossibility, ever, he had come here of his own will in the hope that his act would make Terra successful in the attempt to get the *Star Lady* into space. Returning to Earth would have been futile; coming here to Trenda had seemed the only way. But he and Johntha were in the same category. It was reasonable to suppose that anything that he experienced on Trenda his counterpart on Earth would find similar.

And he had failed to produce anything cogent.

Was Johntha as frustrated on Terra? Would he awaken with the full knowledge of space-problems plus those of the sub-etheric level? Or would his Trendan science fade and die, leaving the man helpless to solve the Terran problem?

It was a terrifying possibility, and far too great a possibility for his peace of mind. For just as atomicians gave little heed to the theories of electronicians here on Trenda, so would the communications experts on Earth be inclined to question a complete new science so far from both the communications and the atomic fields that had been "dreamed" up by an atomic expert.

Or should he have insisted upon the fact of his change in personality? That might have lent sufficient weight to his words to force the atomician to experiment at least. That is, providing he could have convinced them. Were he to persist in the transposition theme, he knew, his next habitation would have been a psychic ward under strict observation, and the possibility that, forever afterwards, his word and his judgment would be subject to critical scrutiny.

So he had failed. And he knew instinctively that his own failure would be mirrored by the man on Earth.

He had given up his Terra life on a gamble and he had lost. For all the benefit that either Earth or Trenda would derive, Barry Williams and Johntha might as well have returned to their own bodies. It would have made life less confusing to both of them.

Add to all this the fact that he was attracted intellectually to a woman who was by all common knowledge, his sister. The body he inhabited was still Johntha's, and despite the mental affinity for the girl, the body responded only in a brotherly way. Barry Williams was sincerely glad about this. There would be enough torture to go on living near to Vella in her brother's indifferent body. It would have been intolerable frustration if Barry's instincts had been able to arouse Johntha's body.

CHAPTER VII

Barred Cell

JOHNTHA had awakened at the same time as Barry Williams after their brief mental rapport. His deep admiration for the man was still strong, and would probably be strong for the rest of his life. He knew Barry Williams' mind, and knew the cost of that decision. He sprawled easily on the hospital bed and considered the thing fully. His determination to measure up to the other man's decision rose strong within him. He would succeed!

No self-curse for failure entered Johntha's mind for he set aside the possibility of failure as something not to be considered. As he lay there thinking, the nurse came with breakfast, and with the nurse came the doctor and several colleagues.

"Hello," said Johntha. The doctor nodded a greeting. "I'm feeling swell this morning," added Johntha hopefully.

Doctor Edwards went over the supposed Barry Williams with a critical eye, testing and inspecting.

"It's amazing," he said to his friends, "that this man, struck on the wet forehead with a high tension line, did not die."

"Miraculous," agreed the nearest physician. "Especially since the recovery has been so complete in such a short time."

Edwards nodded agreement. "This is Barry Williams," he told them. "Barry, these are doctors whom I have asked to consult with me on the case. Doctors Hammond, Burger, and Morse."

"How do you do?" Johntha said. "Am I four doctors worth of illness-"

The laugh was professionally neat.

"Now," said Dr. Edwards, "my trouble is this. When Barry awakened, he was quite puzzled about himself, where he was, and what he'd been doing. I trust that we can discover whether any real damage has been done by that rather severe electric shock."

"He was puzzled?"

"Yes," replied the doctor. "First, he recognized nothing about him as familiar. He rejected the words 'Car-line' and—"

"Understandable," said Dr. Hammond. "A simple psychic block."

"Then he insisted that he was not Barry Williams. But he could not tell us who he thought he was."

"Shock," said Hammond.

"Then he asserted that his position had been on some project pertaining to interplanetary communications and he mentioned quite a bit of some unknown science in detail. He again repudiated his accomplishments on the *Star Lady*. He claimed that he had been suffering for some time with a disease known as neurophasia."

"Neurophasia?" asked Dr. Burger. "Never heard of it."

"Might mean neurophthisis," suggested Dr. Morse hopefully.

"There are no signs of neurophthisis," said Edwards positively. "There is no wastage of nerve tissue. I suspected a layman's mispronounciation, so I checked on neurophage, neuropyra, and neurospasm. There are no symptoms of any of these, either present or past. This man's nervous system is in excellent tone."

"Might have been a mental trauma," Dr. Hammond ventured. "His normally healthy mind may have revolted at the thought of illness striking so swiftly and completely, and it therefore has built up a careful false-memory covering a year of illness."

"But why should he reject his work on the *Star Lady!*"

"It has been a problem that has eluded him for some time," explained Doctor Edwards.

"Ah!" said the psychiatrist, Hammond. "An attempt to deny a frustration! Another psychic block."

"I am beginning to believe so," said Edwards to Hammond. "Another interesting thing is that the new science propounded by the patient should convince him that a proper application of it will solve his problem."

HAMMOND smiled. "So simple when the facts are known," he said unctuously. "A simple psychiatric case, easily explained and justified. A psychic block against illness, plus the delusion he can solve his problem."

The other men nodded. Hammond's word as psychiatrist was good so far as they were concerned.

Johntha, lying in the bed, listened with amusement. They had it so pat and perfect. If at this moment he should sit up and admit his name was Barry Williams, and agree that the car-line feeder was the cause of his mental confusion, the worthy doctors would attribute his remarks of last evening to the effect of electrical shock upon the brain.

But then any insistence he made as to the science of sub-etherics and the functions thereof would be immediately discounted as the ravings of a sick mind. In fact, it was well that he had experienced that rapport with the mind of Barry Williams or he would be convinced, right now, that his past experience on Trenda had only been part of a magnificent dream, and as a dream, he'd not have any faith in the value of Trendan science. But since meeting Barry Williams, mind-to-mind, he knew the real truth, amazing as it was. He was now prepared to accept the truth and go to work, applying sub-etherics to the atomic engines. He would carry out Barry Williams' ambitions regarding the *Star Lady*.

"Your observations are interesting, Dr. Hammond," he said. "But not true."

"Nonsense!" snapped Hammond. "You are wrong."

"Indeed?" said Hammond with lifted eyebrow.

"Yes."

"Then suppose you give us your version," said Doctor Hammond pulling himself up haughtily.

"Surely. I am really—ah, the best that I can do with this Earthly tongue-training is *Chonthrad*. Leave it at that because it is of minor importance now. I was an electronic specialist on a world known as *Dhrenga*, a distant star. I was smitten about a year ago with a disease of the nerves which we knew as *neurophasia*. It is mostly a mental ailment and its name comes because the mind causes the nervous system to create great gaps in the nerve-impulses or in the speed of transmission along the neurones. Thus, you see, even the involuntary muscles are affected adversely, but the effect upon the voluntary system is complete loss of dexterity and timing, also balance."

Edwards started to speak but Hammond stopped him imperiously. "His version is important," he said seriously. "We'll not interrupt."

"Thank you," said Barry. "Yesterday, Barry Williams was struck by a falling high-tension line. It created a condition of shock in the brain. The mind of Barry Williams left this body here and entered mine on a distant planet. I, seeking a means out of the *neurophasia*, entered his body. I believe this is due to the fact that the two of us are closely attuned. At any rate, I came here complete with my knowledge of the *Dhrengan* science of sub etheric wave mechanics, which will be instrumental in solving the problem of the *Star Lady*. This problem, you know, is one caused by the danger that the energy from the engines may consume the engines themselves. Like an ulcer, doctors."

"I note the reference to medicine with interest," said Hammond quietly.

"I am speaking with Barry Williams' body, using his brain. My mind thinks, of course, in the terms of my own planet and my own training. But the brain which uses no false symbols, accepts the pure thought, and when I speak, the proper translation is made in the brain and the words come out with Barry's training in speech and habit. When I am spoken to, I hear the words, but the pure idea conveyed to the brain by the words is easily translatable into my own mental terms. Follow?"

"You have any proof of this?"

JOHNTHA nodded. He lighted a cigarette, a habit he found interesting but unnecessary to his mind though to this body. It was an Earthly habit. Trendans did not smoke.

"I have proof," Johntha said. "Last night I was about willing to doubt my past experiences; to term them dream or delusion. Then last night, my mind met the mind of Barry Williams. We discussed the transfer. We discussed our singular problems, and we decided that this carried-knowledge would most certainly fade if we each returned to our own bodies. On the other hand, if we returned to the other's body, each of us would carry sufficient information to enable—well, to enable me to get the *Star Lady* in working order. He—sent me here. I have a great admiration for the man. A man willing to give up his own ambition to satisfy the collective ambition of Earth is not often encountered."

"You see?" said Dr. Hammond. "Such perfect self-justification. Such beautiful sophistry."

"You are unconvinced?" asked Johntha.

"Your proof lies in your own mind only."

"But what about my science?" demanded Johntha. "I will solve the problem of the engines."

"My dear lad," said Hammond, "if fiction couldn't solve any problem, it would be poor fiction, indeed. I can think of a number of ways of solving your problem of the engines and I am admittedly ignorant of atomic physics. A super-ray or development of some unknown level of energy peculiarly adapted to means of propulsion at velocities exceeding that of light. I need not go into detail, for in a story it is the characters who count and not the imaginative inventiveness of the author.

"I do have a friend, though, young Mr. Williams, who has, for sake of writing logically, created for himself a complete scientific background with false-basic mathematics and a close interrelationship of the supposedly real scientific phenomena. You, apparently have done the same thing as a means of explaining your illness and inability to solve the atomic engine problem. Frustration so complete will do that to the mind, you know."

"Look," said Johntha sharply, "I know what I'm saying and why."

"Naturally. Naturally. And for hundreds of years, all men believed firmly that a heavy

stone fell faster than a light one. False, of course, but they believed in it and their own integrity with equal vigor."

"So what do you hope to do regarding my case?" asked Johntha.

"I am going to prescribe a complete rest. You must not dwell on the atomic problem until I permit you to resume."

"You can't stop me!" said Johntha flatly.

"I can. And with complete satisfaction that I am helping to maintain the mental stability of a fellow man."

"It is my word against yours!" said Johntha hotly.

"I think it is your own word that will work against you," said Dr. Hammond. He looked meaningly at his collegues who nodded solemnly.

Barry got the look. "But the science of sub-etheric wave mechanics!" he cried.

"Who would even attempt to try an experiment based upon a sheer hallucination?" said Dr. Hammond disparagingly.

"But it is a true science!"

"So was the solar system according to Aristotle."

"But I have proof."

"So did Aristotle. And what happened when Galileo tried to teach the Copernican theory to Pope Urban? Galileo discovered that he was bucking proof of a false nature but none the less solid."

JOHNTHA gave vent to his disgust. "Reverse that, will you? So far as I am concerned, your proof against me is as false against a known science as the case you bring to bear."

"The self-justification is remarkably perfect," explained Dr. Hammond to his colleagues.

"Like the case in a text-book, he even turns my own analogy against me, to aid his own proof."

"Then what do you hope to do?" said Johntha.

"Detain you, if necessary."

"Detain me!" yelled Johntha. "Like blazes you will!"

"It will be for your own good."

"Take your help and—"

"Railing against the rules will never help," said the psychiatrist placatingly.

"But, hang it all, the *Star Lady*—"

"Will either wait for your return or they will get a new atomic expert."

"But they can't!"

"Barry, quiet down or they'll never accept you back."

"But my promise to Barry!"

Hammond looked at Edwards. "You see?" he said. "He persists in the delusion."

"Delusion be blowed! I'm going out there and go to work. See?"

Johntha got up and started toward the closet, hoping to get his clothing. His path was blocked by Dr. Burger.

"Don't be ridiculous," said Burger.

Johntha let the doctor have it right across from shoulder to point-of-jaw. Burger dropped like a limp rag.

That was the touch-off. The other three physicians leaped on Johntha's back before he could turn. Their sheer weight carried him down, and there were too many of them for him to fight efficiently. He slugged Hammond in the pit of the stomach and doubled the psychiatrist over his forearm. He kneed Dr. Morse viciously because that was the quickest way to get rid of Morse.

Edwards, meantime, was getting set, and the older man chopped the side of Johntha's face with the edge of his hand. It would have felled him cold if delivered by a younger man. As it was, the elderly doctor's blow staggered Johntha, giving Dr. Edwards another chance to get at him.

The second weak blow in the same place shook Johntha's frame terribly, and upon the third, the man went down, weakly. He was still struggling when Doctor Edwards thrust a hypodermic into his wrist—an emergency thrust that caught only the edge of it but was none the less efficient.

Blackout came. . . .

Johntha awoke again to find a changed scene. Iron bars guarded the tiny window. The bed was small but rugged. It would be impossible to break up the bed and use any pieces to effect a break. The electric light was set, recessed into the ceiling and, obviously, could be turned off from outside, for there was no light switch. But the walls were not padded, and the restraining jacket that he had been delivered in was now gone. He never knew about that, incidentally.

Johntha sat up and swore vigorously. He tried the door, and then he rattled the doorknob hard. It was locked, of course.

The Judas window swung open and a hard face peered in. "Shut up," it snapped.

"Where am I?"

"Lincoln Sanitarium."

"How do I get out?"

"Through this door."

"Well, open it!"

"Not me, boddy, Not me."

"You *can't* keep me locked up," shouted Johntha.

"You're speaking from the cell now!" the guard laughed uproariously. "Remember?"

ANGRILY, Johntha went close to the Judas window. He peered into the guard's face and then said: "I'd like to poke you in that nasty nose. Get out and bring back someone with authority."

"Who, me?" asked the guard with mock servility.

"Yes," snarled Johntha. "You. Now git!"

"Aye, squire," mocked the guard.

"Scram," said Barry with as much menace as he could muster.

"Oh, go peel a egg," grunted the guard. "Look, chump, you're in there, see, and there you'll stay. Giving orders ain't going to get you nothing. And threatening people wid violence will land you in a padder wid a jacket on, see? Now sit down quietly and in a half hour we'll start giving you treatments."

"Treatments?"

"Yah. Electrotherapy."

Barry sank down on the bed. Electrotherapy! They'd scramble his memory-pattern until it was like an addled egg. They'd destroy his subconscious evaluation of all of his own previous experiences. The card-file of his memory laboriously built up through the long years of his life on a day by day basis would be upset and all the cards scattered. Then in a year or more of careful sorting, he could replace them, but with a different set of values assigned to each.

The sub-etheric wave mechanics, precariously carried in his mind on a superimposed, not-understood method would die completely since it was only his ego that retained it. The unnatural warpings of the convolutions of his brain caused by the superimposition would react to their preformed pattern and the memory of Trendan Johntha, would die completely.

And what of the real Barry Williams? His ambition would go unrealized. Johntha felt sick. The other man, willingly giving up his position, his friends, and his life to the job of getting Earthmen to the stars, would live and die on Trenda, never knowing whether Earthmen would place their mark on the interstellar reaches. And then Barry's mind would live in torture of its own decision, for Johntha's mind in Barry Williams's body understood the instant and honest attraction that existed between Vella and the mind of Barry Williams. Barry was, to all intents and purposes, locked in the body of Vella's brother, and brother didn't marry sister on Trenda any more than they did on Earth.

Johntha knew that Barry was honest and true. Vella was untouchable to the Earthman. Hence the secondary decision. Had they known about this upset in plan, Barry need not have placed himself in a position of mental torture, living so close to and yet so remote from Vella. At least, on Earth, Barry could have existed on hope. Hope that they'd perfect the atomic engine and eventually find Trenda. A vain, hopeless ambition, but none the less vital enough to drive a man into super achievement. . . .

The door opened and men entered. Johntha leaped up. They weren't going to scramble his brain!

With insane strength he fought them. They won by weight of numbers though Johntha left a few broken heads on the way. Not trussed, but firmly held by hard, brutal hands, he was lifted and carried along the hallway, up a flight of stairs, and into a room, bare but terrible—equipped with a simple chair, a piece of electrical apparatus, and a headset. He was strapped to the chair. He fought them with his eyes and his voice and they pressed down upon his head the electrodes.

A flaming green light blinded him painlessly, and he knew no more.

CHAPTER VIII

Rough-House

YET BARRY'S bitter realization of complete failure was intolerable. Simply to forget was impossible. Only by immersion could partial forgetting be accomplished. Therefore Barry returned to his laboratory in the city on arising the next morning. If he could not take Trenda to the stars, he would make communication between the four inhabited planets of the system a verbal two-way as soon as possible

Unlike his difficulty in recalling the Terran science, Barry found that working in the communications field was quite easy. Of course, this was not the problem of frustration that his job had been on Terra. Here was a straight designing job with all factors known and the problem one of merely adapting the known scientific theory to practise.

Barry immersed himself in it. He applied himself diligently, made excellent decisions and cut some close corners with singular success. In the end it would be far less satisfying to have his—Johntha's—name on the usual bronze tablet at the various communication stations than it would have been to have the initial interstellar spacelane called by his name.

But he could no longer reach for the stars and hope to win. He could reach for a lesser goal and win, and he would win brilliantly. Perhaps after a high success of this minor nature, Trenda would give him permission to make the other attempt once again.

He kept a notebook at his side daily. Whenever he found something at all clear, he would set it down in the notebook and forget it. As the days added together, the notebook filled slowly with symbols that were half a corrupted Terran script and half good Trendan characters. The forms of the equations were mixed, too, conforming as they did partly to Terran and partly to Trendan conventions.

Some day it would all be clear, perhaps.

He worked long hours and accomplished much. He knew that both Psychologist Crenda and Doctor Kendon were following his actions with very critical eyes—and he also knew that they found only laudable acts. Occasionally Atomician Homarr would drop in to see him, and though it rankled his mind, he and the atomician would treat his dream as an amusing incident.

Inwardly, he knew that the atomician was not too certain. Crenda's statements about the subconscious mind being able to arrive at a solution that might not be understood because of conscious inhibitions in thought, had struck Homarr very close to home, and though the atomician did not think there was anything to the "unreal science" as he called it, he was not certain that Barry's idea was in the realm of pure imagination.

The mathematician called often, too. This relationship was amusing to both. From time to time a bit of Terran mathematical manipulation would creep into Barry's work, and the complete difference to the Trendan style puzzled the mathematician. He had thought lightly of possible differences in symbol and structure, but had never done anything more than toy with the duodecimal system once or twice.

Maradun, like most mathematicians, was a chess-player of no mean ability, and he played often with Barry, though the Terran mind in Barry's body did little but hinder occasionally. That led to various types of fairy chess, which both enjoyed. Then, that in turn led back to what Mathematician Maradun elected to call "fairy mathematics."

They made a game of it.

Barry was no match for Maradun at straight Trendan math. There were few on the planet that were a match for Maradun. But in "fairy mathematics," using the distorted Terran symbols, Barry's additional training, however slightly remembered kept him abreast of Maradun. Barry knew that the reason was that the mathematician was forced to undergo considerable translation to interpet the symbols and the form; Barry thought that it might be like a man speaking a foreign language with a native some time removed. One thinks in his own language and translates, while the other man thinks and speaks in his own.

BARRY was the only one with a real purpose in all this. The other Trendans were merely watching his development, and keeping a sharp lookout for any possible reversion. Barry encouraged them because he hoped that their constant presence and urgings would strike a close parallel, and possibly awaken—or re-awaken—the science that was slowly becoming less and less concise.

Or, perhaps, that one day they might strike the proper factors themselves. Barry did not care how Trenda succeeded. He wanted success at any cost, for he was still mindful of the parallel between himself and the man in his body on Terra. If Trenda, no matter how remotely circuitous a method, finally evolved the super-powered drive in its practical form, then he could be reasonably certain that on Terra, the man who spoke from Barry Williams's body would evolve the proper science again to make the *Star Lady* rise in safety and traverse the awesome gulf between the stars.

His memory of the *Star Lady* was fading in parallel to his loss of detail on atomic

theory. At first, he could visualize the sleek upright ovoid of space in every detail. Every mark, every line was clear. Then like photographs taken at greater distances successively, the image became less than wire-sharp, and the minute, fussy detail blurred through the overall conformation remained.

Like the matter of the window-ports and their shutters. He knew they were there, but he was becoming hazy as to what type of automatic hinges they used to drop the steel shutters over the clear glass—and later he forgot whether they dropped down from above, or swung over from the side. He knew they did not run on slides, but he wondered how soon it would be before he was uncertain as to that, recalling only that there were shutters of an indistinct type.

But the days wore into months, marked off by the regular rise of Trenda's double moon, and there was no glimmer of the secret of the atomic engine.

Barry went into the usual cycle of lows and highs. There were times when he felt that something must eventually come of it all. At other times he went into the blue funk of a man who has gambled all and lost everything. The "might have been" tone was desperate, though he knew that either way, no space travel would have come for Terra. He consoled himself at times on the upswing by a self-belief that a good try with failure is infinitely better than not trying at all.

Barry's big change in personality seemed, to his friends, only a change in his attitude toward women. Previously, the real Johntha had enjoyed their company. Now he did not shun women, but neither did he seek them out as he did before. He preferred the company of his sister.

For adding to Vella's attractions for Barry was his own inward feeling of being Barry Williams so much more vividly when they were together. At other times, the Barry Williams and the Johntha personalities seemed to merge. When he was with Vella, the Johntha side grew almost dormant and intellectually, at least, he became Barry Williams.

This feeling he nurtured carefully. He often thought that if his secret came to him, it would be during a time when he and Vella were enjoying one another's company.

It was quiet desperation. With the single-purposed mind of Barry Williams settling only to Vella, it was difficult to maintain a mentally brotherly attitude despite the fact that the body he inhabited responded only as any brother's body would respond to a well-liked sister. Barry's trouble was not unique among men. He had been the type that paid little attention to womanhood until one entered strongly enough to create a desire. From that moment on he would notice only one.

IT BOTH helped and hurt. For Vella was in complete ignorance of the change in personality. Therefore she failed to notice his deepened attention to her. Similarly she blithely accepted the company of other men while Barry kept his mouth closed tightly.

Although he was more Barry Williams when he was in her presence, her presence was too compelling to permit him more than secondary attention to his problem. She often chided him for drifting off in reverie in her presence, which did not help, for in those times, Barry was trying desperately to penetrate the veil that covered his memory.

At one time he decided to give up completely, thinking that if he forgot the Barry Williams, he would then become as much Johntha as Johntha was or had been. That might solve his difficulty at one complete swoop. Then, as Johntha he would return completely to Johntha's habits and finally achieve happiness and emotional stability.

It did not work. For uppermost in Barry's mind was the simple desire to see interstellar space conquered. He could not look upward to the stars at night without having the fact of his true being brought back to him. The twinkling stars were a constant reminder, as was Vella.

Passing days wore into a year, and the work on the communications system progressed rapidly on Trenda. When the initial testing of the station was under way, Barry made plans to supervise the final details of the similar installation on Vardun, which was Planet II. He spent some time in considering whether or not to take Vella along, but when the time came, there seemed to be some unspoken agreement between them, for he returned home to find Vella trying to make the final snap shut on her traveling case.

Using his greater weight, he did it for her and then looked into her eyes and asked: "Going along?"

"Positively," she said. "My part in this project has been small, but important. I'm

going to be there when the final link is made. I want to see it."

"Your part?" he asked stupidly.

"Haven't I kept the chief electronician well fed, well housed, and reasonably happy?"

He laughed. "More important than it sounds," he admitted.

"There," she said. "So I'm going."

He nodded. "You've been a solid character, Vella."

"Poof," she joked. "Not too much so."

"Yes, you have. I'm not too easy a brother to live with these days."

Vella stood up and faced him. "You're closer to me than ever before," she told him simply. "You've changed, Johntha. Up to your—illness, you never enjoyed the same music as I did, not the same pictures, writing, or games. Now we enjoy them together. Don't give me too much credit, Johntha, because it is very easy to please someone who is completely compatible."

Well, he thought, compatibility is about all we have in common.

"Am I?" he asked in a pleased voice.

"Give it a better name," she laughed. "When I'm feeling a bit low, nothing you seem to do or say gets banal. When I'm feeling very good, we're both feeling good. When I want a quiet and restful time, it seems as though that is the time when you prefer to sit by the fire and read quietly, and if I feel like making noise, you get a big kick out of calling up a slew of people and raising the roof."

He grinned boyishly. "You're just saying that because it's true," he said with a laugh. He put both hands on her head and ruffled up her hair.

"See?" she said backing off a bit. "Normally I'd slay you with the can-opener if you did that. Right now I'll bet I can tie you in a knot. Rough-house?" she asked, and not waiting for an answer she ran forward and caught his hands in hers, and then tried to throw him to the floor in a sort of misapplied judo hold. He fended her off, laughing but tripping over the bag that was still on the floor.

CONCERNED about her, Barry fought a double-battle. He was fending her off with both hands and at the same time he managed to throw his weight around so that when the tripping came to its crashing conclusion on the floor, the impact of her body was cushioned by his.

That ended the battle right there. When approximately one hundred and fifteen pounds lands full on the average male midsection, most ideas of fighting back leave at the same time the breath leaves.

There was a mild blackout, and Barry came to with his head pillowed on Vella's lap. He took in a deep, ragged breath.

"Hurt you?" she asked, bending down over him. Her face was full of concern. "Honest, I didn't mean to murder you all the way. Just a little bit."

He grinned weakly. "You shouldn't have planted that bag right there," he told her. "I'm all right."

Her fingers traced the contour of his cheek and her face became solemn.

"I'm sorry," she said quietly, looking into his eyes. Her hair tickled his forehead and he reached to brush it away. Instead, his hand only got as far as her cheek, where it stopped. Her face was warm and soft in the palm of his hand. He returned her solemn look for several heartbeats, and then his hand came down. Her face followed it.

Her lips were warm and soft. The kiss was gentle and affectionate. Then, quickly, it was over.

"Y'know," he said, looking up into her face with a laugh, "I'll bet you'd be fun to neck with."

"I might be able to get you a signed affidavit," she returned, putting her hands beneath his shoulders and lifting him to a sitting position on the floor.

"I'l strangle the guy!" He glared. His laughter was forced but it sounded genuine enough. He climbed to his feet, rubbed his midsection ruefully, and then gave Vella a hand up.

"Now," he said, "I suggest that we use any more rough-house we have left in our systems to wrangle the baggage, you baggage!"

She stuck her tongue out at him. Then she laughed and went into her bedroom after the other traveling bag.

And as Barry watched her retreating figure, he made a mental note. Whatever had happened to Johntha's mind on Terra had better be pretty good to make it worth all this. He took a deep breath and put the worried thought out of his mind.

But the question of what had happened when Johntha woke up on Terra in Barry Williams's body continued to bother him. It

would continue to bother him until it was either solved or he was dead.

Vella came back with the other traveling bag. The warm merriment was still in her face, but Barry carefully avoided a repetition of the rough-house. To her it may have been mere jollity, but to him, it was a euphemism for physical contact. The specter of wonder about Terra was too strong, now.

CHAPTER IX

Test Journey

ONE AFTERNOON Barry and Vella took off from Trenda to Vardun on the daily space run. Exchanging light banter, they embarked, Barry having regained all of his high spirits, once he quit wondering about possible happenings on Earth. He preferred to put those thoughts out of his mind anyway. Only when he was at the lowest ebb of his physical strength did he worry about the other man's ability to recall the sub-etheric phenomena. He knew that the principles were less complex than the three or four steps of the atomic theory that he had been unable to recall clearly.

When he felt best, Barry recalled that the sub-etheric level of wave propagation had been suspected by a few savants on Earth, but as yet they had not suspected that the idea was based upon anything tangible enough for a general investigation. In time eventual success might result, though how soon was impossible to predict.

His moodiness, after the rough-house with Vella, had been noticed by the girl and she tried hard to raise his spirits. Her efforts met with success.

He showed lively interest when the ship finally lifted from Trenda and hit the outer sky. He wanted to see the entire sky, and though he was no stranger to space travel, this was his first trip since the transposition of personalities and he wanted to see it with new eyes. But as always, there was not a single stellar formation that he found familiar. For all Barry knew, Trenda might be less than a hundred light years from Earth, or Trenda might lie in any one of the outlying galaxies so remote that only an astronomer could find them on the super-perfect photographic materials, exposed in the thousand-inch mirror on Luna. The numberless stars of the galaxy were too awesome to contemplate. When this number was multiplied by the innumerable galaxies, the possibilities of locating this particular one were too great to consider.

Trenda, he thought, might be "anywhere."

He had mentioned the possibilities of two races being almost identical within the universe to Mathematician Maradun at one time, and the mathematician had agreed.

"With a pretty good approximation of an infinite number of stars possible in the overall universe," said Maradun, "the possibilities of a planet very similar to Trenda in physical constants must be tremendous. Among these, which must number into million upon million, the chances of a race almost identical would be likely, despite the myriad details that might cause a minor deviation. If the factors of classification which are required to throw a race into this category are exceeded by the number of possible breeding-planets, then the possibility of a similar race are directly proportional to the number of classification-places divided by the number of breeding-planets. Follow?"

"Vaguely," said Barry, dropping the subject as being one that would never be solved in that manner.

But in space or not, the sky was utterly strange. As for physical similarity, his knowledge of anatomy was fair, and he and Vella seemed quite similar. But there might be hidden factors. He'd like to know the chances of that, mostly, though these things were merely questions of academic importance to him.

He turned from the passengers' observation port. Vella was talking to the captain. She motioned him over.

"Johntha, this is Captain Trammlo. Captain, this is Johntha."

"Glad to have you aboard, young man," boomed the captain. "You're more or less of a celebrity, you know."

"Nonsense," answered Barry.

"You are," insisted Trammlo. "First, you are one of the very few to be cured of neurophasia, and secondly you are credited with the huge job of developing the sub-etheric bands for communications on a verbal basis between the planets. You don't read papers?"

"Of course I do," laughed Barry.

THE CAPTAIN of the ship shrugged. "I'm an old man," said Trammlo seri

ously. "I've been captain of space craft for twenty years. Worked my way up from generator technician. But, Johntha, I'm never quoted in the papers."

"I'm no genius," said Barry. "Any number of men could have done it."

"Granted. But Johntha is the one who is doing it! That makes you a popular fellow. You two will eat at the Captain's table. That, young sir, is an official order. I defy you to defy it."

"And if I do?" asked Barry, with curiosity.

"Space mutiny," said the captain in a sepulchral tone, drawing a forefinger across his throat. "Oh man! We really throw the book at those who defy the captain's orders!"

"I'd better join you," laughed Barry. "I see I can't lick you."

"I'd like you to join me in the scanning room. I think my communications man would be tickled green to have you visit him. Do you mind, or have you better things to do?" the captain asked.

"Come along?" Barry asked Vella.

She shook her head. "Electronics never fascinated me," she said. "I'll see you around." He nodded, but it was slightly sour. He turned to follow the captain.

"We'll not keep you long," promised the captain. "I'd not have bothered you at all, but you are a rather serious-minded lad, you know."

"Am I?"

"You are. Look, Johntha. You've been an hour in space. Look behind you. Every male on the promenade has paired himself off with some woman—or vice versa. You are traveling with your sister and you make no attempt to leave her; to introduce her to some eligible man; or even to go off seeking company yourself. So, therefore I assume that you are serious-minded, and won't mind a bit of technical gab. But you shouldn't assume that your sister is serious-minded too. She might like a bit of dancing."

That, thought Barry, is the main trouble with being attracted to a girl supposed to be your sister. People make it extremely inconvenient.

He laughed and said, "I forget, at times."

"Sure you do. But I remember—and I, young man, was not a serious-minded youngster. Forget it occasionally and be lighthearted. All work and no play, you know." Captain Trammlo opened a huge door marked *No Admittance* and waved Barry in. They went through corridors and up ladders until they reached the big scanning room on top of the ship. "Look, gentlemen. This is Electronician Johntha!"

Luckily the ship was on automatic, for they all left their posts and crowded about Barry, shaking his hand. He responded cheerfully enough, but he was wondering what Vella was doing. There was no escape. So Barry took the crew's generous acceptance of his presence with good grace. They made him one of them, and then plied him with questions.

The talk circled swiftly and took the usual line. Barry was asked about the sub-etheric communications bands, which was a subject of interest to him, too. He started to describe the job from start to finish, and the crew settled comfortably, anticipating a long talk. Barry saw the expectancy and surrendered to the inevitable. He had no right to Vella's affections anyway.

He continued talking.

As for Vella—after Captain Trammlo led Johntha away, she turned to find herself partly surrounded by a number of admiring young men.

"You're Vella," said a good-natured fellow beside her.

"I admit it," she laughed.

"Johntha's sister?" asked another young man.

She nodded.

A THIRD man came up the deck and shouldered his way through. "Beat it," he said with a laugh. "I have the inside track here."

"Hello, Helmond." Vella greeted him with a smile. "I'm surrounded."

Helmond chuckled and asked, generally: "Are these guys courting you or are they courting Johntha's sister?"

"Has she got a brother?" asked the first man in a plaintive tone.

"Who's Johntha?" returned the other man.

"I'm flattered," said Vella.

"Look," said Helmond. "There's no sense in fighting about this, because as winner I don't care to have fist-marks all over my face as I take the lady dancing."

"Or," added the first man drily, "have shoe-prints all over your face as you approach some other woman for the same pleasure."

"Be that as it may—which I doubt," Hel-

mond grinned. "The point is this. Vella has been sort of a she-hermit for more than a year. What with nursing Johntha back to health, taking care of his place for him, and one thing and another, I doubt that she's even held a man's hand for better than two solid years. I proclaim a truce in the battle of wits, and we shall see that Vella makes up for lost time. There's three of us. We shall pledge ourselves to keep off all other vultures for the duration. And now we shall seek the dance floor and dance off her shoes. Right?"

VELLA laughed uncertainly. Then she nodded.

"With three escorts, I'll make up for lost time in a hurry," she said.

"We'll match for first honors," said Helmond.

He won, and he steered Vella out on to the dance floor.

"Goodness," she said. "I'm rusty."

"Nothing that a bit of practice won't cure," he told her. "Vella, being rusty on the dance floor is impossible."

"I am, you know."

"Remind me that I must speak to Johntha harshly."

"It's not his fault, really."

"Not primarily," said Helmond. "Secondarily, though, he is responsible. You're missing a lot, Vella."

"I felt that way while Johntha was ill. But it's been over a year now since he recovered, and honestly, Helmond, I've not been a bit bored."

"He could let you out more."

"He isn't 'letting' me out. I come and go according to my conscience."

"Then your conscience must stop feeling responsible for Johntha."

"I might turn it off."

"Do that until it is atrophied."

"Trouble is," said Vella, "this it isn't all conscience. I actually enjoy doing things for my brother."

"Doesn't sound like fun."

"Perhaps it doesn't. But Johntha and I have so very much in common."

"Look, little Vella! Intellectual companionship is very necessary to all intelligent people. That you find it with your brother makes it very convenient, but also it makes for not going places enough. You get into a nice, easy rut. Why enter a mental fencing bout with some guy you're not certain of when you can discuss the things you like with Johntha? I know how it is. But it isn't practical.

"I know. But I still don't mind."

HELMOND stared at her, then waved his hand in an exasperated way.

"But, good grief, Vella! For more than two years now you've been devoting yourself to that brainy brother of yours. I salute his ability and I am flabbergasted at your constancy to his cause. But two years out of your young life is important, too, Vella. The men you danced with in school are settling down to raising families and you seem to be withdrawing into a sort of shell. It's not right."

"I still don't seem to mind."

"But the Vella I knew was not the mousy type. Vella was the girl with the popularity-plus, with the longest date list, with the brightest look and the happiest future. Vella used to have light feet and a gay smile. Vella still has 'em, gal, but she's not using them."

"Helmond, I don't mind it a bit. I admit it looks odd, but somehow the idea of finding a life completely away from Johntha seems odious to me."

"Hang it, Vella! The man who marries you isn't going to marry your brother too!"

"I haven't considered marriage," she said simply.

"I give up," he said. "You're not concealing a love for some unknown?"

"Not at all. I've told the truth."

"Well, I'm licked," said Helmond solemnly. "And I don't get it."

It was hours later when Barry reappeared. Vella had danced around her three escorts time and again, and was making another round with Helmond when Barry entered the room. Helmond was still talking to her. He said:

"Speaking of which, there's Johntha now. Looking for someone, I'll bet. Wonder who?"

Vella turned from Helmond's arms and went to Johntha.

"Like to dance with your sister?" she asked brightly.

And Helmond stood and watched them dancing with a huge question in his mind. "I'll be darned," he said under his breath. "But Vella does show a lot of interest in that big brainy lunk. And I'll bet that neither of them are aware of it."

He was wrong. Barry knew, and it bothered him and pleased him simultaneously. . . .

CHAPTER X

Angry Scientist

WORK ON Vardun was nearing completion when they landed. Under Barry's skillful supervision, the work leaped forward and as the days passed, each showed definite progress. The days added into months, and then two months passed, and in the middle of the third month the sub-etheric set was being given its load tests. These were more than satisfactory, and on the morrow, there would be a complete test of the first interplanetary voice-two-way.

The intervening hours were spent on the ordinary coded communication means, developing times and procedures for this test. A full three-hour-period was spent merely in synchronizing the clocks between the two planets. Perfect synchronization was impossible because of the twelve minute time of transmission, but an approximation was made which was assumed to be close enough.

Still tired, but enjoying his moment of triumph, Barry stood at the Vardun end of the interplanetary beam and watched the clock sweeping around to the zero second.

This was his moment. This was compensation for his decision back there in space a year ago and God knows how many megaparsecs away, where he met Johntha's mind in the darkness and sent the Trendan back to Earth. He had given up a lot to feel assured that Earth would gain the stars. This was compensation, for the successful culmination of the job would make him truly famous and financially independent for life.

He smiled to himself. He thought of how impossible it would have been if he hadn't treated his Earth life as a dream. Never would he have gained the confidence of the entire Terran System by insisting upon the truth of his transposed personality. Now, perhaps, he could spend the next few years in delving into atomic physics, and perhaps he could learn enough, and then add to that enough, so that eventually he could point the way for Trenda, also, to become an interstellar race. It gave him pleasure to hope. For though few people would ever know, he, Johntha-Barry, would be directly responsible for the start of—perhaps, if they were in different galaxies—two complete galactic empires.

A secret success, but none the less satisfying.

The old doubt still bothered him. His mental loss of the details of his atomic theory made him wonder how the memory of the man on Earth was enduring. Was he completely baffled? Was the *Star Lady* about to drive into interstellar space, or was Johntha still seeking through his clouded mind for the secret of the sub-etheric wave mechanics techinque?

Would Barry ever know?

The dial swept around to zero-zero, and Barry pressed the button that started the system. With a prayer that Johntha was enjoying an equal success, Barry faced the 'phone and said:

"Lengla? Lengla? Can you hear me?"

"Yes, Johntha. As clear as a bell."

"Good."

"But you spoiled it," said Lengla, and chuckled.

"Spoiled it?" Barry asked. "How?"

"You should have said something truly historic. This is an historic moment!"

[Turn page]

Barry thought fast. His hopes were on another planet unknown light years away. This success was great, and everyone in the place was slightly giddy with the happiness that comes when several years of work turn up to be a complete success. Barry made an historic statement then.

"To Perdition with History," he said.

Then he handed the phone to another, and went to join Vella, who was standing there with gladness in her face.

"Thanks to you," he said directly and honestly, "we made it."

HE TOOK the credit and gave it to Vella. He knew who was responsible. For the real Johntha had planned very well indeed, and he, in Johntha's trained body, had merely carried out the rest of Johntha's wishes to the letter, adding only a few of his own ideas. He could neither disclaim credit as the masquerader he was, nor accept it honestly.

"Here," he called to the man now trying the instrument. "Move aside and let Vella talk."

"But I did nothing," she objected, "but try to keep my brother happy."

That, thought Johntha, was plenty. . . .

Doctor Edwards wondered what the matter could be. He'd met Jim Evans on the day of Barry's accident, and knew the man to be quick and resourceful. The call had been urgent, made by Jim Evans's assistant. Edwards hoped that Jim hadn't fallen across one of his own experiments. Edwards felt entirely satiated with partial electrocutions.

But the order was imperious and he went.

He was shown into a large laboratory as soon as he gave his name. Jim Evans, apparently, carried considerable weight in the place, for everything was dropped upon his arrival.

"Oh," he said, seeing Evans hale and hearty, though excited. "I was afraid this was a professional call."

"Doc, you hit it right on the button. Never a more professional call in your life. Look!"

"What?"

"Oh, sorry. This is strictly a new science to us, too. I've spent the entire night tinkering with Barry's cockeyed system. And I don't care whether he dreamed it up out of electric shock or hasheesh. Blast it, it works!"

"Works?" asked Edwards weakly.

"Definitely. Look, Doc. Do me a favor. I want a shot in the arm to carry me. I'm dead on my feet and I've got to continue for the next few hours before I go beddy-by. Can do?"

The doctor gave Jim Evans a hypodermic that he said was guaranteed to keep him running at high gear for a week, solid.

"I don't care if I sleep for a month afterwards," said Jim. "I've got to get some more figures. I'm certain that taking some evidence of success to Barry will get him all hepped up and rarin' to go!"

"Barry Williams?" asked Doctor Edwards.

"Look, Doc. That man is important. He's even more important now that he's unleashed an inkling of this. We've got to nurture that—hallucination, and water it and weed it and reap it when it's grown to man-size. Then Earth will get to the stars, and when we get there, we'll be able to call back and say we've arrived. This is as big as the Great Pyramid. I'd suggest that you go back and tell Barry that we're working on it."

"They took him to the sanitarium—" Edwards began.

"They what?" yelled Evans.

THE DOCTOR explained. "I don't give a curse if he's raving mad or thinks he's Napoleon," snapped Evans. "And did you say electrotherapy? Lucille!" he yelled. "F'gosh sake, Lucille! Get Lincoln Sanitarium on a Priority One and tell 'em that if they touch Barry Williams with a single volt, I'll burn their hides! Crass stupidity!"

"Now see here—"

"Yeah!" Jim Evans shouted harshly. "I mean your gang. So what?"

"I'll not have you interfering!"

"In this laboratory, you're a citizen, baffled and ignorant, see?" said Evans with his chin stuck out at Doctor Edwards. "I'm in a position here to call upon the services of the craziest idiot at large if he's useful. Do you realize that the man you've pronounced crazy holds within his mind the secret of interstellar travel?"

"But—ah—I don't understand."

"Ah, rats! You'll addle his memory, huh?"

"Look, young hothead, any man who fights like a demon because people won't pamper him in his preposterous story of transposed minds—"

"Might as well have something to fight about. I have, too! Yes, Lucille?"

"Mr. Evans, the treatment has been started."

Jim Evans took Doctor Edwards by the coat lapels and thrust his chin into the doctor's face and said:

"You are going over there right now and undo whatever has been fouled up by the initial treatment, see?"

"I'll try," promised Edwards, trying to shake loose.

"I'm going along to see just how you try. Get me?"

"I hope you are not—not—"

"Crazy, too? Listen, Doc, I'm an electronics specialist. Being crazy is a prerequisite. Now come along!"

Doctor Edwards afterwards remembered a wild, crazy ride through the streets of the city at full speed. A siren wailed and cleared their path, somehow. Jim Evans skidded the car for the last forty feet, bringing it to a racketing stop at the sanitarium door. The car was still oscillating on its frame as Jim leaped out with the doctor in tow and banged open the front door.

"I'm Evans— Where's Barry Williams?" he demanded of the information clerk.

"He's seeing no—"

Jim lifted the man out of his chair by the front of the white coat and said:

"We're seeing Williams or I'll take this place apart."

Men came running, but Jim Evans faced them in an attitude of belligerency. That did not bother them, for they were used to taking care of men who wanted battle.

"I'm Evans of the *Star Lady,*" the scientist said. "And if I'm crazy I don't want to be cured, see?"

One of them stopped and looked at the doctor. Edwards shrugged. "Take us to Williams."

Evans and the doctor were carefully convoyed through the place to Johntha's room. The door was opened and they filed in.

Johntha was inert on the small bed.

Evans looked down on the silent man and uttered a string of curses.

"Electrotherapy puts them out for some time, you know," said Doctor Edwards shakily.

"Okay," said Evans. "If we can't do anything constructive *with* him, we'll do it *for* him. Get the stretchers and we'll hurry him back to the electric-surgical room at the hospital. Then you and I, Edwards, will wait for him to awake."

"How much?" asked Edwards of one of the attendants.

"The initial treatment. Mostly trial to set a threshold level."

THE medical man stared thoughtfully at the scientist. "There's hope," said Edwards. "Not much, but some. Trouble is that he's been shocked before, by the falling car-line feeder."

"Maybe that gave him a bit of immunity."

"I doubt it. But speculation is futile now. Evans, I'll do anything I can."

"Good. Let's try everything."

With a worried look on his face, Jim Evans watched the completely inert form of Barry Williams, harboring the intelligence of Johntha, lifted to stretchers, and carried to the ambulance.

Luckly, the original room was still vacant at the hospital. With Barry installed, Jim and the doctor started a long vigil. . . .

Hours later, Johntha stirred, at long last. "Wha—where—"

"You're awakening again," said Jim soothingly.

"Bu—I—"

"Easy, Barry. You're all right."

He looked up at them blankly.

"Remember the *Star Lady?*" prodded Evans.

"Yah—good ship. Wha—"

"The atomic engines?" asked Barry.

"Yah, the atomic engines. Burned up Shame."

"But you've got the answer."

"Ah—to whad?" came the thick reply.

"To the *Star Lady's* engines."

"Evans," said the doctor, "this is difficult. Electrotherapy at first makes memory difficult. Things decay quickly. A thought impressed upon the mind a moment ago is remembered sketchily as though a month or more had passed between then and now."

"And Heaven only knows how far back the *Star Lady* is?" growled Evans.

"I'm afraid so."

"It wears off?"

"The initial treatment is less rigorous. Perhaps in a few hours he may be able to think clearly again."

Barry stirred. "Engines," he said thickly. "Get to stars. Man—great man. Gave up his own chance and I've failed him."

"No!" shouted Evans. "You didn't!"

Edwards was puzzled. "He has a fixation on that. It is almost frightening. Yet it alone

might be strong enough to penetrate despite the treatment. Continue on that line, Evans."

"Anything you say, Doc," said Jim. Then to Johntha he said: "Force fields? Barrier potentials? Remember. The atomic engines?"

"Uh. Sub-ether force fields in engine. Something about Barry Williams. A fine fellow. Loves my sister. He—" but the man's voice trailed off again.

"Williams has no sister," said Evans positively.

"Then what is he talking about?"

"Perhaps," said Evans sharply, "this *Chonthrad* character—the one he's swapped minds with—has a sister!"

Doctor Edwards sat down weakly. "I can't believe it," he said.

"Can you believe the worth of a working science, completely against all Earthly techniques?"

"I'd prefer not to consider it too deeply," objected Edwards. "How can men change minds?"

"I don't know—nor care. Ask your brilliant Doctor Hammond."

"You're not being vindictive."

JIM EVANS scowled. "Look, Doc, this isn't hay we're playing with. I don't care a hoot whether Barry has swapped minds or what he knows is a first-class pipe dream, complete with a gawjuss gal to round out the little tale. All I'm interested in is the end-product. That's all anyone on Earth cares about. I'm in on the ground floor because I happened to hear Barry's mutterings and happen to be crazy enough to try it. So it works. Now I want more."

"Y-you—you've tried it?" stammered Edwards.

"Doctor, they didn't take off on four-hour spinal operations two days after they discovered anesthesia, did they? It wasn't Hertz or Marconi who started the first country-wide radio network. The Brothers Wright didn't accept their success at Kitty Hawk and then go out to fly the Atlantic Ocean. I've got a crude collection of cockeyed junk back in the laboratory that generates a wave of some sort. I have another collection of junk that detects it. Give a wild Hottentot a spark coil and a crystal detector, and he's got the rudiments of radio but he can't really do anything about it but tickle one and wonder why the other jumps. Yeah, there's math and there's mutterings about barrier potentials and force fields but how does a man go looking for them in the dark? What lines do I follow?"

"I see. And you think that he knows the answer?"

"You bet he knows! And I don't care whether he dreamed it or is another man in Barry's skin—he's predicted a new science which has a sound basis of fact. I'm perfectly willing to assume that if his initial premise is correct, his more complex reasoning is at least entitled to rigorous and extensive investigation."

"I don't know what we can do, though," complained the doctor.

"Just this: the *Star Lady* is a large undertaking, large enough for me, or Barry, or any number of other technical supervisors on the job, to haul off and give orders of considerable magnitude, orders which must be carried out to the letter. I'm going to make an official request that you and your little brain-boy, Hammond, deliver Barry Williams to his laboratory in full possession of his senses within twenty-four hours!"

"It may be impossible!"

"Then," said Jim Evans with a superior look and a nice-nasty grating sound in his voice, "there'll be a devil of a lot of clever explaining to be done."

The doctor scowled. "High handed methods will not get you anywhere!"

"Doc, don't make me mad again," warned Evans. "As for high-handedness, remember the doctors were high-handed when they shoved him in the calabozo. Without authorization you medicos have no more right to tinker with the brain of a man like Barry Williams than you have tinkering with the mind of Sir Isaac Newton. Neither one of 'em thought conventionally. I'm going back to work. Call me if he gets lucid."

CHAPTER XI

Deep Into Space

EVANS left swiftly. Behind him, Doctor Edwards was beginning to perspire. Who could predict what kind of actions would be taken by brilliant, slightly unstable men? He wondered about Barry Williams. He'd never seen Williams when Barry had

his full faculties. Evans was quiet and easy going until he got steamed up, and from then on, Jim Evans was a wild man.

Doctor Edwards decided to let other shoulders hold part of the load, and he picked up the telephone and put in a call to Hammond. Maybe, he thought, he could pass a little responsibility along to him.

A week dragged by, and each day would find Evans at the hospital trying to urge Barry's mind into action. There was improvement, but it was desperately slow. In the laboratory, Jim lashed the medical men to higher efforts, all of them working strictly in the dark on trial and error and coming up with bits and snivets of truth.

A corps of trained mathematicians toiled over the inklings, trying to untangle the thin, frail line of truth from the tangled and many-ended skein of possibilties. Each fact unearthed in the laboratory was one more step on the right road.

Jim Evans came to this hospital daily, bringing each day some news, some hope, to goad Barry Williams's mind into action. They admitted to the patient that his supposed delusion had been true. They made profuse apologies.

The patient Johntha's, mind cleared slightly, but there was a haze that obscured the details, just as there was obscurity over Johntha's mind. On Earth, however, this failure to recall details was attributed to the impulsive action of hot-headed medicos and both Hammond and Edwards suffered the arrows of scorn.

Though still befuddled about the sub-etheric waves, Johntha returned to his job. Since his job apparently depended upon the development of the sub-etheric wave mechanics, Johntha worked with Jim Evans.

He contributed little but facility and dexterity. No originality.

Yet he was more than helpful, for with his arrival, the trial and error process of untangling the facts became easier. Each step and each try was completely outlined to Johntha. Then they would look expectantly at Johntha, who would sit and try to remember. In many cases he would say a definite "No" and the group would outline a next step. When he said "yes" or "maybe" they would perform the experiment and see for themselves.

He was responsible for mountains of equipment, and upon his uncertain knowledge went the word to spend time, money and material.

The months flowed past, and each day saw Terra closer to their success. Johntha still lagged, but he had that which Barry Williams on far-off Tendra did not have—Johntha had the confidence of his contemporaries. They were working on his theory. He had the opportunity of studying as they acted, and study he did, diligently. He lagged, but he learned.

Jim Evans uncovered the facts about the force fields, and the *Star Lady* project took shape. Jim's assistant located the hidden knowledge of the barrier potentials and they were applied, haltingly at first but with firmer decision as time and experience went on.

It was a twofold project. As developments came, they were entered simultaneously in the project to reach the stars and a project to communicate.

And so passed a solid year.

Not too long after that year was marked off, Johntha, Jim Evans, and a corps of assistants huddled down behind a massive barrier, looking through telescopes at the test-stand a mile across the desert. Jim Evans was pouring the power in, and Johntha was reading meters and making recordings.

GRADUALLY the power input rose bit by bit as Evans notched it up, and as the critical level was achieved without stability, then exceeded, and surpassed to a hundred percent factor of safety, Evans took a deep breath.

"We've made it!" he shouted, cutting the power. "We've made it!" He went into an Indian war dance and finally grabbed Johntha by the hands and whirled him around and around. There were cheers from the crew and men congratulating one another.

But Johntha was not too elated, and when Jim Evans' own enthusiasm died slightly, he noticed the sober face of his friend.

"Hey, Barry! We're a howling success. Cheer up, man!"

"It's not fair," muttered Johntha.

Evans sobered instantly. "What isn't?" he demanded.

Johntha smiled wistfully. "Remember what this has all been based upon?"

Evans nodded. "The stuff you told me on that first day after the accident."

Johntha nodded glumly. "I told it to you before I went out, in mind, met the real Barry, and was sent back by him."

"Great guys, both of you!"

"But you don't understand. Earth would have achieved this if Barry had returned at that time. When he sent me back, you were already experimenting, and our work was really over. I've been of help, but far from indispensable."

"And?"

"Had we known, Barry's mind would not be inhabiting my body. Earth would have achieved the stars anyway, and perhaps—well, who knows how far my home planet is from here?"

"I understand," said Evans quietly. "Look, fella. You and I are going out to look for it!"

The days sped swiftly, now, for there was far too much to do. The entire crew went on a sixteen-hour day and a seven-day week, catching sleep when they dropped in their tracks and eating when a tiny breather broke their day.

Jim Evans was tireless, and Johntha went around somewhat helplessly trying to assist. Johntha knew that his job should have been the atomic engines. On straight theory, he was using the right mind, but when the addition of the sub-etheric waves became necessary, his Trendan knowledge had suffered, and he was forced to rely upon Jim Evans' help.

Evans was also running the project of setting up the communications. And Johntha's mind was convinced that all Earthmen were inclined to let nothing stand in their way.

Then at last the *Star Lady* was ready—an erect prolate spheroid of shimmering metal standing on the spaceport awaiting the hand of her master. They entered the ship, and Johntha paused to look at the bronze plaque beside the door. Some attributed this scrutiny to Johntha's personal pride, and few knew that he was paying tribute to the man in whose body he—Johntha—lived.

They entered the ship and closed the door. Then before the eyes of a million people and the lenses of a thousand cameras and iconoscopes, the *Star Lady* disappeared. A swirling column of dust raced in and followed the invisible ship high into the air, and even out into space itself.

A year later they found a discarded candy wrapper in Iran; a scrap of a California newspaper in Siberia; and some semi-tropical leaves—quite dead—on the ice-cap of Antarctica.

Up into space she went and into the blackness. Earth dwindled from a sphere into a lost mote in the distance, and the scintillating sun dwindled in minutes to where they could look into its disc without harming the eyes. Then it blacked out, disappearing with the rest of the stars and the *Star Lady* was arrowing through the vast reach of interstellar space. Time became meaningless as the velocity of the *Star Lady* mounted upwards into the unthinkable velocities that could only be expressed in multiplied functions of the speed of light.

HOURS later, Arcturus streaked past at less than a billion miles. It was a long, almost instantaneous flash, that extended from far ahead to far behind in an insignificant fraction of time and then was gone.

More hours fled by and other stars made their streaks against the sky. Then, satisfied, the *Star Lady* decelerated and came to a relative stop, floating in the void many light years from any star. Her speed was approximately zero with respect to Sol. For the rest, they did not care.

"Now," said Jim Evans, "Let's call home and tell 'em we're cooking with helium!"

Tom Adler grinned and fired up the sub-ether communications job. He toyed with it a bit, and then the tuning indicator illuminated brilliantly.

"Go ahead," he said to Jim. "Have the dubious honor of being the first character to shoot the breeze over a few hundred light years."

"Thanks," drawled Jim. "Shall it be 'What hath God wrought' or 'Guess who I am?'"

"Make it—huh, what's that?"

"Sounds like chop suey to me. Are you on our right band?"

"What's the right band?" asked Adler. "I'd like to know more about this stuff before you tie me down and take to quoting me."

"Well, is it tuned properly?"

"The indicator says we're on a transmitting station."

"Shut up," said Johntha. He listened. The sounds were familiar, and they entered Barry's ears, bypassed Bary's brain, and came to complete understanding with the mind that lived there.

"To Perdition with History," he repeated in English after Johntha had spoken his unhistoric words.

"That's what I've always said," grinned

Evans. "But what—"

"That's—my home planet," Johntha said slowly. "Barry's mind did finish my job—on Trenda."

"*Um!* Sure?"

"I know my own language, don't I?"

"Ought to."

"Can we answer 'em?" asked Johntha. "We can fling out a signal, but unless they're listening to this band, we might as well whistle into space. Go ahead."

"Barry Williams!" called the man into the microphone. "Barry Williams, this is the *Star Lady!*"

They listened, but there was no break in the conversation. "Barry Williams!" called the man again. And again; and again and again.

"Look," said Adler. "Maybe you can understand their chop suey. D'ye expect them to understand yours?"

"One of them will," said Barry.

Jim Evans nodded bleakly. He—understood, finally. He believed, and the evidence hit him with as much force as any physical blow.

Then Johntha said hopelessly, "They're all set up for commercial interplanetary communications. They'll not explore the entire spectrum. Can we match their band?"

"Not from out here. It'll take a re-design job on the transmitter."

"Oh," said Johntha sorrowfully.

"But, blast it, Adler! Slap the direction finder on them! If we can't talk to 'em by 'phone, we'll track 'em down and make 'em listen to us face to face!"

"Check!" said Adler.

CHAPTER XII

Fusion Of The Minds

HASTILY HUNTING around, Jim Evans found a small model of the galaxy.

"This thing has all the precision of a two-dollar spectroscope," Adler growled. "How many light years' error in two percent accuracy is possible from a galactic scale model?"

"Triangulate us into the volume," said Johntha. "From there on, we'll be in fair shape."

"Okay. Evans, here's the first line. G-Twenty-seven; declination south, twelve degrees; Azimuth, one four three; point, two-two-seven. Subtract whichever is the larger—"

"Income tax lizard," growled Evans, running the line through the model.

The *Star Lady* turned on her minor axis and fled at right angles to the previous line of direction. An hour—two—three she sped at many times the speed of light. Then decelerated to stop and make another "fix." A third vector was added to the first two, and the resulting lines enclosed a small volume. Pointing her head down on the last line of the direction, the *Star Lady* packed on the acceleration and arrowed toward Trenda.

More time passed in headlong flight. Then—

Jim Evans scratched his head. "So we're here. How do you make a door to door canvass of a stellar system when no one speaks their language, and only one guy understands theirs?"

"You forget," Barry said with a smile. "This is my home. Follow me!"

Evans looked about the ship. "Uh-huh," he grinned. "We'll be in a mess if we don't. Whither away?"

Across the system went the *Star Lady*. Down upon the third planet it dropped, and it streaked across the sky until Johntha pointed down.

"Right in that back lawn," he said with a chuckle.

The *Star Lady* landed gently. The landing floods burned the scene into almost-daylight, and Johntha and Jim Evans got out of the ship.

"Home!" said Johntha.

"Stop it," said Jim. "You're making my head spin."

"*Your* head?" asked Johntha solemnly. "Stick around, fella. I'm about to shake hands with me!"

On Trenda, Barry Williams had awakened, vaguely troubled, vaguely expectant. Something was about to happen. Bad? He didn't know. Good? He could hope so. But bad or good or indifferent, there was tension—undefinable—something unknown charging the air? Barry did not know what it was.

For the first time since that day so long ago, he missed the opportunity of smoking.

He arose and went out to the library, uncertain of what he wanted. He snapped on a small light and looked at the backs of books.

He was unimpressed, uninterested in any that were there. He went into the kitchen and raided the refrigerator idly, toying with the idea of really setting up a minor meal. That did not interest him too much either. He—heard a noise and turned.

"Vella," he said.

"What's the matter?" she asked.

"I'm vaguely troubled."

"Over what?"

"I don't know."

"An unrest, a worry?"

"Something of that nature," he said to her.

"Anything I can do?"

"I don't know. I'm bewildered."

"Can't sleep?"

He shook his head.

"Might take an opiate," she suggested.

"Afraid to," he laughed nervously. "I might miss—"

"Miss what?"

"Whatever is about to happen."

"Is something about to happen?" she asked, wondering.

HE PUT both hands on her shoulders, and said, "Vella, have you ever felt a foreboding about the future, and you didn't know why?"

She nodded.

"Well, that's it!"

"But what can we do?" she asked. "There's no use in sitting around waiting."

"Vella, whatever happens from here on in, I want you to know that I—"

Lights blazed outside, illuminating the neighborhood. It was as a sudden flash as of lightning, and if there were no sound, Barry's mind supplied the blast of thunder. He forgot to finish what he was saying. He leaped to the window. Then to the door at full speed.

The scene before him struck home. The *Star Lady* surrounded by the diaphanous veil of her own flood lights. He stood in the doorway breathing deeply, his throat choked with emotion. His eyes smarted and tears welled and ran down his cheeks unnoticed.

"Johntha," said Vella, frightened. "What's that ship?"

"This is it," he said in a choked-off tone.

"Barry Williams!" called the foremost figure.

"Johntha!" replied the man in the doorway.

"Johntha, who is that?" breathed Vella.

Trendan and Earthman faced one another uncertainly. "You did it," said the man in the doorway.

The new arrival nodded. "It was not all my doing," he said sadly. "Jim Evans got the details—the evening before you sent me back!"

Evans shook his head. "You shouldn't have dropped that so suddenly," he said.

Vella looked from one to the other. "You—you understand them?"

Her supposed brother nodded. "I understand them—and he understands us."

The newcomer nodded at this.

"You understand me?" she demanded of the Terran.

Again he nodded.

"Can I understand you?"

A shake of the head.

"But who are you?"

Her supposed brother turned, but the stranger said: "If she does not know, wait."

"But why should I wait?"

"Wait for what?" asked Vella. She looked at the stranger and smiled. Barry saw that smile and it hurt. He should be in his own body. Then—but how could it be accomplished.

"Well," said the stranger, hopefully, "we're both famous even if we are a little mixed. I congratulate you!"

"You've done a grand job, Johntha."

Vella took her supposed brother by the shoulders and turned him to face her.

"Just who are you?" she demanded. "You call him Johntha. He understands me, and you understand both of them. Now explain."

"Inside," said Barry, and Johntha translated for the other Earthmen. They all entered the house, and Johntha roamed about the place with easy familiarity.

Then Barry Williams explained, completely, and fully. He omitted nothing, and found that his verbal inertia, once started, swept him through the details of his own feeling for her, through his own fears and heartaches over the *Star Lady* and his worry about the loss of memories. He spent a solid hour at it, and when he was finished, he sat back and said, glumly:

"Now we're finished. A success. Now what?"

BARRY got up from his chair and went to the door to look once more at the

Star Lady. Now, he thought foolishly, he could find out whether the shutters were hinged from above or from either side.

"Look, fella," said Johntha. "There must be some way."

"You name it," said Barry, still looking out of the door with his back to them.

Jim Evans grunted in embarrassed emotion. Here were two of the finest men ever created, caught in their own desire to do right. And between them was a woman, equally at the odd ends of an emotional tangle. For the man she could marry wouldn't treat her in any way but as a brother, while the man who loved her was similarly bound.

The Earthman arose from his easy chair and went over to stand beside the Trendan. "I'm—deeply concerned, Barry," he said.

"So," said the other man, "what can we do about it?" He gave a sour smile of resignation and then looked at the *Star Lady*. "You did a wonderful job."

"Me?" exploded the Terran. "Barry, that's all yours." He slapped the Trendan on the shoulder affectionately.

The contact did it. Both minds were in wrong bodies, and like a captured proton, imprisoned in a potential well, each mind had a definite probability of escape which would reduce the overall potential. Like the twanging of a string, the contact reduced the confining potential of the wells, and the minds, each with greater binding force for the proper body, snapped into their proper places.

At once, Johntha was Johntha and Barry Williams was Barry Williams. They turned back to the other men, and in their faces was the truth.

Jim Evans looked and shook his head gladly. "Well," he said, "we've lost an interpreter."

But the two that really counted did not need an interpreter.

Forecast for the Next Issue

WHEN a couple of exiles from the Space Marines and a group of plant men from Mars and Velos get together, MR. ZYTZTZ GOES TO MARS in the amazing novel of that name by Noel Loomis. An extraordinary bird's-eye view of the future—in a scientifiction treat par excellence!

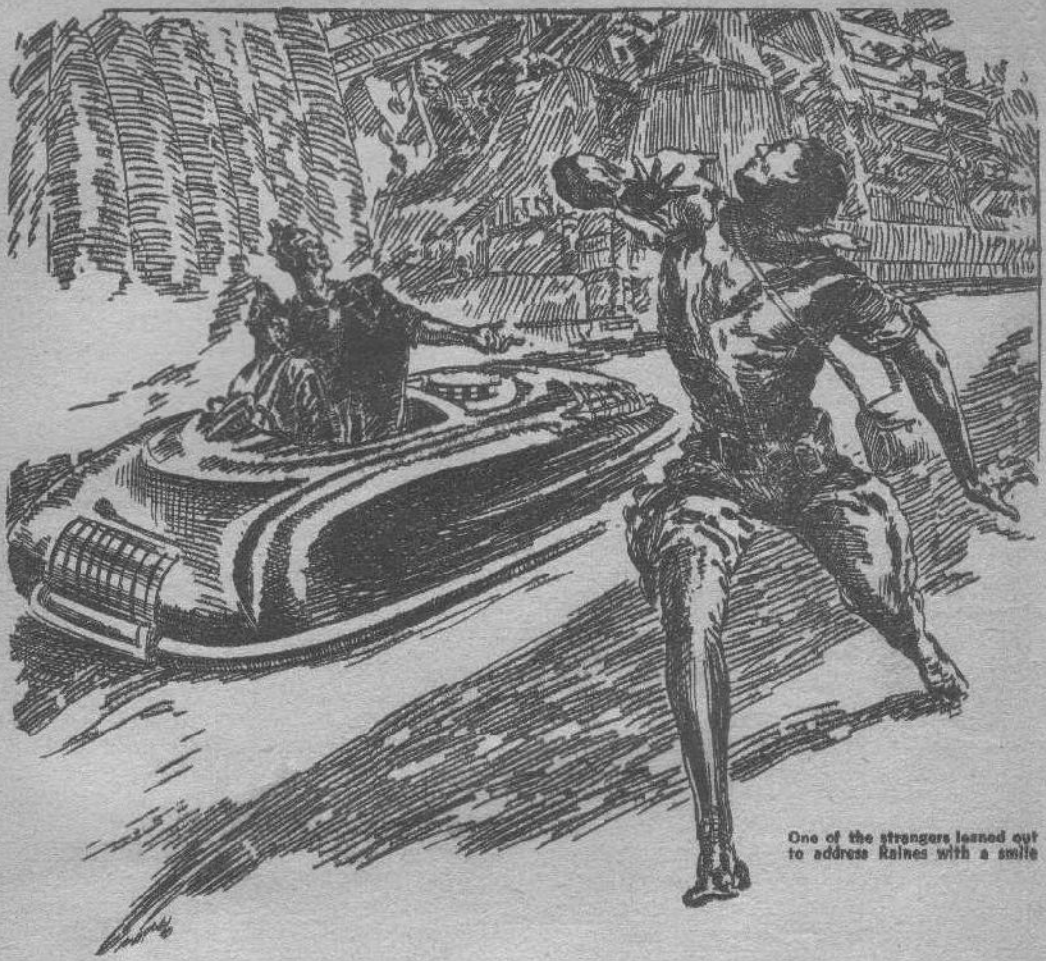
OOPS! The weather again! But—it's June in January in CLIMATE, INCORPORATED, by Wesley Long, when young scientist James Tennis takes the matter in hand in one of the cleverest novelets we've ever offered you!

NOVELTY is the keynote of William Tenn's novelet, THE IONIAN CYCLE, also featured next issue, in which a little knowledge of the facts of life on Earth helps a space crew stranded on a satellite. You'll find this a space-exploring yarn which is truly "different."

DID you know that certain inanimate objects have memories? So many scientists believe —and this thesis is the inspiration of a grand novelet, MEMORY, by Theodore Sturgeon, which completes the roster of next issue's headliners.

ENTERTAINING and unusual short stories, by some of your favorite writers, will, of course, be added to round out an exceptional number packed with distinguished fiction from cover to cover!

READERS, as usual, will have their say in the department—THE READER SPEAKS—a feature which is constantly growing in popularity. All in all, our next issue will be one well worth while—look forward to it!



One of the strangers leaned out to address Raines with a smile

WAY OF ESCAPE

by William F. Temple

Stafford seeks surcease from his worldly cares in a Universe that shares space and time with the Earth!

THE YOUNG MAN leant upon the black-gray parapet gazing up-river towards the Gothic spikes of the Houses of Parliament in silhouette against a yellow and red autumn sunset. Something in his attitude caused Dr. Stafford to pause.

This young man was in a state of extreme tension. He was screwing himself up to go through with something unpleasant. As Stafford watched, the young man, with deliberation, set his right foot upon the ledge of the wall's skirting and placed his hands firmly upon the slightly convex top of the parapet.

At which moment Stafford tapped him on the shoulder and said, "You'll find the water very cold and your struggle in it more protracted and painful than you anticipate."

The young man started, then relaxed and turned. He was not quite so young as Stafford had imagined. He was nearing the middle thirties, there were streaks of gray at his temples and his eyes had a hunted and hopeless look. Nevertheless, he retained something of the self-control of the educated man.

With a certain dignity he answered, "Possibly. But what alternative is there?"

"I can give you an alternative," said Stafford, leaning against the parapet in a conversational attitude.

"I don't think so."

Stafford gave him his card.

"Dr. S. E. Stafford?" said the other man. "Well, my name's Raines. So you're a doctor, eh? Perhaps you *can* give me an alternative. Say an overdose of morphia or veronal."

"I'm a Doctor of Physics," pointed out Stafford.

"Oh—you physicists have something to answer for, with your atomic bombs and rockets." This with some bitterness.

"I did some work on atomic energy," said Stafford, reflectively. "My purpose was partly the curiosity which leads research workers on, partly a desire to release atomic energy to replace man's dwindling resources of coal and gasoline. I had no interest in making big bangs. Only the monkey men among us seem to want to do that."

"Then you should keep such discoveries out of their hands."

"My dear fellow, if an inventor designed such an innocuous thing as a pair of nutcrackers to save these monkeys breaking their jaws, the first thing the monkeys would do would be to find a way of using them to break everyone else's heads. Their reasoning is, you see, that if they didn't, then everyone else would steal their nuts."

"There's plenty of nuts for everyone in the world."

"True. You see that and I see that. But can anyone persuade them to see that? No, they're motivated wholly by greed and suspicion, which in short means fear—fear of loss. You can't persuade people by reason who think on a plane of emotion. You can't get on common ground with them. By the way, you sound much too reasonable a person to be attempting suicide."

"It's because I'm reasonable that I'm committing suicide," said Raines gloomily. "In a fit of temporary sanity. You see, I can't be happy and I can't work—I'm an artist—unless I have peace of mind.

"This world has become fear obsessed. You can't escape the atmosphere. Everyone about you is nursing some fear or collection of fears. Fear of poverty, fear of loss of money or health or employment. Fear of criticism, fear of failure in the success race to accumulate money, power, prestige."

"Think you're exaggerating," said Stafford.

The other ignored him, and continued: "Overriding everything, the fear of yet another world war. I can't feel that my life or my work mean anything at all with the threat of an atomic rocket dropping on it at any moment. And that's what your unteachable monkeys are going to do, you know. Their nature is unalterable. I'm sick—*sick!*" he repeated savagely, "of living under the sword of Damocles."

"Most of your generation must be, with two world wars within only half a lifetime and another already threatening. So you are seeking peace of mind in death? Don't you think there are any other ways of escape?"

"No," said Raines. "No good dodging off to remote Pacific islands in the next war. It wasn't much good in the last. There'll be no safe place in the world next time. There'll even be air battles over the North Pole. It'll be touch and go whether some fools don't manage to blow the whole planet apart."

"Quite," said Stafford. "You've hit upon my own fear obsession there. I feel much as you do. I want some place to continue my research work in peace and with some assurance of time to get results. And I don't want it monkeyed with any more. I think I may have found such a place. If you would accompany me home, I'll explain."

Raines hesitated.

"You've nothing to lose and that water's still cold," said Stafford.

"All right then," said Raines, slowly.

STAFFORD'S home was an ugly but roomy house in one of the squares south of the Euston Road. Most of the basement had been knocked into a private workshop. The rest of the house above it was one great mass of books, in which small

areas had been cleared to fit in a few chairs, a table, and a couple of beds. Stafford shared the house with a friend, a philosopher named Cornman, and the pair of them lived like mice gnawing out their own living space.

Cornman had a low forehead, heavy, prominent brows, brown eyes deep-set and huge bowed shoulders. At first glance he might well have been one of those classed by Stafford as "monkeys." In actual fact, he was the antithesis. Moreover, he had a sense of humor—indeed, it was the thing he prized above all his considerable intellectual gifts.

When he heard Stafford's introduction and explanation of Raines he laughed deeply, like an operatic Mephistopheles.

"My friend," he addressed Raines, "you take life too seriously. Everybody does. It's all very funny if you stand back far enough to get a view of things whole. The world's a circus. And man is a mixture of trained seal, trapeze artist, wild animal and clown. Mostly clown.

"The spectacle of him getting up to the most elaborate and ingenious dodges with an air of immense seriousness, dignity and self-righteousness, to avoid looking any facts in the face, is an inexhaustible amusement."

"Perhaps it was once," said Raines. "Nowadays he doesn't throw custard pies but atomic and bacteriological bombs and the audience gets the benefit of them too."

"All the more fun," said Cornman, with a deep chuckle.

"We don't happen to be philosophers, Corny," said Stafford. "We want to go somewhere and work quietly. Otherwise our lives don't mean a thing. Raines here doesn't think there's anywhere to go. As you know I think there is."

"If you're thinking of rocketing to another planet in the Solar System," said Raines, "you might as well forget it. It won't be long before our monkeys come rocketing after you, bringing their circus."

"My idea," said Stafford, seating himself on a pile of volumes of a technical dictionary, "is that of an escape through time."

"Past or future?" queried Raines and added, "Not that it matters. I'm convinced that time travel is paradoxical and quite impossible in a physical sense. And I can't paint pictures in my astral body, you know."

"I believe time to be intermittent," said Stafford. "Its smooth continuity is only an illusion through the manner of presentation, like the separate pictures on a movie film. I believe we exist in a series of spasms.

"One minute the world and all its beings is there. Then it's plunged into complete nonexistence for a spell. Then abruptly it exists again. And so on. Naturally, we are only cognizant of the spells during which we exist. Thus our existence seems continuous to us."

"Quite an interesting little theory, but I can't see that you can get any facts to substantiate it," commented Raines.

"Are you a mathematician?" asked Stafford and Raines shook his head.

"Pity," said Stafford. "I've worked out a beautiful thesis to prove that the nature of time, like light and gravitation, is electromagnetic. A wave motion, as it were, and we exist on the crests of the waves but not in the troughs."

Cornman laughed abruptly at some fancy and sang in a rumbling bass, "My bonny lies over the ocean . . ."

"Assuming it to be true, then what about it?" asked Raines, a little impatiently. "I still don't see—"

Cornman broke off his song to interrupt, "Can't you perceive, my dear young man, that Moses here believes that the Promised Land lies in the interstices of the time we know? A sort of jigsaw puzzle world fitted into the gaps of ours."

RAINES looked questioningly at Stafford. The latter smiled rather deprecatingly.

"In general, that's the idea," he said. "We exist for a space, then don't for a space. Immediately we cease to exist, another world flashes into existence. Then it in its turn ceases to exist, while we flash back for our period again, and so on alternately. Both worlds imagine their own time is continuous and unbroken."

"H'm," said Raines, thoughtfully. "An ingenious extension of your theory but still—no facts."

"And that's where you're wrong," said Stafford, rising. "Come and see my machine."

He led Raines along a passage to a room on the ground floor. Cornman followed them leisurely, lighting a big black cigar.

The room contained nothing but an ebonite control panel on a makeshift table—a circular black pedestal in the center of the

floor, a few inches high and a couple of feet in diameter, surrounded by a ring of bright copper—and a twin to this pedestal, but inverted, fixed to the ceiling directly above it. A delta of cables from the panel were gathered into a bunch and thrust through a hole in the bare plank flooring.

Pointing the latter out, Stafford said: "They go to my power units in the basement. That's where the bulk of the machine is really. But this converter here is the important part. It has to be on ground level, for it seems that ground level is the same in the other world as here. If I had put this downstairs with the rest, then passengers converted to the other time would also be converted into corpses interred in the ground."

"Without even a burial service," put in Cornman, complacently.

"I'm not going into details about this, for it would take a layman a month of Sundays to get even a glimmering of what happens," said Stafford. "Briefly, any person placed on that black disc can be subjected to a barrage of electro-magnetic waves of exactly opposite pitch, though of similar intensity, to those which at present determine his existence.

"As is well-known in physics two opposing wave systems will cancel out into a uniform line. That is, non-existence. Non-existence is the frontier between our world and this other. When that is attained, it only needs a slight push or boost of power for the subject to be edged over the border and be caught up by the other time system."

"That'll do," said Raines. "Technicalities bore me I take it you want to use me as a guinea pig?"

"Oh, the thing works all right," said Stafford, rather quickly. "Only—"

"Only Stafford is a scientist," said Cornman drily. "He doesn't approve of blind risks. He likes to make doubly sure that he is standing on firm ground before he takes the next step. The scientific method, they call it."

"It's merely that I don't want to step out of the frying pan into the fire," said Stafford. "I'm the only person who knows this machine well enough to operate it. It needs hair-trigger adjustment and lightning handling. If I send anyone through it I can bring them back. But if I got anyone to send me through it it would be most unlikely that they could bring me back.

"Once anyone has crossed the border, so to speak, it's the deuce to get them back on our wave crests. They will stay there for the rest of their lives if the operation is not performed faultlessly. When I make the trip I shall be committed."

"You intend to go then?" asked Raines.

"It depends. I want to take all my manuscripts with me and settle down in this other world to continue my research. But first I want to make certain it will be possible to settle down there. I want to know what sort of people they are."

"I don't think there's enough meat on you to tempt a cannibal," said Cornman, humorously.

"What makes you think there are people there?" asked Raines. "Come to that, you haven't even convinced me that there is another world."

STAFFORD rummaged in a drawer in the table supporting the control panel. He found a thin wad of photographs and passed them to Raines. As the latter looked through them, Stafford explained.

"I have sent various objects into that world and brought them back. First a chronometer, to determine the wave-pitch, as it were—that is, the duration of the intervals of our alternating existences. It turned out to be surprisingly long.

"You'll be interested to learn that every twenty-two days, four hours, eleven minutes, forty-three seconds this world of ours ceases to exist for just that same length of time. Only, as we cease to exist too, we don't notice it. Next, I sent a camera through several times, with a delayed action shutter set for a different delay each time. You'll notice that some of those photos are taken in daylight and others at night."

Raines studied them. The site of the camera was obviously always the same, but not the direction it was facing. This site seemed to be somewhere on a rolling grassy plain set with rare trees. About two miles distant was a city walled on the scale of ancient Babylon. But the towers showing above the mighty walls were certainly not Babylonian. They were of bright metal and many-windowed.

The night views showed these windows lighted and a little thrill went through Raines when he realized that this probably meant the city was inhabited. Who were the inhabitants? What kind of life were

they? A sense of wonder grew and possessed him.

He became a child again with an imaginative inward eye, gazing upon the strange and glittering worlds evoked by Wells. It made it the more exciting to realize that this was no tale of fantasy. These photographs he held in his hands were actual views of another world, hitherto unseen and unsuspected by man.

Some of the views showed a white, wide road curving across the plain towards the city. On one of them the camera had caught a small open car of some sort on the road. There were two small black dots showing above the top of the car. The heads of the occupants? It looked remarkably like it.

Raines had come out of his weary indifference. He was really interested now.

"This is worth investigating," he said. "I wonder if the atmosphere there is breathable for us?"

"It is," said Stafford. "I sent three rabbits across. I got two of them back in the best of health. They had fed well on the grass. The third was dead."

"Dead?"

"Yes. It had obviously wandered on to the road and been run over by some vehicle. The mark of the wheel was plain upon it." He picked up a glass flask with a clockwork mechanism bound to it.

"I've been sending through gadgets like these to get samples of the air," he continued. "First creating a vacuum in the flask, of course. The clockwork is a time mechanism which unstops the flask, then stops it up again.

"I've got a gauge fixed to one of them. It shows the atmospheric pressure to be the same as ours—fourteen and a half pounds per square inch. And the composition is much the same. It's rather purer, in fact."

"Could you demonstrate sending and getting back one of those things?" asked Raines.

"There are only set times for such demonstrations as that," said Stafford. "They occur every twenty-two days, four hours, eleven minutes, forty-three seconds. That is, at the very end of our period of existence and the beginning of the next world's turn. At this moment I could only send the flask into non-existence for just now the other world is non-existent. The next switch moment actually occurs tomorrow morning at ten-four. I was hoping—"

"You were hoping to send me, and not just a flask," said Raines. "Otherwise you'll have to wait another twenty-two days to send me. It's all right. I don't really need any demonstrations. If the machine finishes me it will save the Thames the job."

"That's what Stafford thought," said Cornman with a sort of benign bluntness.

AT THREE MINUTES past ten the next morning Raines, carrying satchels of concentrated food sufficient for three weeks, a slung water bottle, toilet articles and a sketch-book (he had refused to take weapons), mounted the black pedestal.

"Let me get this clear before I go," he said. "You are sending me for just one interval, that is, for the pitch of one wave—twenty-two days. And it doesn't matter where I wander in the other world, this thing will snatch me back to this spot."

"If I can manipulate the controls correctly," said Stafford, his gaze fastened upon a chronometer, his hands poised. "I haven't failed yet. Seven seconds to go."

"Right. Shoot," said Raines.

"Our roving reporter—" began Cornman, and was interrupted by the deafening whipping and cracking of blue-white electric flashes darting up and down twisted paths through the air between the copper ring on the floor and its opposite number on the ceiling.

Cornman turned his eyes from the brilliance, and glimpsed Stafford, his face tense with concentration, running his fingers like a high-speed typist over sliding resistances, buttons, switches and the milled knobs of dials. Just for a second or so—then Stafford froze, the cracking ceased with a snap that banished the leaping shadows.

And Cornman became aware that his ears were ringing and that there was a smell of ozone. Because of this temporary deafness, Raines' voice sounded faint to him. He didn't get the import of it. It sounded like "Idlmstfgtnidtcmbk."

He swung round and blinked to behold Raines standing on the little pedestal in a long robe of a yellow so vivid it almost stabbed the eye. Raines had grown a little pointed beard, he was smiling, his eyes were full of a serene amusement. He stepped down and gripped Stafford's hand.

"It's great!" he said enthusiastically. "You'll have to come over there. I never dreamed before that such bliss was possible."

Stafford's tired eyes lighted up.

"Nothing to worry about?" he asked.

"Worry!" said Raines with a snort. "Nobody there knows the meaning of the word. Hello, Cornman, heard any good jokes lately?"

"Hello," responded Cornman. "What was that word you used the moment you arrived? Something in your blissful friends' language?"

"Their language is English," smiled Raines. "Only through usage it has developed into a kind of verbal shorthand. The vowels have mostly been dropped, and more degrees of expression put into the consonants. Civilization speeds up thought processes.

"People here are already thinking faster than they can speak. It's logical to expect speech to take short cuts. What I said was 'I had almost forgotten I had to come back.' Believe it or not, I've got so in the way of speaking like that these last few weeks that I feel I am speaking painfully slowly and deliberately now."

"Let's go and sit down in the other room and let you tell us the story," said Stafford. "I take it this other world is higher up the scale of civilization than ours?" he flung over his shoulder as he led the way.

"Way up," said Raines.

"Things swam about me for a moment," said Raines, beginning his narrative. "I seemed to drop a few inches—the height of the pedestal, I expect—and then I found myself standing on that grassy plain shown in your photo in bright sunlight. And there was the walled city, a couple of miles away.

"The road was but a hundred yards off. I gained it and started walking towards the city. Apart from the unusual design of the city, there was no sense of being on another planet. The gravitation, air and natural scenery were the same as here in England. I judged that the planet which kept changing places with the Earth was in general identical to it. It remained to be seen how the inhabitants compared.

"It didn't remain long. I had barely covered a quarter of a mile before I saw a little car—like that in the photo—speeding towards me from the city. I stopped and waited for it.

"It overshot me by twenty yards. I glimpsed a couple of men in it arrayed in scarlet robes, like cardinals. It stopped. The men in it did something which caused their seats to swivel around, and this obviated the necessity of turning the car, for it came slowly back to me, and what had been its rear was now its front."

HE PAUSED, then resumed his story.

"The men were just like any other men, except that they looked much better humored. None of the tense frowning you see all the time in the streets of our cities. The only lines on their faces were the lines of laughter.

"One of them leaned out and addressed me with a smile. 'Hooru.'

"It sounded vaguely like 'Who are you?', so I answered, 'My name is Raines. I have come from another world. What do you call this place?'

"Obviously they didn't comprehend a word of it. They smiled at one another and motioned me to a sort of high dicky seat which had sprung up at the back of the car. Then we set off at a swift pace for the city.

"The city gate was just like a great roller blind. It rolled up at our approach and we shot underneath it and through the fairly populous streets without slackening speed. The buildings reared above us like skyscrapers. There were no sidewalks. People, all in differently colored but always vivid, robes, seemed to be walking just where they pleased, paying no heed to the traffic, of which there was little enough.

"We were spinning round corners so fast that several times I nearly shot off my seat. I was scared, and yelled to the driver to slow down. Both men merely looked at me in puzzlement. One pedestrian, a tall chap in a yellow robe like mine, walked slap in front of our bonnet. He saw us. He could have avoided us. I believe we could have avoided him. There was a slight jar, a bump, and looking back I saw him lying in the road. Only his robe was yellow and crimson.

"And the two men in my car were grinning at each other! I felt sick. What mad and murderous people were these, I wondered?

"We stopped at a tall white building. In a few minutes I was shown into a room somewhere near the top of it with a view over the city and the surrounding plain. The two men retired, leaving me alone. Presently the door opened, and in came a portly gray-haired fellow in a robe of startling orange. He sat himself comfortably oppo-

site me, and began what I presumed to be an interrogation.

"I said, 'I'm sorry but I don't understand your language. You don't, by any chance, happen to have heard of English?'

" 'English?' he echoed, and rattled off again. He stopped when he saw that I wasn't getting any of it. 'Why do you speak archaic English?' he asked, suddenly and surprisingly.

" 'This is the only English I know,' I said.

"He smiled. 'Then it's lucky I have made it my hobby. I was asking who you were and where you came from.'

" 'It's a story you'll hardly credit,' I said and told him how and why I was visiting his world. I was amazed that he accepted it all without expressing any doubt. He asked more about Earth, its inhabitants and their behavior. Then he settled himself to give me a long account of his world.

"In brief, it amounted to this—their world is nearly a twin of our own. Although the two worlds had developed side by side in time, as it were, theirs had gained about a thousand years on us. There must be some small difference in the intervals for some reason or other, possibly only a single second. But the aggregate over thousands of millions of years amounted to a thousand years.

"In effect their world is what this one will be in a thousand years' time if it continues to follow a parallel course—which, mark you, it has done so far undeviatingly.

"I was in a town called London—or 'Lndn' in their speedier English—round about two thousand nine hundred forty-seven A. D. There had been a Third World War—quite as nice a mess as we visualized, except that the planet managed to remain in one piece. But no nation did.

"All that was left afterwards were a few globally scattered strong points—vast, thick-walled fortresses, having no contact with each other, and harboring displaced persons thrown together by chance in the total world upheaval.

"From these grew up a system of walled cities, widely separated, each sufficient unto itself, each in deadly fear of attack from other cities and in a perpetual state of alert defense. Most cities had a radar system which detected the presence of any unknown persons or objects approaching the city by any means. I myself had been detected at once on the radar screens, surveyed through telescopes and a car dispatched to bring me in for interrogation.

" 'Though that was merely through force of habit and curiosity,' said the man in the orange robe—his name was Tmsn. 'We did not fear you. We don't fear anybody or anything any longer. Fear has been abolished and war has gone with it.' "

RAINES paused again—briefly.

"Tmsn elucidated this statement. In the walled fear-haunted city of Lndn after the Third World War a body of wise men set themselves to answer the question—'Why, if all men hate war and only wish to work and pursue happiness in peace, do they keep starting wars?'

"The answer, they decided, was because man was still saddled with the brain of an animal, a beast of prey, with the impulse to turn and rend everything that threatened it. While man was still a beast that blind sense of self-preservation was natural and fitting. But man had one fundamental and growing difference from the beasts—an imagination.

"Unfortunately this imagination was tethered to his impulse to attack threatening things. He began to see threats that weren't there at all—they were only in his leaping, anticipating imagination. He began to fear the attack phantasms in his own mind and gave them the flesh of other people, other tribes, other nations.

"The wise men decided that this unholy union of fear and imagination had to be broken. One or the other had to be cut out if man was to have any future at all. To cut out imagination meant to return to the beast. They decided to cut out fear.

"Upon analysis they found fear, worry, hatred and rage were all disguises of just one thing—doubt. Doubt of one's own ability to be equal to any threatening thing brought a surge of adrenalin from the glands into the bloodstream to supply fighting energy to tackle the threat, imagined or otherwise. And when men were charged with this fighting energy wars began of themselves.

"This doubt center of the mind, they found, was located in the frontal lobes of the brain. Hunting in the records they found reports of a brain operation current in war neurosis cases during and after the Second World War. It consisted merely of severing the white nerves joining the frontal lobes of

the rest of the brain.

"There was a Scottish surgeon who had specialized in the operation—the newspapers and journals of the end of the war period gave much space to it. The shell-shocked people, the war neurosis cases, were simply men distracted by doubt. Most of these people worried themselves ill fighting the enemies of their own imagination. A threat is just as real as you imagine it to be.

"The operation cut out that doubting. It brought unity, which meant peace of mind, to the patients. They became happy, good-humored, self-confident, unmalicious people. Some of them had speech and hearing centers slightly affected. That was because of the clumsy surgical tools employed—a gimlet and a knife.

"'Nowadays,' said Tmsn, 'we use heat and burn away the nerves painlessly, with no boring or cutting. We don't even break the skin. It's merely a matter of getting a fix on the part to be removed by crossing two narrow electronic beams there. Also, the early, crude operations often brought on symptoms of fatness and lethargy. Obviously because fear no longer stimulated the glands to function. So now we make a little adjustment to the thyroid gland.'

"He went on, 'The practise of this operation spread and has now become compulsory all over the world. We are a happy, confident people. We know war is finished now. As for the ordinary bothers of life as your people live it, we care no more than the lilies of the field.

"'You will not find here people worrying because they've got to get to a certain place by a certain time or do anything by a certain time. No one worries about time in the least. Nobody worries about his health, so everyone is healthy. Most illnesses are products of worry.

"'Nobody worries if there isn't enough food—they just help themselves to other people's. The other people don't care. If they starve they don't care—you only die once.

"'You won't find people caring what others think of them or their work. There is no fear of criticism. In your world most people love bright colors but they're afraid to wear them. As you may have noticed we are not afraid. We are free people.'

"I asked him the meaning of the incident of our car callously running down a harmless pedestrian. He laughed.

"'Such things are fairly common,' he said. 'Only somebody from your sick world would think comment necessary. The fellow didn't doubt that he could get across the road before the car got to him. The fact that he didn't doesn't mean a thing. He just didn't, that's all. I'm certain it didn't worry him in the least. No more than it would have worried me. Or you, after we have cured you.'

"'What!' I exclaimed.

"'As I've said, this lobular operation is compulsory for all in this world. You're in it now. *Ergo*—'

"'But I don't want to be operated on.'

"'Of course not. You fear it. That's a symptom of your illness. After the operation you'll wonder how you could have objected.'

"'How dare you presume to operate on me against my will! This is dictatorship. I won't have it,' I cried.

"'In your world," said Tmsn, 'school doctors remove septic tonsils against the children's wishes. They realize they are doing it for the children's own good and the children's objections literally are—childish.'

"'I'm not childish.'

"'You are. Your whole world is. That's what's wrong with it. For your own good, we are going to give you treatment.'

"Well, they operated. And then I saw what a fool I had been to fear it. There was nothing to fear anymore. What a great part of my life had been wasted in futile worrying! Everything became easy to me now that there was no crippling doubt. Here, look at my sketch-book."

HE DRAGGED it out of a capacious inner pocket and tossed it to Stafford, who glanced through it with a deepening frown.

"I filled that in a day," said Raines. "I drew with swift confident lines. Before, I used to think genius meant taking infinite pains. I spent half of my time erasing. I never had to erase a line of that. I was sure and unerring in every stroke.

"I studied the abbreviated English, too, and mastered it in a few days. Study is easy if the mind is cleared of doubt. The memory is infallible. You only forget if you fear you will forget."

"And what do you propose doing now?" asked Cornman.

Raines stood up. "I'm going to see all the influential people here I can. Newspaper editors and proprietors, politicians, doctors,

surgeons. I'll soon persuade them that everyone should have this brain operation. It'll end war for good and all and bring man perfect peace at last. Here begins the millennium!"

He marched towards the door and paused to call to Stafford, who was now staring gloomily out of the window, "I'll be back in three weeks. Have no doubt of it. We'll take the next trip together."

He was gone.

Stafford had a pantomimic glimpse of him striding down the road in his flying yellow robe, singing joyously.

"H'm," grunted Cornman, turning the leaves of the sketch book. "I don't think our friend has much future as an artist. This stuff looks like the work of a five-year-old. In fact, I take a poor view of his future altogether in this world. He won't last long if he continues to have no doubt that he has the right of way over six-wheeler buses."

He gave a laugh that seemed to come from his chest.

"Well, there you are, Stafford," he rumbled on. "The choice is between living in a fool's paradise or a sane man's hell."

Stafford started to say something, stifled it, then turned on his heel and walked out.

It was early evening, and still Stafford had not returned.

Cornman went alone to a café to have the meal he usually shared with Stafford. As he sat at the table smoking his after dinner cigar and reading the evening paper, his eye alighted upon a paragraph.

MAN DROWNS IN RESCUE ATTEMPT

Shortly after noon today an unknown man, aged about 35, was drowned in a spectacular attempt to rescue Mr. R. H. Strongarm, well-known director of United Armaments, Ltd., who had accidentally fallen from his motor launch as it passed under Waterloo Bridge.

According to witnesses, the unknown man, who wore a full-length robe of bright yellow and who is suspected of having been a member of some strange religious sect, without a moment's hesitation dived headlong from the bridge in an attempt to rescue Mr. Strongarm. After a few moments it became obvious that the would-be rescuer had no idea of how to swim, and soon sank and was not seen again.

Mr. Strongarm, who was rescued by a patrol boat of the River Police, said: "I have never seen such courage. It is a great pity the man did not live to realize that he had attempted to save a life—I say this with all modesty—of such importance to our national security.

CORNMAN'S guffaw made other diners turn to stare at him. He got up and left, hoping to find Stafford at home so that he could amuse him with this delicious piece of irony.

The man waiting at home for him was not Stafford but a police sergeant. The sergeant asked him when he had last seen Stafford, made other pertinent inquiries and finally revealed that Stafford had been fished out of the Thames, dead.

"He jumped from the Embankment," said the sergeant. "People saw him from a distance but couldn't get there in time to save him. He left this note for you, Mr. Cornman, on the parapet."

He handed Cornman a folded piece of paper. Cornman read the pencilled scrawl on it.

Dear Old Corny,

I've walked the streets for hours but I can see no way out except this one. That other world is worse than useless to me. How can I conduct my research if my critical faculty is to be destroyed?

That was how Raines was destroyed as an artist.

My work means everything to me. But it is impossible to adhere to the scientific method without the element of doubt. All science has been built up laboriously on a system of doubting, doubting, doubting, until a theory has been accepted as almost beyond doubt. But never wholly beyond doubt, for that is against the spirit of science.

Science must forever doubt that it has final knowledge.

But the system of trial and error falls to pieces if you will admit to no error. Progress, except for absolute flukes, is impossible. And progress in this present world of ours, it seems, is impossible too.

I'm getting out.

It will, I'm sure, amuse you to learn that I'm jumping into the Thames from that very spot where only yesterday I restrained Raines from performing this act of sanity. I can almost hear you laughing.

Your old friend,
Stafford.

But Cornman found it difficult to laugh that night alone amid the labyrinth of books. He missed Stafford's company. He felt lonely and unhappy—and insecure.

Fighting men respect you when you wear this patch

Complete strangers will come up and shake your hand when they see you wearing the shoulder patch of the Third Armored Division. Some will be soldiers. Some civilians. They'll always look at you with respect and say, "The Spearhead, eh? I was with 'em overseas."

They'll be thinking of the heroic days when the Third Armored led the attack of the First Army in Normandy, and so became known as "The Spearhead Division." They'll be thinking of all the division's "firsts"—first to enter Germany. First to capture a German city. Many other great achievements.

That's what it means to wear the famous shoulder patch and looped cord of the Belgian Fourragere that marks men of the Third Armored.

If you enlist in the Army Combat Forces, you'll get your training in this or one of three other famous divisions. During basic training you'll wear their insignia. Later you'll learn one of a wide range of valuable skills and trades. A 3-year enlistment enables you to select your arm or service. If you are 17 to 34 and can measure up to the high standards of a Combat Soldier, choose the Infantry, Artillery or Armored Cavalry! Get details at your nearest Army and Air Force Recruiting Station.

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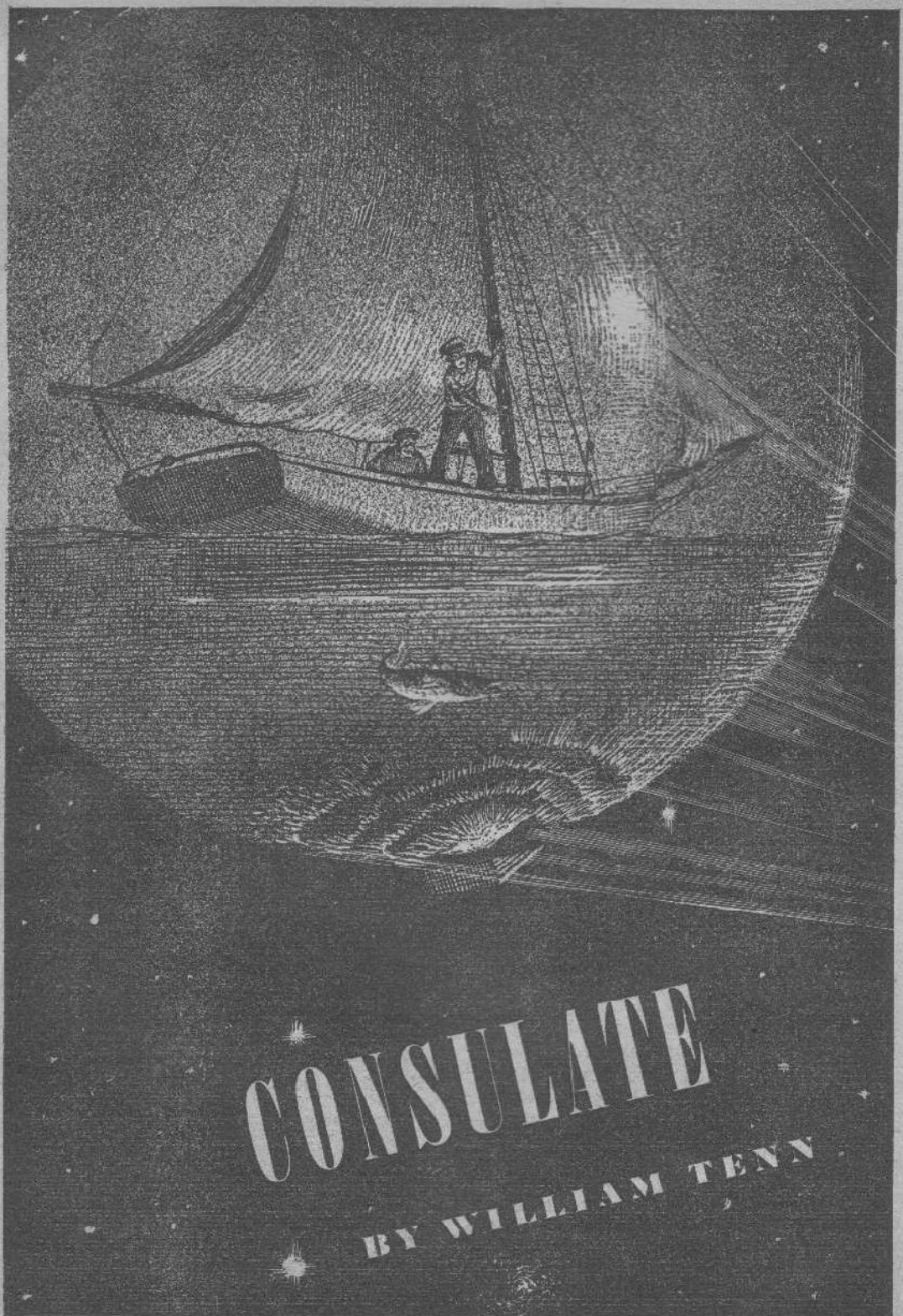

CONSULATE
BY WILLIAM TENN

The Martians send an expedition to Earth to collect some specimens—and they pick up Paul Garland, the New England storekeeper, and his buddy Fatty Myers!

A NOVELET

CHAPTER I

Sail in the Sloop

I SEE by the papers where Professor Fronac says that interplanetary travel will have to go through what he calls a period of incubation. He says that after reaching the moon, we now have hit so many new problems that we must sit down and puzzle out new theories to fit them before we can build a ship that will get us to Venus or Mars.

Of course, the Army and Navy are supervising all rocket experiments these days, and the professor's remarks are censored by them. That makes his speeches hard to understand.

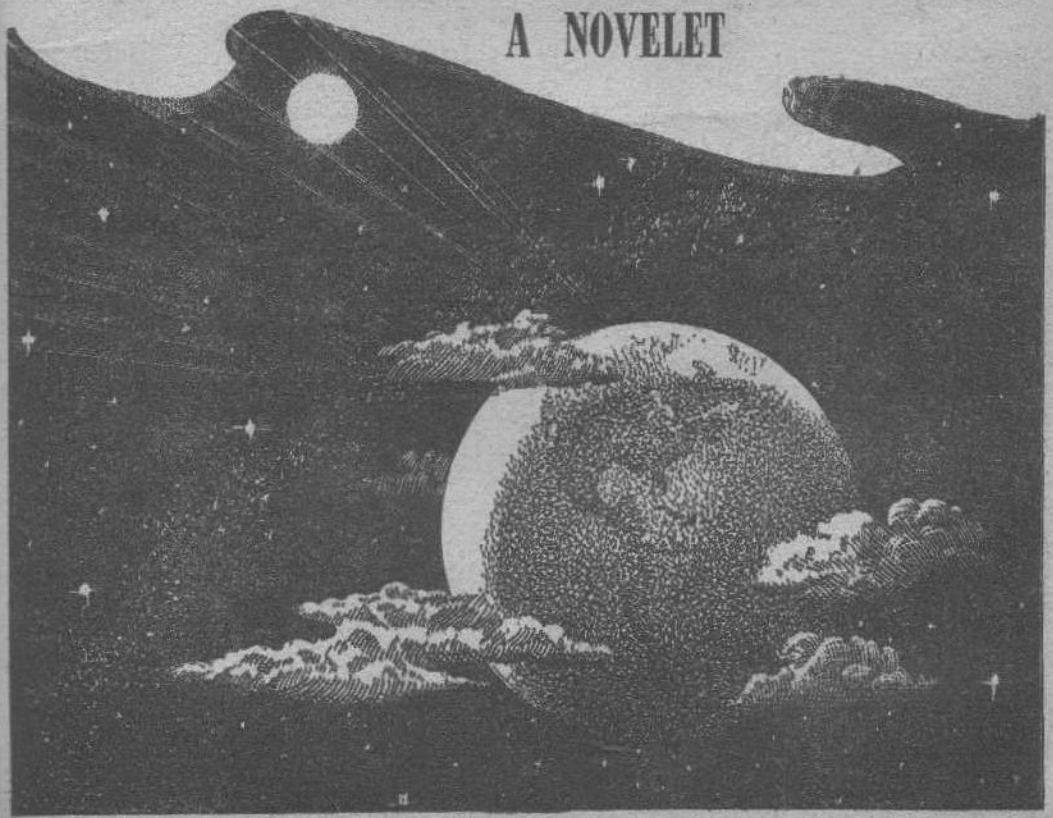
But you know and I know what Professor Fronac is really saying.

The Second Martian Expedition was a complete flop. Just like the First Martian Expedition and the Venusian ones. The ships came back with all the machinery working fine and all the crews grinning with health.

But they hadn't been to Mars. They couldn't make it.

The professor goes on to say how wonderful it is that science is so wonderful, because no matter how great the obstacles, the good old scientific approach will eventually overcome them. This, he claims, is the drawing of unprejudiced conclusions from all the data available.

Well, if that's what Professor Fronac



really believes, he sure didn't act like it last August when I went all the way to Arizona to tell him just what he'd been doing wrong in those latest rocket experiments. Let me tell you, even if I am only a small-town grocer and he's a big physics professor with a Nobel Prize under his belt, he had no call to threaten me with a jail sentence just because I slipped past the Army guards at the field and hid in his bedroom! I was there only because I wanted to tell him he was on the wrong track.

If it hadn't been for poor "Fatty" Myers and that option on the Winthrop store which he's going to lose by Christmas, I'd have walked out on the whole business right then and kept my mouth shut. After all, it's no skin off my nose if we never go any further than the moon. I'm happier right here on *terra firma*, and I do mean *terra*. But, if I convince scientists, maybe I'll convince Edna.

SO, for the last time, Professor Fronac and anybody else who's interested—if you really want to go places in the Solar System, you have to come down here to Massachusetts. You have to take a boat out on Cassowary Cove at night, every night, and wait. I'll help if you act halfway decent—and I'm sure Fatty Myers will do what he can—but it'll still add up to a whole lot of patience. Shoin wasn't dreefed in a riz. So they say.

Fatty had just told his assistant to take charge of the gas station that evening in March and walked slowly past the Winthrop store up to my grocery window. He waited till my wife was busy with a customer; then he caught my eye and pointed at his watch.

I shucked off my apron and pulled the heavy black sweater over my head. I had my raincoat in one hand and my fishing tackle in the other, and was just tip-toeing out when Edna saw me.

She came boiling around the counter and blocked the door with her right arm. "And where do you think you're going and leaving me to do the work of two?" she asked in that special sin-chasing voice she saves for my tip-toeing moments.

"Aw, Edna!" I said, trying to work up a grin. "I told you. Fatty's bought a new thirty-foot sloop he wants me to make sure will be in shape for the tourist trade this summer. It's dangerous for one man to sail a new boat alone at night."

"It's twice as dangerous for him with you along." She glared the grin off my face. "For the past thirty years, ever since we graduated from school, one unfailing recipe for trouble has been Paul Garland and Fatty Myers doing anything together. I still haven't forgotten the time he came over to help you install the new gas heater in our basement. You were in the hospital for five weeks and the street still looks crooked."

"The flashlight went out, Edna, and Fatty just struck a match to—"

"And what about the time, Mr. Garland," Louisa Capek, the customer, hit me from behind, "that you and Mr. Myers volunteered to shingle the church roof and fell through it on top of the minister? For eight Sundays he had to deliver sermons with his back in a cast and every one of them 'answering a fool according to his folly!'"

"How were we to know the beams were rotten? We volunteered for the job."

"You're not going, and that's final," Edna came in fast with the finisher. "So you might as well get that sweater off and the apron back on and start uncrating those cans of sardines. The two of you out on Cassowary Cove at night in a sailboat might bring on anything, including a tidal wave."

I gave Fatty the high sign, and he opened the door and squeezed in just as we had agreed he'd do in case I had trouble getting away.

"Hello, Edna and Miss Capek," he said in that cheerful belly-voice of his. "Every time I see how beautiful you look, Edna, I could kick myself around town for letting Paul steal you away from me. Ready, Paul? Paul and I are going to do a spot of fishing tonight. Maybe we can bring a nice four-pound fish back to you. Do you think you could fit it into one of those pots I gave you last Christmas, hey?"

My wife cocked her head and studied him. "Well, I think I could. But you won't be out past midnight?"

"Have him back by eleven—word of honor," Fatty promised as he grabbed me and squeezed back through the doorway.

"Remember, Paul!" Edna called after me. "Eleven o'clock! And you needn't come home if you're ten minutes late!"

That's the kind of pal Fatty was. Any wonder that I knock myself out trying to get this story told where it'll do the most good? Of course, he and Edna had been kind of sweet on each other back in school

and it had been nip and tuck between us which one she'd marry. No one knew till we both got drunk at Louisa Capek's birthday party that we'd settled the problem, Fatty and I, by each catching a frog out of the creek and jumping them. Mine jumped the furthest—nine and a half feet—so I got Edna. Fatty stayed single and got fatter.

While he was starting the car, Fatty asked me what I thought of the Winthrop store as a buy for nine thousand. The Winthrop store was a big radio and electrical gadget place between my grocery and Fatty's corner service station.

I TOLD him I thought it was a good buy for nine thousand if anyone who had the money wanted such a place.

"Well, *I* want it, Paul. I just paid old man Winthrop five hundred dollars for an option until Christmas. Between what I have in the bank and a mortgage I think I can raise on my service station, I'll have the rest. It's the coming thing in the new age."

"What's the coming thing in what new age?"

"All those scientific gadgets. The Army has just announced it's established a base on the moon and they're going to equip it with a radio transmitter. Think of it, Paul! In a little while, we'll be getting radio programs from the moon! Then, we'll be tuning in on the latest news from Mars and Venus, the latest exploration on Mercury, the latest discovery on Pluto. People will be crazy to buy the new sets they'll need to receive that distance, kids'll be fooling around with all the new gimmicks that'll be coming out because of the inventions interplanetary travel will develop."

I watched the country side get dark as we bounced along toward the cove. "Meanwhile, we don't have interplanetary travel. All we have is the moon, and it don't look as if we're going further. Did you read about the Second Venusian Expedition coming back after they got two million miles out? The same thing's happened to them before, and we can't seem to make Mars either."

Fatty slapped the wheel impatiently. His jaloppy swerved off the road and almost hit a fence post. "So what? They keep trying, don't they? Don't forget, the Fronac Drive's only been around for two years, and all scientists agree that, with the Drive, we can eventually go anywhere in the Solar System —maybe even to the stars after a while. It's just a matter of perfecting it, of getting the kinks out. We'll reach the planets, and in our lifetimes too. How do you know what kind of crazy problems they run into two or three million miles from the Earth?"

Naturally, I had to admit I didn't know. All the newspapers had said was that both the First Martian and the two Venusian Expeditions had "experienced difficulties and been forced to return." I shut up and tried to think out another argument. That's all it was: the argument for me, and a business proposition for Fatty Myers. If you remember, back in March, the newspapers and magazines were still full of feature articles on "the expanding empire of man."

CHAPTER II

Up They Go

WE reached the cove and Fatty locked his car. The sloop was all ready to go, as we'd fixed her up the night before. When we shoved off, she handled like a dream that Lipton might have had as a boy. She was gaff-rigged, but not too broad of beam so that we couldn't run a little if we wanted to. Fatty handled the tiller and I crewed. That way, we only needed ballast forward.

Neither of us were crazy about fishing. We'd made that up as an excuse for Edna. Sailing in the moonlight in the great, big loneliness of Cassowary Cove, with the smells of the Atlantic resting quietly around us—that was all the wallop we wanted.

"But suppose," I said, as soon as I'd trimmed sail, "suppose we got to Venus and there's a kind of animal there that finds us more appetizing than *chili con carne*. And suppose they're smarter than we are and have disintegrators and heat-rays like that fellow described in the story. And the minute they see us, they'll yell, 'Oh, boy—rations!' and come piling down on Earth.

"That'll do your business a lot of good, won't it? Why, when we get through driving them back off the planet, won't be a man or woman who'll be able to think of interplanetary travel without spitting. I go along with Reverend Pophurst: we shouldn't poke our noses into strange places where they were never meant to go or we'll get them

bitten off."

Fatty thought a while and patted his stomach with his free hand like he always does when I score a good point. Most folks in town don't know it, but Fatty and I usually get so lathered up in arguments just before Election Day, that we always vote opposite tickets, no matter what.

"First place, if we hit animals smart enough to have disintegrators and suchlike when we don't have them, *and* if they want this planet, they're going to take it away from us, and no movie hero in a tight jumper and riding boots is going to stop them at the last minute by discovering that the taste of pickled beets kills 'em dead. If they're smarter than we are and have more stuff, we'll be licked, that's all. We just won't be around any more, like the dinosaur. Second place, didn't you read Professor Fronac's article in last week's Sunday Supplement? He says there can't be any smarter animals— Say! What'd you call that? There, over to starboard?"

I turned and looked off to the right.

Where a streak of moonlight grinned on the water between the lips of the cove, something green and bulbous was coming in fast. It looked like the open top of an awfully big umbrella. I judged it to be thirty-five, forty feet across. It was floating straight for Mike's Casino on the southern lip where lights were blazing, music was banging, and people generally were having themselves a whale of a time.

"Seaweed," I guessed. "Bunch of seaweed all scrunched up in an ice-jam. Jam melted or broke up and it comes floating down here in one lump."

"Never saw that much seaweed in these parts." Fatty squinted at it. "Nor in that shape. And that bunch *came* into this cove; it didn't float in. The ocean's too quiet for it to have so much speed. Know what I think it is?"

"The first summer tourist?"

"No! A Portuguese Man-Of-War. They're jellyfish. They have a bladder, kind of, that floats on the surface, and long filaments underneath that trail into the water and catch fish. I've read about them but never expected to see one. Pretty rare around here. And that's a real big fellow. Want to take a look?"

"Not on your life! It may be dangerous. Besides, this is the first time in a month Edna's let me go out with you. She doesn't know exactly what's going to happen, but she's sure *something* is. I want to be home safe and sound by eleven. What were you saying about smarter animals, Fatty? On other planets?"

"It can't be dangerous," he muttered, still keeping his eyes on its track. "Only catches very small fish. But— Like I was saying, if there was something on Neptune, say which is more advanced than we are, why then it'd be smart enough to have space travel and they'd be visiting us instead of us them. Look how we've explored that planet. We've gone down into the ground nine miles and more, across every sea and into every ocean, back and forth over every piece of land, and now up into the air. If there was another kind of intelligent life on this Earth, we'd know it by now. Stands to reason anybody else'd do the same. So, like Professor Fronac says, we must conclude— Am I wrong, or is that Man-Of-War coming at us now?"

IT was. The green mass had turned in a great, rippling circle and was headed for our sloop, but fast.

Fatty slammed the tiller hard to starboard and I leaped for the sails. They went slack.

"What a time for the wind to drop!" he moaned. "There's a pair of emergency oars in the— Too late, it's abreast! You'll find a hatchet in the cockpit. See if you can—"

"I thought you said it wasn't dangerous," I puffed, as I scrambled back with the hatchet.

Fatty had dropped the tiller and picked up a marlin-spike. He stood up next to me and stared at the floating mound alongside. Both it and our boat seemed to be perfectly still. We could see water rushing past us. Far off, in Mike's Casino, the band was playing "Did Your Mother Come From Ireland?" I stopped being sad and got sentimental. That song always make me sentimental.

"It isn't dangerous," Fatty admitted. "But I just remembered that the Portuguese Man-Of-War has batteries of stingers that it uses to catch fish. They can hurt a man sometimes, too. And in anything this big— Of course, we're inside a boat and it can't get at us."

"You hope. Something tells me that I won't be home at eleven tonight. And if that's just supposed to be an air-filled bladder, what are those black things floating

in it? Eyes?"

"They sure look like eyes. *Feel* like eyes." We watched the black dots flickering over the green surface and began to shuffle our feet. We felt as if a crowd of people were watching us undress in Courthouse Square. I know we both did, because we compared notes later. We had plenty of time—later.

"Know what?" Fatty said. "I don't think it's a Portuguese Man-Of-War, after all. It's too big and green, and I don't remember seeing anything like those black dots inside the air bladder in any of those pictures I saw. And it doesn't seem to have any filaments hanging from it. Besides, it moves too fast."

"Then what is it?"

Fatty patted his stomach and looked at it. He opened his mouth.

I forgot to ask him what he was going to say just then, and he never told me. He didn't say it anyway. He just went "Beep?" and sat down hard. I also sat down hard, only I went more like "Foof?"

The sloop had gone straight up in the air for about fifteen feet. As soon as I could, I jumped up and helped Fatty wheeze to a standing position.

We both gulped. The gulps seemed to get stuck going down.

Even though we were fifteen feet above the surface of the cove, the boat was still in the water. A little cup of water, that is, extending twenty feet out on both port and starboard and only about five feet on the bow and stern.

Beyond the water, there was a kind of gray haze that was transparent enough for me to see the lights of Mike's Casino where they were still playing "Did Your Mother Come From Ireland?" This gray haze went all the way around, covering the mast and the gaff tops.

When we rushed over to the side and looked down, we saw it came around under the keel too. Solid stuff, that gray haze—it contained us, the boat and enough water to float it.

Somebody had taken an awfully big bite out of Cassowary Cove, and we were included. We knew who that somebody was. We looked around for him.

The big slob was busy outside the gray haze. First, he was under the keel, fastening a little box to the bottom of the haze. Then he squirmed around to the top, directly over the mast and stuck another doohickey up there. Those little black dots were still bubbling around inside his green body, but they didn't make me feel queer any more.

I HAD other things to feel queer about. "Do you think we might try yelling at him?" Fatty asked in the kind of whisper he uses in church. "Whatever he is, he looks intelligent."

"What could you yell?"

He scratched his head. "I dunno. How about, 'Friend. Me friend. No hurt. Peace.' Think he'd understand?"

"He'd think you were an Indian in the movies, that's what. Why should you think he understands English? Let's drop our weapons and raise both our hands. That gesture's universal, I read."

We kept our hands over our heads until they got tired. The lump of green jelly had moved from the box he had fixed over the mast to a position in line with the slant of the gaff. He boiled around for a few seconds until a section of the gray haze began to sparkle with color; a lot of colors, shifting in and out of each other. Then, as soon as the patch was coruscating nicely, he dropped off the side and hit the water fifteen feet below.

He hit the water without a splash.

He zoomed along the surface, faster than I could breathe the initials J. R., for about half a mile, paused just outside the cove—and dropped out of sight. There wasn't a ripple to show the path he'd been traveling, or where he'd sunk. All that was left was our floating gray bubble. With us, inside.

"Hey!" Fatty began yammering. "You can't do this to me! Come back and let us out, d'ye hear? Hey, you in that green jelly, come back here!"

I got him quiet by pointing out that the animated shrimp cocktail was no longer with us. Also, there didn't seem much cause for worry. If he'd wanted to do us any harm, he could pretty much have done it while he was close up, considering the brand of parlor tricks he had already demonstrated. Let well enough alone, I argued; I was satisfied to be alive and unwell, while the bubble-blowing object did a Weismuller somewhere in the Atlantic.

"But we can't stay here all night," Fatty complained. "Suppose someone from town could see us—why, with our reputation, they'd laugh us clear into the comic strips. Whyn't you shinny up the mast and stick

an arm into that stuff, Paul? Find out what it's made of, maybe make a hole and wriggle through?"

That sounded reasonable. We sure had to do something. He bent down and gave me a boost. I wrapped my legs around the mast, grabbed handfuls of sail and dragged myself to the top. The mast ended just under the box outside of the gray haze.

"There's a purring noise coming from the box," I called down to Fatty. "Nothing inside it but silver wheels going round and round like the one in an electric meter. Only they're not attached to anything. They're floating at all kinds of angles to each other and spinning at different speeds."

I heard Fatty curse uncertainly, and I punched up into the grayness. I hurt my fist. I pulled my arm back, massaged it as my feet slipped and scrambled on the mast and sail, and stabbed up with a forefinger. I hurt my forefinger.

"Gray stuff hard?" Fatty asked.

Unprintably unprintable it was hard. I told him.

"Come on down and get the hatchet. You might be able to chop a hole."

"I don't think so. This fog is almost transparent and I don't think it's made of any material we know. Fact is, I don't think it's made of any material."

Above my head, the purring got a little louder. There was a similar noise coming from the bottom of the bubble where the other box was located.

I took a chance and, holding myself by one arm and one leg, I swung out and peered at the spot of shifting color near the box. It looked like the spectrum you see in an oil puddle—you know, colors changing their position while you look at them. I pushed up against the gray near the colored patch. It didn't give either.

THE nasty thing was I had the feeling that it wasn't like trying to push a hole through a sheet of steel; it was more as if I were trying to drive a nail into an argument, or break a sermon across my knee. Kind of a joke in a scary sort of way.

"Hand up the hatchet," I called. "I don't see how it'll do any good, but I'll try it anyway."

Fatty lifted the hatchet high and stood up on his toes. I started to slide down the mast. The purring from the box became a whine.

Just as my stretching fingers closed around the hatchet handle, the box on top and the box on the bottom of the boat began going *clinkety-clangety-clung*. It reached *clung* and I was no longer doing it to the mast. I was on top of Fatty and he was spread-eagled on the deck.

I had a glimpse of the hatchet sailing over the side.

"Wh-what f-for you wanted to d-do th-that," Fatty gasped as I rolled off him and we both groaned upright. "C-couldn't you tell me you w-wanted to get down fast? I'd have moved away, honest!"

"Wasn't my fault," I said. "I was pushed."

Fatty wasn't listening. He was staring at something else. And, when I noticed it, so was I.

A lot of sea-water had splashed into the cockpit. Some of it had wet us.

All of the water on deck rolled into a little lake abaft of the mast, the water on our bodies dripping down and joining it. Then, the entire puddle rolled to port and spilled off the deck. The boat was perfectly dry again. So were we.

"This I'm beginning not to like," Fatty commented hoarsely. I nodded my head, too. Under the circumstances I didn't feel easy in my mind.

Stepping very delicately, as if he were afraid he might fracture a commandment, Fatty moved over to the side and looked out. He shook his head and looked down.

"Paul," he said after a while in a low voice. "Paul, would you come here? Something I—" he choked.

I took a look. I gulped, one of those really long gulps that start down from your Adam's apple and wind up squishing out between your toes.

Below us, under the water and the gray haze, was a slew of darkness. Beyond that, at a respectable distance, I could see the Atlantic Ocean and the New England coast line with Cape Cod hooking out its small, bent finger. New England was moving away fast and became the eastern seaboard of the United States even as I watched.

The moonlight gave it a sort of unhealthy dimness, just enough to make out details and recognize the North and South American continents when they grew out of the eastern seaboard. The western coast was a little dark and blurry, but it made me homesick for the days when Fatty and Edna and I sat

next to a map looking just like that in school.

Right then, I couldn't think of anything more absolutely enjoyable than standing near Edna in the grocery while she nagged the sass off me.

"That's what happened," Fatty was whimpering. "That's why we fell and the water jumped into the boat. We just shot up in a straight line suddenly and we're still traveling—us, the sloop, and enough water to float the whole business. We're inside a gray ball that isn't made of anything and which we can't break out of even if we still wanted to."

"Take it easy, Fatty, and we'll be all right," I told him with all the assurance of a bank robber trying to explain to the policeman who caught him that he was only trying to deposit his gun in the vault and the cashiers misunderstood him.

WE SAT down heavily in the cockpit and Fatty automatically grabbed the tiller. He sighed and shook his head.

"I feel just like a package being sent someplace." He gestured up towards the spot of changing color. "And that's the label. Please do not open until Christmas."

"What is it, do you think? An invasion from another planet?"

"And we're the first battle? Don't be silly, Paul. Although it could be at that. We could be a sample being sent back to headquarters to give them an idea of how tough a nut Earth might be. The careless, offhand way that green whatnot acted is what gripes me! It was as if he was going after Mike's Casino first and then decided to take us because we were closer, or because our disappearance would attract less notice than a night-club's. But either way it didn't matter much. He did it and went back home, or—"

"I can still hear Mike's Casino. At least I can hear the band playing 'Did Your Mother Come From Ireland?'"

Fatty slanted his big, loose face at the mast. "I hear it too. But it's coming from that box with the wheels up there. This whole thing is so crazy, Paul, that I actually think that creature knew it was your favorite song and fixed the box to play it all the time. So you'd be more comfortable, kind of. Like the glow we have inside the bubble to provide us with light. He wants the package to arrive in good condition."

"A space-going juke-box," I muttered.

CHAPTER III

On To Mars, Via Bubble

THERE was a longish bit of silence after that. We sat and watched the stars go by. I tried to make out the Big Dipper but it must have been lost in the shuffle, or maybe its position was different up here. The moon was shrinking off to port, so I decided we weren't going there. Not that it made much difference. But at least there was an Army base on the moon and I've seen enough western films to have great confidence in the United States Army—at least in the cavalry part. The sun wasn't a pleasant sight from empty space.

The funny thing is that neither of us were really frightened. It was partly the suddenness with which we'd been wrapped up and mailed, partly the care that was being taken of us. Inside the bubble there was a glow like broad daylight, strong enough to read by.

Fatty sat and worried about the option on the Winthrop store he'd lose if he didn't pick it up in time. I figured out explanations for Edna on why I didn't make it home by eleven. The box on top and the box on bottom hummed and mumbled. The sloop maintained the position it had originally had in Cassowary Cove, perfectly steady in the water. Every once in a while, Fatty bit a fingernail and I tied a shoelace.

No, we weren't really frightened—there didn't seem to be anything solid enough to get frightened about, sitting in a sailboat out there with trillions of tiny lights burning all around. But we sure would have given our right arms clear up to our left hands for a sneak preview of the next act.

"One consolation, if you can call it that," Fatty said. "There's some sort of barrier two or three million miles from the Earth and this contraption may not be able to get past it. The papers don't say exactly what the space-ships hit out here, but I gathered it was something that stopped them cold, but didn't smash them and allowed them to turn and come back. Something like—like—"

"Like the stuff this gray bubble is made of," I suggested. We stared at each other for a few minutes, then Fatty found an un-

bitten nail on one of his fingers and took care of it, and I tied both my shoelaces.

We got hungry. There was nothing in our pockets that could be eaten. That made us hungrier.

Fatty lumbered over to the side and looked down into the water. "Just as I thought. Hey, Paul, break out your fishing tackle. There's a mackerel swimming around under the boat. Must have been caught up with us."

"Fishing'll take too long. I'll net it." I undressed, grabbed my landing net. "There's not much water and he won't have maneuvering space. But what about a fire? If we try to cook it, won't we use up the air?"

He shook his head. "Nope. We've been in long enough for the air to foul if it wasn't being changed. It's as fresh as ever. Whatever that machinery is up there, it's not only tooling us along at a smart clip and playing *'Did Your Mother Come From Ireland?'* for your special benefit, but it's also pumping fresh air in and stale air out. And if you ask me where it gets oxygen and nitrogen in empty space—"

"I wouldn't dream of it," I assured him.

As soon as I spied the mackerel, a small one, less than a foot long, I stepped into the water and went for it with the net. I'm a pretty good under-water swimmer.

Pretty good, but the mackerel was better. More practise. I felt silly caroming off the keel and gray haze while the fish dodged all around me. After a while, he got positively insulting. He actually swam backwards, facing me, just out of reach of the net.

I came to the surface, swallowed air, and climbed back aboard.

"He's too spry," I began. "I'll get my fishing gear and—"

I stopped. I was back in the gulping groove again.

FATTY was sitting in the cockpit, looking as if he had sat down suddenly. In front of him there was a flock of plates, six glasses and two snowy napkins on which rested assorted knives, forks and spoons.

There were two glasses of water, two glasses of milk and two glasses of beer. The plates were filled with food: grapefruit, soup, beef steak, French fried potatoes, green peas, and—for dessert—ice cream. Enough for two. Our dream meal.

"It came from the box above," Fatty told me as I dressed with clumsy fingers. "I heard a click and looked up. There was this stuff floating down in single file. They distributed themselves evenly as they hit the deck."

"At least they feed you well."

Fatty grimaced at me. "You know where else you get served a meal with everything your heart desires."

Well, we unwrapped the cutlery and ate. What else could we do? The food was delicious, perfectly cooked. The drinks and the ice cream were cold, the grapefruit was chilled. When we finished, there was another click. First, three cigars that I remembered smoking at Louisa Capek's birthday party and liking more than any others I'd ever had, then, a plug of Fatty Myers's favorite chaw appeared. When the matches breezed down, we had stopped shrugging our shoulders. Fatty talked to himself a little, though.

I was halfway through the first cigar when Fatty heaved himself upright. "Got an idea."

He picked up a couple of plates and heaved them over the side. We both stood and watched them sink. Just before they got to the bottom—they disappeared. Like that. About two feet away from the lower box.

"So that's what happens to the waste."

"What?" I asked him.

He glared at me. "That."

We got rid of the rest of the service in the same way. On Fatty's suggestion we kept the knives. "We might need weapons when we arrive where—where we're going. Characters there might want to dissect us, or torture information out of us about Earth."

"If they can pull this kind of stuff, do you think we can stop them?" I wanted to know. "With knives that they made up for us out of empty emptiness?"

But we kept the knives.

We also kept the mackerel. For a pet. If we were going to be fed this as a steady diet, who wanted mackerel? There were only the three of us in that bubble and we felt we all had to stick together. The mackerel felt it too, for he began swimming up near the surface whenever we came close to the side. We became pretty good friends, and I fed him the bait I'd brought along—free.

About four hours later—it may have been five, because neither Fatty nor I had watches

—the box clicked and the same meal wafted down with all the fixings. We ate some and threw the rest overboard.

"You know," Fatty said. "If it weren't for that 'Did Your Mother Come From Ireland' playing over and over, I could almost be enjoying myself."

"Yeah. I'm getting tired of it myself. But would you rather be listening to 'I'm Forever Blowing Bubbles?'"

The Earth was just a shrinking, shining disc but neither of us could resist grabbing a fast look at it, now and then. It meant my grocery and Edna, Fatty's service station and his option on the Winthrop store. Home, 'mid planets and galaxies. . . .

We got sleepy and pulled down the sails which weren't being overwhelmingly useful at the time. We rolled them up into a sort of mattress and, together with some blankets Fatty had in the cockpit, made ourselves a fairish bed.

When we woke out of a mutual nightmare in which Fatty and I were being dissected by a couple of oyster stews, there were two complete steak dinners on deck. That is, two for me and two for Fatty. We had a grapefuit and a glass of milk apiece and got rid of the rest. We lounged around uncomfortably and cursed the composer of 'Did Your Mother Come From Ireland?' I couldn't understand how I'd ever liked that song.

I DIDN'T think too much of the sloop, either. It was one of the most idiotic boats I'd ever seen, narrow, hard, uninteresting lines. If I ever bought a boat it wouldn't be a sloop.

We shucked our clothes off and went for a swim around the edges. Fatty floated on his back, his immense belly rising above the surface, while I dived down and played tag with the mackerel.

Around us was nothing but the universe. Stars, stars and still more stars. I'd have given anything for a street-light.

We climbed back in the boat to find another steak dinner waiting. The swim had made us hungry, so we ate about a quarter of it.

"Not very efficient," Fatty grumbled. "I mean that green monster. Some way or or other—telepathy, maybe—he figured we liked certain things. Steak dinners, special tobacco, a song. He didn't bother to go into it any further and find out how *much* of those things we liked—and how often. Careless workmanship."

"Talk about carelessness," I shot at him. "You wanted to go out and take a look at him when he first came into the cove. You were at the tiller and couldn't even get us about in time. You didn't see he was chasing us until he was abreast!"

His little eyes boiled red. "I was at the tiller, but what were you doing right then? You were pretty unoccupied and you should have seen him coming! But did you?"

"Hah! You thought he was a Portuguese Man-of-War. Like the time we were shingling the church roof and you thought that the black spot near the steeple was a sheet of metal when all the time it was only a hole. We wouldn't have fallen past the beam either, if you weren't such a big fat slob."

Fatty stood up and waved his stomach at me. "For a little hen-pecked squirt, you sure— Hey, Paul, don't let's get going this way. We don't know how long we may have to be together on this flea-bitten rowboat and we don't want to start arguing."

He was right. I apologized. "My fault, that church roof—"

"No, *my* fault," he insisted generously. "I *was* a little too heavy at that moment. Shake, old pal, and let's keep our heads. We'll be the only representatives of humanity wherever we're heading, and we have to stick together."

We shook and had a glass of beer on it.

All the same, it did get tight as steak dinner followed steak dinner and 'Did Your Mother Come From Ireland?' went through chorus after chorus. We carved a checkerboard out of some deck-boards and tore up old newspaper to make checkers. We went for swims around the boat, and we made up little guessing games to try on each other. We tested the gray haze and thought up a thousand different ways that the boxes might be working, a thousand different explanations of the spot of color near the top, a thousand different reasons for our being bubbled and sent out into the wild black yonder.

But we were down to counting stars when the red planet began to grow large.

"Mars," Fatty said. "It looks like the picture of Mars in the article Professor Fronac had in the Sunday supplement."

"I wish he were here instead of us. He wanted to go to Mars. We didn't."

There wasn't a cloud in the sky at Mars as we came down through the clearest air I've ever seen. We landed ever so gently in a flat desert of red sand. On all sides of the gray ball we could see acres on acres of sand.

Nothing else.

"Don't know if this is much of an improvement on what we've been through," I remarked morosely.

Fatty wasn't listening. He was standing on his toes and staring around eagerly.

"We're seeing what no man has ever seen before us," he said softly. "We're on Mars, do you understand, Paul? The sun—notice how much smaller it looks than on Earth? What wouldn't Professor Fronac give to be in our shoes!"

"He can have mine any time he shows up. And I'll throw in a new pair of soles and heels. Looking at a red desert isn't my idea of a really big time, if you know what I mean. Fails to give me a bang. And where are the Martians?"

"They'll show, Paul, they'll show. They didn't send us forty million miles just to decorate their desert. Hold your horses, feller."

BUT I didn't have to hold them long. Off at the edge of the horizon, two specks appeared, one in the air and coming fast, and one mooching along the ground.

The speck in the air grew into a green and bulbous mass about the size of the one in Cassowary Cove. It didn't have any wings or jets or any other way of pushing itself along that I could see. It just happened to be flying.

When it reached us, the one on the ground was still far away.

Our new buddy had eyes, too—if that's what they were. Only they weren't black dots floating inside it; they were dark knob-like affairs stuck on the outside. But they felt just the same as the other when it paused on top of our bubble—as if they could undress our minds.

Just a second of this. Then it moved to the box, fiddled with it a moment and the music stopped. The silence sounded wonderful.

When it slid round to the bottom, going down through the sand as if the desert was made of mirage, Fatty handed me a couple of the knives we'd saved and picked out three for himself.

"Stand by," he whispered. "It may come off any minute now."

I didn't make any sarcastic crack about the usefulness of such weapons because I was having trouble breathing. Besides, the knives gave me a little confidence. I couldn't see where we might go if we happened to have a battle with these things and won, but it was nice holding something that could conceivably do damage.

By this time, the guy on the ground had arrived. He was in a one-wheeled car that was filled with wires and gadgets and crackly stuff. We didn't get a good glimpse of him until he stepped out of the car and stood stiffly against it.

When we did, we didn't like it. This whole play was getting peculiar.

He wasn't green and he wasn't bulbous. He was about half our height, very thin, shaped like a flexible cylinder. He was blue, streaked with white, and about a dozen tentacles trailed out from the middle of the cylinder under a battery of holes and bumps that I figured were the opposite number of ears, noses and mouths.

He stood on a pedestal of smaller cylinder that seemed to have a sucking bottom to grip the sand.

When our green friend had finished working on the underside, he came tearing up to Jo-Jo near the car. Jo-Jo stiffened even more for a second, then seemed to get all loose and flexible and bent over, his tentacles drooping on the sand.

It wasn't a bow. It reminded me more of the way a dog fawns.

"They *could* have two intelligent races here on Mars," Fatty suggested in a low voice.

Then, while the tentacled chap was still scraping desert, the blob of green lifted and skimmed away in the direction he'd come. It was exactly like the business back in Cassowary Cove, except this time it was flying away while back on Earth it had zoomed along the water and submerged. But both were done so quickly and carelessly as to be positively insulting. After all, I'm not exactly small potatoes in my part of the country: one of my ancestors would have come over on the Mayflower if he hadn't been in jail.

This cylinder character turned and watched until the jellyfish was out of sight. Very slowly, he turned back again and looked at us. We shuffled our feet.

CHAPTER IV

A Brief Dreef On Mars

OUR VISITOR began piling equipment out of the car and on the sand. He fitted this in that, one doojigger into another doohickey. A crazy-angled, shiny machine took shape which was moved against our little gray home away from home. He climbed into it and twirled thingumajigs with his tentacles.

A small bubble formed around the machine, attached to the gray haze.

"Air-lock," Fatty told me. "He's making an air-lock so that he can come in without having our air belch into the desert. Mars has no atmosphere to speak of."

He was right. An opening appeared in the grayness and Kid Tentacles sucked through slightly above water level. He was suspended in the air like that for a while, considering us.

Without warning, he dropped down into the water—only he splashed—and out of sight. We hurried to the side and looked down.

He was resting on the bottom, all his tentacles extended out at the mackerel which was scrounged up hard against the wall of gray, its tail curved behind it. A bunch of bubbles dripped up to the surface from the cylinder's mid-section and burst.

I didn't get it. "Wonder what he wants of that poor mackerel. He's sure scaring it silly. It must think he's the Grim Angler."

The moment I'd opened my mouth, the blue and white fellow started rising. He came up over the side and hit our deck with a wet sound from the base of his pedestal.

A couple of tentacles uncoiled at us. We moved back. One of the holes in his mid-section expanded, twisted like a mouth in the middle of a stutter. Then in a rumbling, terrifically deep bass:

"You—ah—are the intelligent life from Earth? Ah, I did not expect two."

"English!" we both yelped.

"Correct language? Ah, I think so. You—ah, are New English, but English is correct language. This language has been dreefed into me—ah, dreefed is not right—so that I could adjust correctly. But excuse me. Ah, I only expected one and I didn't know whether you were marine or land form. Ah, I thought at first— Permit me: my name is Blizel-Ri-Ri-Bel."

"Mine's Myers," Fatty stepped forward and shook a tentacle, taking control of the situation as he always did. "This is my pal, Paul Garland. I guess you're here to give us the score?"

"To give you the score," Blizel echoed. "To adjust. To make the choice. To explain. To—"

Fatty raised a pudgy hand and headed him off. "What happened to the other Martian?"

Blizel coiled two of his tentacles into a braid. "No, ah, other Martian, that. I am Martian, ah, and representative of Martian Government. It-Of-Shoin is Ambassador from Shoin."

"Shoin?"

"Shoin. Galactic nation, ah, of which our system is a province. Shoin is nation of this galaxy and other galaxies. Ah, it in turn is part of larger nation whose name we do not know. It-Of Shoin, the, ah, ambassador, has, ah, already decided which of you will be best but has not told me. Ah, I must make choice myself to prove partially our capabilities, ah, and our readiness to assume complete citizenship in Shoin. This is difficult as we, ah, are but five times as advanced as you, to round the numbers."

"You want to find out which of us is best? For what?"

"To stay as diplomatic functionary so that your people will be able to come here and there as they could now, but for the barrier of forces in balance which has been dreefed, ah, about your planet and satellite. This barrier has protected you from unwarranted intrusion, ah, as well as prevented you from unexpectedly, ah, appearing in a civilized part of Shoin to your detriment. It-Of Shoin on your planet has been more interested in observing the development of the intelligent life-forms at the core of your planet than on its surface, no discredit, ah, intended. It-Of Shoin was unaware you had acquired space travel."

"It-Of-Shoin on Earth," Fatty mused. "The one who sent us here. The Ambassador to Earth, hey?"

THE Martian twisted his tentacles in genuine embarrassment. His white streaks got broader. "Ah, Earth does not require ambassador as yet. It-Of-Shoin is,

ah, a—yes, a consul. To all the intelligent life-forms of, ah, Earth. Ah, I will return."

He plopped backwards into the smaller bubble which was his air-lock and started collecting machinery.

Fatty and I compared notes.

All of our galaxy and several others were part of a federation called "Shoin." Mars was practically ready to join or be accepted into the federation whose other members they considered pretty terrific operators. Earth was a backward planet and only rated a consul who was an "It-From-Shoin." He had a much higher regard for several other specimens of life he'd found on our planet than for man. Nevertheless, we'd surprised him by giving out with space ships long before we should have. These ships hadn't been able to go anywhere else than the moon because of something called "forces-in-balance" which acted as a barrier both within and without.

For some reason, a representative of Earth was needed on Mars. This consul had scooted up one night and grabbed us off. When we'd arrived on Mars, the Shoinian ambassador had inspected us and decided which he wanted. Did that mean that one of us could return? And what about the other?

Anyways, he was too all-fired superior to tell the Martians which was the lucky man. He'd taught some government official our language by "dreefing" and it was up to the Martian from then on. The Martian, for all his humbleness, thought he was at least five times as good as we were. Finally, his English wasn't too good.

"Maybe he was only dreefed once," I suggested. "And it didn't take." I was nervous: we were still being treated too casually.

"What's with this dreefing?" Fatty asked Blizel when he plopped back on deck with a couple of tentacleloads of equipment.

"They-Of-Shoin alone can dreef. We, ah, of Mars must use machinery still. Dreef is not the image but a construction of an, ah, of a transliteration for your delight. They-Of-Shoin dreef by, ah, utilizing force-patterns of what you call cosmos? Thus any product can be realized into, ah, existence—whether material or otherwise. Now testing for you."

The Martian was presenting us with various gadgets on which colored lights flickered. We found that he wanted us to match switches with the colored lights in certain patterns but we couldn't seem to get any of them right.

While he was playing around with the toys, Fatty asked innocently what would happen if we refused to split up and leave one of us here. The Martian replied innocently: one of us *would* be left here, as we had no choice since we couldn't do a thing unless we were allowed to by them.

Fatty told him of the presence on Earth of very brilliant men who knew calculus and suchlike and would give both eyeteeth and maybe an eye or so for the chance to spend their lives on Mars. These men, he pointed out, would be much more interesting for the Martians to have around, maybe even for They-Of-Shoin too, than a small-town grocer and serviceman who had both flunked elementary algebra.

"Ah, I think," Blizel delicately commented, "that you overestimate the gulf between their intellects and yours, in our views."

Fatty was elected. His experience with motors turned the trick. I congratulated him. He looked nauseously at me.

Blizel withdrew, saying that he expected Fatty to go with him on a little trip to their "slimp"—which we decided was a city of sorts. He would bring Fatty back to "ah, organize farewell" if it turned out that Fatty was the right candidate. He was awfully nervous about the whole proposition himself.

FATTY shook his round head at the Martian who was building a small bubble outside of ours for transportation purposes.

"You know, we can't really blame those guys. They have troubles of their own, after all. They're trying to get into a galactic federation on equal terms with some big-shots and they want to prove themselves. They feel like rookies going into a game with a world-series pitcher to bat against. But I don't get the way they crawl and suck around these Shoiners. They need a little backbone. When you come right down to it, they're nothing but exploited natives, and everyone thinks we'll be the same, but on a lower level."

"Wait'll we get here. We'll stiffen these Martians, Fatty. We'll get the system free of galactic imperialists, with our atom bombs and all. Bet our scientists have this forces-in-balance thing licked in no time. And dreefing, too."

"Sure. Think of it—another life-form, maybe more than one, in the core of the Earth with this It-From-Shoin leading them not into the path of temptation. Golly! And these Martians here with their civilization, and no telling what other intelligent characters we have scattered between Mercury and Pluto. A whole empre, Paul, bigger than anything on Earth—all controlled by those green jellies!"

Blizel finished building the bubble and Fatty went into it through the air-lock. It was darker than the one he left behind. I guessed Blizel wasn't as skilled as that fellow down in Cassowary Cove.

The Martian got back into his machine and started off. Fatty's bubble floated along above it.

I spent about ten or twelve hours on Mars alone. Night fell, and I watched two moons chase across the sky. Some sort of big snake wriggled up out of the sand, looked at me and went away on his own private big deal.

No more steak dinners came down, and I actually found myself missing the stuff.

When Fatty and Blizel returned, the Martian stayed outside and tinkered with the equipment. Fatty came back through the air-lock slowly.

He was licking his lips and sighing in half breaths. I got scared.

"Fatty, did they harm you? Did they do anything drastic?"

"No, Paul, they didn't," he said quietly. "I've just been through a—well, a *big* experience."

He patted the mast gently before continuing. "I've seen the slimp, and it's really not a city, not as we understood cities. It's as much like New York or Boston as New York or Boston is like an ant-hill or bee-hive. Just because Blizel spoke our language and spoke it poorly, we had him pegged as a sort of ignorant foreigner. Paul, it's not that way at all. These Martians are so far above us, beyond us, that I'm amazed. They've had space travel for thousands of years. They've been to the stars and every planet in the system that isn't restricted. Uranus and Earth are restricted. Barriers.

"But they have colonies and scientists on all the others. They have atomic power and stuff after atomic power and stuff after that. And yet they look up to these fellows from Shoin so much that you can just begin to imagine. They're not exploited. just watched and helped. And these fellows from Shoin, they're part of a bigger federation which I don't quite understand, and they're watched and guarded and helped too—by other things. The universe is old, Paul, and we're newcomers, such terribly-new newcomers! I wonder what it will do to our pride when we find it out."

There was a dollop of quietness while Fatty slapped the mast and I frowned at him. They must have done something to the poor guy, his backbone had done slipped right out. Some devilish machine, they probably had. Once Fatty was back on Earth he'd be normal again—the same old cocky Fatty Myers.

"Are—are you acceptable?"

"Yeah, I'm acceptable. The ambassador—It-From-Shoin," he said with more respect in his voice than I'd ever heard before, "says I'm the one he picked. You should have seen the way Blizel and his crowd bucked up when they heard that! Now you have to get back to Earth. Blizel will fix the bubble so you'll have more variety in your meals and can let them know what's what. When humans start coming here regularly, they can appoint another man to handle affairs and, if he's acceptable to Shoin and Mars, I can go back."

"Fatty, what if I can't get anyone to believe me?"

HE SHRUGGED. "I don't know what happens in that case. Blizel tells me that if you can't operate successfully enough to get man through the barrier in a riz or two, they will conclude that he isn't enough of an intellect as yet to warrant their interest. You've just got to do it, Paul, because I don't know what happens to me if you don't, and from what I can see, nobody up here cares much."

"Meanwhile, you'll be all right?"

"I'll be preparing a sort of city for Earthmen to live in on Mars. If you send any folks in the right channels, I'm supposed to verify them and greet them when they arrive. I'll explain the setup as one human to another. Makes me out as an official greeter, doesn't it?"

After Blizel finished tinkering with the boxes, he applied another spot of color near the top and I shot away from Mars. The return trip was pretty boring, and the mackerel died on the way. There were a lot of different dishes served, and I was able to keep

up my interest in food, but everything had a soapy taste.

Blizel just wasn't up to that guy in Cassowary Cove—no two ways about it.

I landed on the same spot from which we'd taken off—two months before, as I found.

The bubble dissolved as I hit the water. I didn't bother to sail the sloop in, but dived off the deck and swam ashore.

It felt good to be able to swim a distance in a straight line.

It seems that there were folks who wanted to hold a funeral for us, but Edna had put her foot down. She insisted that so long as no wreckage was found, she'd consider me alive.

I'd probably turn up in Europe one fine day with Fatty, she told them.

So when I walked into the grocery, being Edna, she merely turned to face me. She asked me where I'd been. Mars, I said. She hasn't spoken to me since.

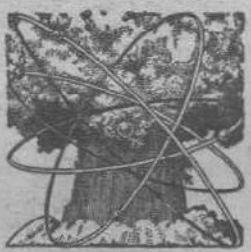
A reporter from our local paper interviewed me that night and wrote up a crazy story about how I'd claimed I had established consulates all over the solar system. I hadn't; I'd just told him my friend Fatty Myers was the acting-consul for Earth on Mars.

The story was reprinted in one of the Boston papers as a little back-page squib with a humorous illustration. That's all. I've been going crazy since trying to get someone to believe me.

Remember, there's a time limit: one riz, two at the most.

For the last time, then, to anyone who's interested in space travel after all I've said: Stop knocking yourself out trying to break through a barrier of forces-in-balance that isn't meant to be broken through. You have to come down to Cassowary Cove and take a boat out and wait for It-From-Shoin to appear. I'll help, and you can be sure that when it gets to him, Fatty Myers will verify and do whatever else is necessary. But you won't be able to go to Venus or Mars any other way.

You need a visa.



CHEAP POWER FROM THE ATOM BY 1960

TWO War Department scientists, Drs. Henry T. Wenzel and Ralph E. Lapp, have recently made the statement that low-cost atomic power will be available to mankind within a dozen years.

A pair of engineering problems must be solved, however, before other sources of power take a back seat. They are:

1. Obtaining structural materials which will stand up under the high temperatures of the atomic pile.

2. Getting efficient amounts of heat out of the system.

Atomic piles, according to Dr. Lapp, will not detonate like atom bombs. But, unless the extreme heat which they generate is conducted away in time, they will tend to melt.

Probably the first applications of the new power will be in situations where cost is not a main factor, as in naval vessels, or in the Antarctic, where other sources of heat are not available. But—peaceful use of the atom is on the way!

"Like it, honey?" Jick asked. "It's a Metal Lark."

The METAL LARK

By MARGARET ST. CLAIR

Oona, woman of the future, decides to have the voice of a concert singer!

"OF COURSE we'd be delighted to have you, Oona dearest," Joyzelle Cabot-Cabot said in her high, drawling voice. "But, really, I didn't know you sang."

Oona swallowed. "Oh, yes," she said brightly into the video, "I've taken it up recently. My teacher seems to think I show a good deal of promise." Her conscience needn't hurt her—what she had said might not be true right now, but she was sure it would be as soon as the Metal Lark came. So it wasn't a fib.

"Oh—well, that's splendid." Mrs. Cabot-Cabot groped behind her for a stylo—the Cabot-Cabots were so rich that it was probably solid palladium and those stones in the top must be Martian emeralds—held it poised over a writing pad. "What shall we put you down for? A group of songs?"

Oona nodded. She had devoted a lot of thought to what she wanted to sing at her club's annual concert—something simple (Oona

didn't want the girls to get the idea that she was trying to break into stereopera—why, she wouldn't even consider it), yet something which would show off her voice.

"A group of folk songs," she said. She named three or four titles.

Joyzelle Cabot-Cabot wrote them down in her dashing backhand while Oona stared at the older woman's hair-fix. It was lots too fussy. All those rhinestones and miragems were in terrible taste. Where had Joyzelle got it and how much had it cost?

"Now don't forget, darling, we're counting on you," Mrs. Cabot-Cabot said when she had finished. "The concert is on the seventeenth, a month from next Saturday. I've got you down for the third number on the program. Don't forget."

"Oh, I won't." The 17th of next month, Oona thought after she had hung up, and her birthday was on the 13th of this one. Over a month for her to work with the Metal Lark on getting her voice into shape. That ought to be plenty of time.

Oona got the prospectus of the Metal Lark Company (a division of Interstellar Electronics) out of her hand case and carefully studied it.

"In your home twenty-four hours a day," it began, "the finest vocal teacher in the world!" Then there was a lot of stuff about precision engineering in the Metal Lark's electronic brain and the lyric wonder of the voice *you* can have and something about the revolutionary cortical synthesis of neutrons and positrons in a vital imbalance.

The prospectus ended with the words, "What do you mean—you can't sing? All you mean is—you've never owned a Metal Lark!"

"'Mm, yes." How could she go wrong with a thing like that? A month—why, probably she'd be singing like a lark within two weeks, even though Jick had said once in a burst of frankness that she sounded more like the steam coming out of a teakettle when she sang than anything else he could think of. All her life she'd wanted to have a good voice. Now she was going to.

That is, she was going to if Jick gave her a Metal Lark for her birthday. She was practically certain he would—she'd hinted and hinted and shown him the prospectus and left magazines, open at the marked Metal Lark ad, lying around for him to see.

Still, Jick could be awfully—well, dumb, sometimes. Last year, for instance, she'd wanted a string of Venusian pearls (those from the deep near Aphrodition were the finest, but they were all simply lovely) and she'd hinted nearly as much as she had about the Metal Lark.

AND what had he given her? A fifteen-piece set of Ever-duhr cooking wear. It had a ninety-nine year guarantee, and it cooked by remote control, which was awfully convenient. It was a lot more original of him, really, to think of that than it would have been to get her the pearls. But she couldn't help feeling that the pearls would have had more of what the ads called "the quality of wonderment."

The video chimed softly.

"Mr. Ritterbush in?" the man in the viewing plate said when she had answered it. "This is the hardware store."

"He's not here. Can I take the message?"

"Will you tell him the wholesaler's all out of the Standard model Metal Lark? He won't have any more of them before the end of the month. But he'll let me have one of the super de luxe jobs, with all sorts of special engineering features, for the same price as the Standard, if that'll be all right. I thought I'd better ask Mr. Ritterbush before I went ahead and ordered it."

Why, the sweet old thing! Here Jick had gone and had the Metal Lark on order for her all the time she'd been fretting so over it! What a great big electronic angel he was! But he mustn't know the hardware store had given his surprise for her away.

"You'd better talk to him about it," Oona said into the receiver. "Unh—please don't say you mentioned it to me, will you?"

After the hardware dealer, sworn to secrecy, had hung up, Oona paced excitedly about the room. She couldn't sit still. She felt like turning handsprings.

She could see herself, wearing her new bice-green dress with the fluorescent hemline (she'd need new wristlets and new slippers—it would be nice if she could find a pair with fluorescent heels), standing on the stage and bowing to right and left as they applauded her.

And she knew just how her new voice was going to sound, too—rich and golden, clear as a bell on the high notes and sort of velvety on the deeper ones. It would be the sort of voice Pola Australis, her favorite stereo star, had. A whole week yet till her birthday! Gee, she could hardly wait.

The day came at last. Jick, after finishing, "—and one to grow on!" triumphantly, went into his closet and came out puffing under the weight of a huge box.

"Happy birthday, angel girl," he said, putting it down in front of her. "Open it up."

Oona pulled at the preemitex zipper. The box fell away from its enclosure.

"Do you like it, honey?" Jick asked with a hint of anxiety. "It's a Metal Lark. I sort of got the idea from something you said that you might like to have one."

Oona found her tongue. "It's just exactly what I wanted, Jick," she said warmly. "I was crazy to have one. But I'm a little surprised; I didn't think it would be this big."

Somehow, she'd had the idea that it would be about the size of a metronome; the Metal Lark was shaped like a metronome, all right, but it was almost a meter and a half tall and its whole surface was covered with glassy protuberances. It looked as efficient as could be.

"It has to be big, honey, to hold all the machinery," Jick explained. "It's the super de luxe model, the best they make. I hope you enjoy it."

"Oh, I *will!* What are those big things around the bottom, sort of like eyes?"

"I don't know. Wait, here's the instruction book." Jick groped at the back of the Metal Lark and came out with a small iridi-wrapped booklet. He handed it to her.

While Jick looked over her shoulder Oona opened it and read, "To get the most out of your new, super de luxe Metal Lark, we suggest the following procedure: One—plug the Metal Lark into an electric circuit; Two—allow at least five minutes for the cortical syntheses of the electronic brain to warm up; Three—take the two processes (figure one) on either side of the Metal Lark and—"

"Gee, baby, I've got to go," Jick said, looking at his chronometer. "Be late to work!" He embraced her ardently but hurriedly and sprinted for the door. "Be sure to tell me all about it tonight," he said and was gone.

LEFT alone, Oona opened the instruction book again "Plug the Metal Lark into an electric circuit." Well, that should be easy. While she was waiting for the electronic brain to warm up, she went on with the sentence she had been reading when Jick had had to leave.

"Take the two processes"—they must be those flexible things with plates on their end at the sides of the Metal Lark—"and apply the terminal disks to each side of the throat. Relax completely and endeavor to make the mind a blank—This period of relaxation is necessary so that the Metal Lark may analyze the structure of your larynx and throat.

"Four—after laryngeal analysis is complete, apply terminal disks to either side of the sternum (see figure two). Be sure lungs are fully inflated when disks are applied. Retain air in lungs while—"

She could go on to that later. The question now was—had the electronic brain of the Metal Lark warmed up enough? Oona looked at the machine speculatively. The glassy warts on its surface had begun to light up in shades of purple and blue, so that it looked like a cross between a Christmas tree and an illuminated pine cone. Oh, it *must* be five minutes by now.

Rather gingerly, Oona picked up one of the processes (it had a peculiar half-alive feel, like a sluggish caterpillar) and applied the disk to her throat, just under the curve of the jaw. She followed suit with the second process. She began to relax and make her mind a blank.

It was difficult to do. The disks kept wriggling about and vibrating faintly in a way that made Oona feel fidgety instead of relaxed. And whenever she'd try to make her mind a blank she'd find she was thinking about the new slippers she'd need and wondering whether she should get them in bice to match her dress or in champignon, because it went with everything.

On the whole, perhaps champignon would be better, especially if she had her hair done in verd antique to pick up the color of her dress. Or how about chrysolite? It—

"H'mm," said the Metal Lark.

Oona jumped. She hadn't been expecting it to say anything—and anyhow, where was its voice coming from? There wasn't any opening in the surface of the Metal Lark that she could see.

"H'mm," it repeated. "Repeat after me, please—mi-mi-mi-mi-mi-mi."

Oona threw back her head and took a deep breath. "Mi-mi-mi-mi-mi-mi," she caroled obediently.

She had an unreasonable impression that the Metal Lark winced. "Again," it said.

"Mi-mi-mi-mi-mi-mi-mi!"

"Yes. Now, this: *aha-aha-aha-aha-aha.*"

"Aha-aha-aha-aha-aha."

"H'mm," said the Metal Lark for the third time. There was a silence while the blue lights inside turned to cattleya and back to blue again. "Go on to stage four," it said.

"I beg your pardon?"

"Stage four in the instruction book. Apply the terminal disks to either side of the sternum, being sure the lungs are fully inflated. . . ."

"Well, baby, how'd it go?" Jick said when he came home that night. "How do you like your present? By the way, get into your best clothes, kid—we're eating out."

"Oh, really?"

"Sure. I got a table reserved at the Golden Rhnx Club. Celebration."

Over their glasses of soma and rhum, while the orchestra in the background played softly on malimbas and lignin bubbles, she told him of her dealings with the Metal Lark during the day.

"It says the construction of my larynx is quite unusual," she finished, "and my voice has never been properly placed. All my life I've been trying to sing too high."

"That's interesting."

"Um-hum. It gave me a whole bunch of exercises to do. Voice exercises, breathing exercises, posture exercises—there's even one exercise in sniffling."

"Yeah, I noticed you talk as if your throat were sore. Do you like it, kid?"

"Why, I'm just crazy about it, Jick!"

UNDER the table, Jick squeezed her hand. "Let's polk," he said.

"Listen, Oona," Jick said a trifle nervously on the fifteenth or sixteenth day after he had given her the Metal Lark. "I don't want to say anything out of turn, but don't you think maybe that thing's placing your voice a little *too* low? Gee, sweetheart, sometimes you sound like a lush in a tap room or a tenor with a bad cold."

Oona shook her head vehemently. "No," she answered huskily, with somewhat more emphasis than mere denial called for. "Not a bit! It's just the in-between period, Jick, don't you see? Pretty soon I'll begin to sound wonderful. Why, I have perfect confidence in the Metal Lark!"

On the fourth day before the concert was scheduled, Oona broke down. When Jick chimed at the door that evening, she threw herself into his arms and dissolved in tears.

"It's all that darned old machine's fault," she said in the hoarse, froggy tones that now served as her voice. "I just *hate* it! Here I thought I was going to have such a wonderful voice and I can't even talk! And the concert's only four days away! Oh, Jick, darling, what am I going to do?"

Jick had been holding her against his chest, making soothing murmurs and attempting to comfort her. Now he drew back and stared at her.

"Concert?" he demanded. "What concert?"

"My club's annual concert," Oona answered hoarsely. "Mrs. Cabot-Cabot put me down for a group of four songs. I didn't tell you about it before because I wanted to surprise you."

"My heavens!"

"Well, don't just stand there," Oona retorted with a touch of spirit. "You've got to help me, Jick. You've just got to fix it up!"

Jick's jaw set. He went into the living room and rang a number on the video. He talked over it for quite a long time while Oona blotted at her eyes and wondered if her lash-do had smeared very much.

"It's all right," he reported when he came back. "I called the hardware dealer and gave him hades. It seems that they've had trouble with this special de luxe model before. The imbalance in the electronic brain is so great that the thing is always going out of whack. I told him we'd sue and he said he was sure the company would be willing to make any reasonable settlement out of court."

Oona sniffled despairingly. "How's that going to do me any good?" she croaked miserably. "Even if we do get a lot of money out of it I still won't be able to sing at the concert. Mrs. Cabot-Cabot will tell everybody and you know that way she has of talking—lots of gush and yet with a sort of sneer.

"She's called me up five times in the last week and asked me if I'm *sure* I'll be able to sing. I just know she hopes I'll make a fool of myself. Oh, Jick, I just can't stand it—you don't know how I'd set my heart on it!"

Jick pondered for a moment, folding his lower lip between his thumb and forefinger. Then he went back to the video.

"Skinner's coming over," he reported when he returned. "Maybe he can think of some way to help you out."

"Skinner?" Oona honked.

"Sure. Don't you remember him? He was at the water polo tournament. Kind of a

tall thin guy."

"Kind of a tall thin guy"—Oona searched in her memory. She had a dim recollection of a dark bright-eyed man with rumpled hair. He'd worn white lumiflan trousers, hadn't he? He must be the one whose long, thin legs and sharp nose had reminded her of a heron or a crane.

"He's doing his interneship at City Hospital now," Jick went on. "He wants to specialize in diseases of the throat. Sound engineering is a sort of hobby of his."

Oh, a doctor. Well, it might be all right even if he was one of Jick's friends. Perhaps he'd be able to do something for her throat, give her a gargle or a spray that would bring it back to normal. But when you came right down to it, what good would that do? She'd still sound like the steam coming out of a teakettle when she tried to sing. The tears began to run down Oona's cheeks again.

SKINNER, when he arrived, was even more like a crane than Oona had remembered him. She wouldn't have been surprised to see him stand on one leg and make a quick grab with his beak at a fat little fish. But his manner was reassuringly professional.

"Wider, please," he said, looking down her throat with a light-conduit. "As far back as you can. Oh, my! What *have* you been doing to that throat to get it into that condition, Mrs. Ritterbush? Oh, *my!*"

Oona told him, croaking out the story of her relationship with the Metal Lark in a factitious basso profundo.

"A concert in four days?" Skinner said when she had finished. "Impossible. Why, even with complete rest that throat won't be back to normal in less than a week. Oh, my!"

Oona stared at him for a moment and then, for the second time that evening, burst into wild tears.

"Well, now, Bob," Jick said. The two men had been pacing nervously about the room for nearly half an hour, looking obliquely at Oona, who was still crying, from time to time. "How would it be if we were to wire her for sound?"

"I mean by that, get disks of those songs she's going to sing, 'cast them to her over that short wave outfit of yours and have her pick them up on a little old-fashioned radio set. Some of those sets are quite small, only about twelve centimeters square and four or five thick, and she could wear the set in the front of her dress.

"Of course she'd have to synchronize the movement of her lips with the words of the songs but she's got four days to practise that in. I don't know why it wouldn't work."

"How about it, Mrs. Ritterbush?" Skinner asked, turning to Oona.

Oona shook her head. Didn't Jick know anything about women's clothes, as long as they'd been married and everything?

"It would show," she brought out froggily, "dress hasn't any front." She began crying again. She knew her nose was red and her eyelids were swollen. But what difference did it make? Nothing mattered now.

The men resumed their floor-pacing. Several kilometers later, Skinner spoke. "I've thought of something which might conceivably help solve our problem," he announced. "It's the idioplastic larynx McGregor's been working with."

"McGregor's your chief, isn't he?" Jick asked.

"Yes. He's been interested for a long time in what to do for people who have had laryngotomies, and he was telling me a week or so ago that clinical experience indicated that this larynx might be the answer."

"'s it work?" Oona queried. Weeping, on top of the havoc the Metal Lark had previously wrought, had impaired her voice to the point where she was hardly intelligible.

"Eh? Oh, it's really an artificial larynx with a tiny built-in motor. It translates nervous impulses into sounds in the same way that the normal larynx does. The sound is made by thinking it.

"The only difficulty would be in fitting it to Mrs. Ritterbush. Ordinarily, even when there has been a section of the larynx, a number of fittings is necessary and that takes several weeks. Let me think."

Skinner strode about the room, ruffling up his hair. "Well," he said at last, "as far as I can see there's no real reason why we shouldn't fit a very small larynx to Mrs. Ritterbush since the use is to be only temporary. And that would do away with the need for accurate determination of size."

"... hurt?" Oona boomed.

"I beg your pardon. I didn't—oh, I see. No, it wouldn't hurt. Some patients report soreness at first but that's because they're unconsciously trying to use the natural larynx instead of letting the idioplastic one do the work."

"... sound?" Oona asked.

This time Skinner was baffled. Jick had to interpret.

"I think she wants to know how her voice would sound with it," he said a little doubtfully. "Unless her singing voice would be pretty good there's no use in bothering with the larynx."

"That would depend on her," Bob Skinner answered. "It's all a matter of how clear an idea she has of the sound she wants to make. If she thinks a sound of good quality, if she keeps a sound of good quality firmly in mind, that's the kind of sound she'll come out with. Most of the people who have been fitted with the idioplastic larynx report that their voices are much better than before.

"My advice to Mrs. Ritterbush would be to spend her time between now and the concert listening to some good singer's version of the songs she's going to sing. And we'll get busy hunting that extra-small larynx for her."

Oona wiped her eyes. She wished she hadn't cried so much. Things were going to be fixed up and now she looked perfectly terrible. What had been the sense in it?

". . .get sing," she croaked. "Sing—after all."

"You bet you will, honey," Jick said. "Like a lark."

FOUR days later Oona, wearing the bice-green dress complete with garnishings, stood in front of Bob Skinner. The idioplastic larynx had only just come. McGregor had been unable to supply the correct size and they had had to send to Siberia, to the Children's Hospital in Omsk, to get it.

From the other side of the curtain Oona could hear the buzz and hum of the audience. She tried not to think about it. Joyzelle Cabot-Cabot had been calling her on the video all morning to tell her how sorry she was that her voice was gone and she wouldn't be able to sing.

Although Oona had told her each time that she was sure to be all right by the time of the concert, she hadn't entirely believed it herself. By now she was so nervous that she felt a little sick.

"Open wide, please," Skinner said. He was dangling the larynx in front of her nose. It was a small, pinkish, shriveled object, like a baby's sock which has been shrunk in the wash. Oona looked at it apprehensively, closed her eyes and obeyed.

For a horrible moment Oona thought she was going to choke to death and then she could breathe once more.

"How does it feel?" Skinner asked.

Oona opened her eyes. "Fine," she replied in ringing bell-like tones.

Skinner looked at her almost with awe. "My—what a difference it's made in your voice!" he said. "Well—good luck."

"Thank you."

The accompanist struck the first few notes of "Dark Eyes." The curtain went up. Oona, her knees all quivery, walked out on the stage.

Joyzelle Cabot-Cabot was sitting in the second row, so close that Oona could see the sapphires in her fingernail sheaths. She was looking through an almandine lorgnon at the program, her eyebrows slightly raised. Something in the sight irritated Oona so much that she forgot all about being nervous. She leaned negligently against the harpsiano and waited until the accompanist gave her her cue. She opened her mouth.

What came out was a revelation to Oona. She sounded exactly like Pola Australis, only a little truer and more clear. If the Metal Lark had been everything it was advertised to be, she couldn't have sounded better. Oh, gee. She meant, Oh, *gee!*

She finished. There was an instant's utter silence while she wondered what was wrong. Then came a crash, a thunder of applause. People were pressing the third button on the backs of their seats, the one marked *Ovation.*

Oona stood by the harpsiano, bowing from side to side and smiling graciously, just as she had imagined she would. But better than the applause, better than the way her voice had sounded, better than anything, was the jealous, pale-green look on Joyzelle Cabot-Cabot's face.

The applause after Oona's next song, "The Four Generals", was even more insistent, and Oona was still acknowledging it when she noticed that Joyzelle had left her seat and pushing past everyone out into the aisle. Puzzled, Oona watched her stalking toward the back of the auditorium.

"*Barzun-Barzon*" was an even greater success than "The Four Generals" had been. People had stopped using the applause buttons long ago and were clapping their hands together furiously, and somebody in the audience was shouting, "Bravo!" and "Bis!" Between bows Oona looked around the auditorium for Joyzelle but couldn't find her. She must have gone home.

The accompanist played the first few bars of Oona's last number, "Ging Heut' Morgen." Oona opened her lips. The lights went out.

The audience stirred uneasily. Somebody coughed nervously down in front. After a moment, a high, feminine voice in the rear called, "Lights!" Oona tried to go on with her song and couldn't. Her accompanist had gone backstage to hunt the electronist and, anyhow, people were making too much noise.

"Let's get out of here!" the unknown woman called again. "I'm not going to stay here in the dark!" There was a bang and a thump, as if she had decided to follow her own advice. Somebody shouted "Lights!" a few more times, and then bumps and bangs became increasingly audible. Everybody in the auditorium, it appeared, was trying to get from his seat into the aisle.

Oona stood in the middle of the darkened stage, struggling with tears. The lights had gone out so unexpectedly (or been put out—but this was no time to go into that) and everything had happened so fast that Oona was bewildered.

One thing was sure, her program was ruined unless she did something. There might even be a panic. Wasn't there anything she could do? Wasn't there anything she could sing—something good and loud, something that would make them stop before somebody got hurt?

Oona drew a deep breath. She clenched her hands. She stepped forward to the edge of the stage, her fluorescent hemline a wan gleam in the dark. Of course she hadn't practised it but she'd heard it a million times. She inhaled deeply once again.

"From pole to pole the mighty nations, from pole to pole the human race. . . ." Oona had begun to sing "The United Nations Battle Hymn."

OH, SHE did it, all right," Jick said grimly. He turned the 'copter about the pylon so sharply that the air officer on duty glared at them.

"Of all the dirty, foul tricks! I kept after that electronist till he confessed Joyzelle gave him one thousand and five hundred I. U.'s if he'd shut off the lights for ten minutes. And she was the one that started yelling for lights and all that stuff about let's get out of here. She and that electronist ought to have a year in jail each! Somebody might have been killed."

"But you saved the day, baby. I never was so proud of you in my life, kid, as I was when I heard you begin to sing the 'Battle Hymn.' You were a real heroine."

"Aw—" Oona said, wriggling.

"A real heroine," Jick repeated. "And the audience knew it, too. All those Venusian flowers they tossed onto the stage when you finished singing! And the cheers! It sounded like the last quarter of the Inter-hemispheric soccer final last New Year's day in the Soya Bowl—You remember, it was seven to eight in favor of the eastern hemisphere.

"I don't think I ever heard more noise. They'd have you there singing encores yet if you'd been willing. They loved your voice and thought you pretty swell yourself."

"Well—" said Oona.

Jick's tone grew harsh once more. "Listen, though, kid, what were you talking to that Cabot-Cabot slut about backstage after the show was over? After what she tried to do to you, I wouldn't think you'd want to touch her with a three meter pole."

Oona looked sideways at her husband's profile. Jick was an absolutely fur angel-baby weetareete, and she doted on him. Still, he was a man, and sometimes men didn't understand the way girls did things.

"Joyzelle didn't know I knew she'd done it," she explained. "She thinks everybody's stupid except herself."

"Yeah. She would. But what were you talking to her about?"

"Well, she asked me who my vocal teacher was. She's giving a musicale at her home next month and she thought it would be nice if she could sing at it. So I told her you'd given me a Metal Lark."

"A Metal Lark?" Jick sounded startled.

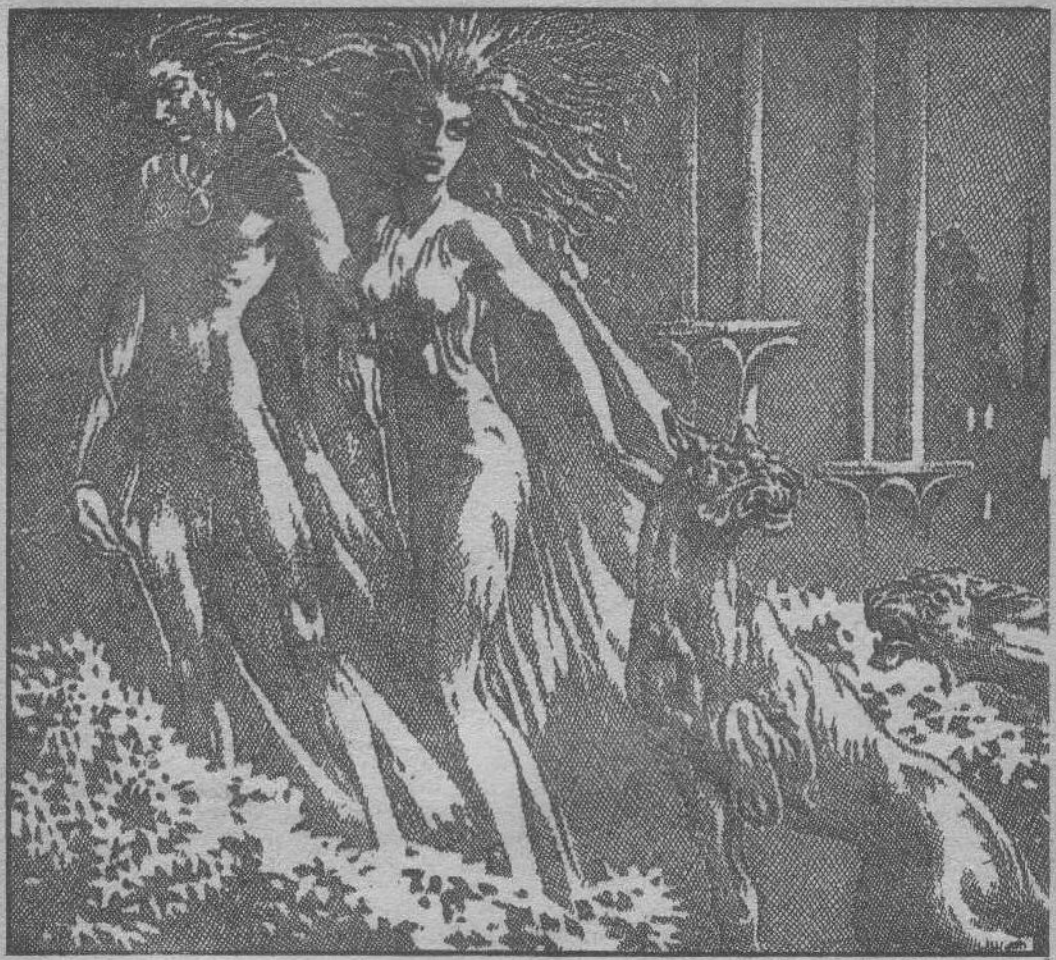
"So she asked me if she could borrow it. She's the kind that always borrows things. I told her it wasn't any good but she didn't believe me. She's sending her chauffeur over for it tomorrow morning."

Oona got out her lac-kit and began going over her face. They were nearly home now and she wanted to look nice when the bright lights came on in the hangarage.

"She's going to borrow it anyhow?"

"Um-hum." Oona's answer was muffled. The cosmetic was drying, and she didn't want to disturb it until it had set. "It made my throat so sore I couldn't talk at all, and Joyzelle's voice is naturally squeaky and high. What do you s'pose she'll sound like, Jick, before it's done with her?"

A Complete Novelet by



People moved like blue vapor lights on the cobbled

. . . . and the moon

CHAPTER I

Voyagers From Earth

IT WAS so cold that when they first came from the ship into the night, Spender began to gather the dry Martian wood and build a small fire. He didn't say anything about a celebration, he merely gathered the wood, set fire to it and watched it burn.

In the flare that illumined the thin air of this dried up sea of Mars he looked over his shoulder and saw the rocket ship that had brought them all, Wilder and Cheroke, and Gibbs and McClure and himself

When Spender Stalks the Martian Hills, He

RAY BRADBURY

avenues and odd animals scurried over the gray-red sand

be still as bright

across a silent black space of stars to land upon a dead, dreaming world.

Jeff Spender waited for the noise. He looked at the other men and waited for them to jump around and shout. It would happen as soon as the numbness of being the first men to Mars wore off.

Gibbs walked over to the freshly ignited fire and said, "Why don't we use the ship chemical fire instead of that wood?"

"Never mind," said Spender, not looking up.

It wouldn't be right, the first night on Mars, to make a loud noise, to introduce a strange silly bright thing like a stove. It would be a kind of imported blasphemy.

Faces the Fate of an Idealist Gone Berserk!

There'd be time for that later; time to throw condensed milk cans in the proud Martian canals, time for copies of the *New York Times* to blow and caper and rustle across the lone gray Martian sea-bottoms, time for banana peels and picnic papers in the fluted delicate ruins of old Martian valley towns. Plenty of time for that. And he gave a small inward shiver at the thought.

He fed the fire by hand and it was like an offering to a dead giant. They were on an immense tomb. They had landed on a tomb planet. Here, a civilization had died. It was only simple courtesy that the first night be spent quietly, in reverence to a world that had once moved with life and was now buried and lifeless.

"This is not my idea of a landing celebration," said Gibbs. He looked at Captain Wilder. "Sir, I thought we might break out rashers of gin and meat and hoop it up a bit."

Captain Wilder looked off toward a dead city, a mile away. "We're all of us tired," he said, remotely, as if his whole attention was upon the city and the men were forgotten. "Tomorrow night, perhaps. Tonight we should be glad we got across all that space without getting a meteor in our bulkhead or having one man of us die."

The men shifted around. There were twenty of them and they stood around, some of them holding on to each other's shoulders quietly. Spender watched them. They were not satisfied. They had risked their lives to do a big thing, and now they wanted to be shouting drunk and firing off guns to show how wonderful they were to have kicked a hole in space and ridden a rocket all the way to Mars.

BUT nobody was yelling. Especially Captain Wilder and Spender himself.

The captain gave a quiet order. One of the men ran into the ship and brought forth tins of food which were opened and dished out without much noise. The men were beginning to talk now. The captain sat down and recounted the trip to them. They already knew it all, but it was good to hear about it, as something over and done and safely finished. They would not talk about the return trip. Someone brought that up, but they told him to keep quiet. The spoons moved in the double moonlight; the food tasted good and the wine was even better.

Spender did not take his eyes off them. He left his food on the plate under his hands. He felt the land getting colder. The stars drew closer, very clear.

When anybody talked too loudly, the captain would reply in a low voice that made them talk quietly from imitation.

The air smelled clean and new. Spender sat for a long time just enjoying the way it was made. It had a lot of things in it he couldn't identify; flowers, chemistries, dusts, winds.

"Then, there was the time in New York when I got hold of that blonde, what was her name—Ginnie!" cried Biggs. "That was it!"

Spender sat there, tightening in. His hand began to tremble. His eyes moved behind the thin, sparse lids. His mouth was shut.

"And Ginnie said to me . . ." cried Biggs.

The men listened and roared.

"So I smacked her one," shouted Biggs, with a bottle in his hand.

Spender put down his food tray. He listened to the wind over his ears, cool and whispering. He looked at the cool ice of the Martian buildings over there on the empty sea lands.

"Let me tell you, what a woman, what a woman!" Biggs emptied his bottle into his open mouth. "Of all the women I ever knew!"

The smell of Biggs' sweating body was on the air. Spender let the fire die. "Hey, kick her up there, Spender," said Biggs, looking at him for a moment, then back to his bottle. "Well, one night, me and Ginnie. . . ."

"This," murmured Spender to his empty hands in front of him, "is the first night on Mars."

"What?" said Biggs, pausing.

"Nothing," said Spender.

"As I was saying—" Biggs turned to the other men. They laughed.

A man named Schoenke got out his accordion. He began to do a kicking dance. The dust sprang up under him.

"Ahoo—I'm alive!" he shouted.

"Yay!" roared the men. Their eyes brightened. They threw down their empty plates. Two or three of them lined up and kicked like chorus maidens, joking coarsely. The others, capping hands, cried for something to happen. Cheroke pulled off his shirt and his undershirt and showed his naked chest, sweating, as he whirled around. The moonlight shone on his crew-cut hair and his young clean shaven cheeks glinted with light.

In the sea bottom, the wind stirred along faint pieces of vapor, and from the mountains, great stone visages looked upon the moon-

light and the rocket and the small fire.

Spender closed his hands into fists.

The noise got a little louder and a little louder. More of the men got up and the accordion was squeezed dry of its music. Somebody sucked on a mouth-organ.

"A perverted pastime!" observed Biggs with a slap on his back. Somebody blew on a tissue-papered comb. Twenty more bottles were brought out, opened, drunk.

Biggs staggered about, wagging his arms to direct the dancing men.

"Come on, sir!" cried Cheroke to the captain, jumping around, one foot in the air, wailing a song. The captain shook his head.

"Come on, sir!" called several others.

The captain had to join the dance. He didn't do a very good one. His face was solemn. Spender watched, thinking, you poor man, oh, you poor man. what a night this is! A good man among fools. They don't know what they're doing. They should have been prepared for this. They should have had an orientation program before they came to Mars to tell them how to look and how to walk around and be good for a few days.

"That does it." The captain begged off and sat down, saying he was exhausted. Spender looked at the captain's chest. It wasn't moving up and down very fast. His face wasn't sweaty either.

ACCORDION, harmonica, wine, shout, dance, wail, roundabout, clash of pan, break of bottle, laughter, giggle, stamping—all of it. They had quite a time.

Biggs weaved to the rim of the canal. He carried six bottles in his arms and he dropped one of them, empty, down into the blue canal waters. It made an empty hollow drowning sound as it sank.

"I christen thee, I christen thee, I christen thee—" said Biggs, thickly, unable to say it. "I christen thee Biggs Canal, Biggs, Biggs Canal!" And he dropped two more bottles.

Spender was on his feet and over the fire and alongside of Biggs before anybody could move. He hit Biggs once in the teeth, and once in the ear and then pushed him so Biggs toppled and fell down into the canal water. Spender did it all without so much as a word. After the splash he just stood there, waiting for Biggs to climb back up onto the rim stones. By that time, the men were holding Spender.

"Hey, hey—what's wrong?" they asked. "What's eating you, Spender? Hey?" Spender stared brightly into the canal waters where Biggs floundered like a large fat beetle.

The wind came in off the dead sea.

Biggs climbed up and stood dripping. "Who kicked me off?" he said. He saw the men holding Spender. "Well," he said, and started forward.

"That's enough," said Captain Wilder. The men broke and left Spender standing there. Biggs did not continue his movement. He stopped and looked at the captain.

"Sir," he said.

"All right, Biggs, go climb into some dry clothes," ordered the captain. Biggs went into the ship.

"Here now!" Captain Wilder gestured at Spender. The captain waved his hand at the men. "Carry on with your party! You come with me, Spender."

The men took up the party. Captain Wilder walked off with Spender after him, and stopped quite some distance from the other men.

"I suppose you can just explain what happened now," Wilder said.

Spender looked at the canal. "I don't know. I was ashamed."

"Of what?"

"Of Biggs and us and the noise. Pah, what a spectacle!"

"They've got to have their fun, it's been a long trip."

"Where's their respect, sir? Where's their sense of the right thing?"

"You're tired, too, and you have a different way of looking at things, Spender. That'll be a fifty-dollar fine for you."

"Yes, sir. It was just the idea of Them watching us make vile fools of ourselves."

"Them, Spender?"

"The Martians, dead or not."

"Most certainly dead," said the captain. "But do you think They know we're here?"

"Doesn't an old thing always know when a new thing comes?" said Spender.

"I suppose so. You sound as if you believe in ghosts and spirits."

"I believe in the things that were done, sir, and there are evidences of many things done on Mars. There are streets and there are houses and there are books, I imagine, and big canals and clocks and places for stabling, if not horses, well then some domestic animal, perhaps with twelve legs, who knows. Everywhere I look I see things that were *used*. They were touched and

handled for centuries.

"Ask me if I believe in the spirit of the things as they were used, and I'll say yes. They're all here. All the things which had uses. All the mountains which had names. And we'll never be able to use them without feeling uncomfortable. And somehow the mountains will never sound right to us, we'll give them new names but the old names are there, somewhere, in time, and the mountains were shaped and seen under those names. The names we'll give to the canals and mountains and cities will fall like so much water on the back of a mallard. No matter how we touch Mars, we'll never touch it. And then we'll get mad at it, and you know what we'll do. We'll rip it all up, rip the skin off and change it to fit ourselves."

"We won't ruin Mars," said the captain. "It's too big and too good."

"You think not? We earth men have a talent for ruining big, beautiful things. The only reason we didn't set up hot dog stands in the midst of the Temple of Karnuk in Egypt is because it was out of the way, and served no large commercial purpose. And Egypt is a small part of Earth. But here, this whole thing is ancient and different, and we have to set down somewhere and start fouling it up. I haven't any faith in humans. We'll call the canal the Rockefeller Canal and we'll call the mountain King George Mountain and we'll call the sea the Dupont Sea and we'll call the cities Roosevelt and Lincoln and Coolidge City and it won't ever be right, when there are the *proper* names to these places."

"That'll be your job, as archaeologist, to find out the names and we'll use them."

"A few men like myself, against all the commercial interests?" Spender looked at the iron mountains. "*They* know we're here tonight, and I imagine they hate us because we've come to pry and ruin things."

The captain shook his head. "There's no hatred here." He listened to the wind. "From the look of their cities, they were a graceful, aesthetic, beautiful and philosophical people. They accepted what came to them. They acceded to racial death, that much we know, and without a last-moment war of frustration to tumble down their cities. Everyone we've seen so far has been flawlessly intact. They probably don't mind us being here, any more than they'd mind children playing on the lawn, knowing and understanding children for what they are. And, anyway, perhaps all this will change us for the better.

"Did you notice the peculiar quiet of the men, Spender, until Biggs forced them to get happy? They looked pretty humble and frightened. Looking at all this we know we're not so hot, we're young kids in rompers, shouting with our play-rockets and our atoms, loud and alive. But, one day, Earth will be this way, too. This will sober us up. It's an object lesson in civilizations. We'll learn from Mars. Now, suck in your chin and let's go back and play happy. That fifty-dollar fine still goes."

CHAPTER II

Red Reckoning

THE party was not going too well. The wind kept coming in off the dead sea. It moved around the men and it moved around the captain and Jeff Spender as they returned to the group. The wind pulled at the dust and the shining rocket and pulled at the accordion and the dust got into the vamped harmonica. The dust got in their eyes and the wind made a high singing sound in the air. As suddenly as it had come the wind died.

But the party had died, too.

The men stood upright against the dark cold sky. They had their pale hands to their eyes, some of them coughed.

Spender and the captain sat down.

"Come on, gents, come on!" Biggs bounded from the ship, in a fresh uniform, not looking at Spender even once. "Come on, you guys!" His voice was like someone in an empty auditorium. It was alone. It sounded like bad oratory.

Nobody did anything but stand there.

"Come on, Whitie, your harmonica!"

The wind passed on away along the length of the canal, stirring the cool deep clear waters like so much distilled wine lying in the stone channel.

"Oh," said Whitie, and blew a harmonica chord. It sounded funny and alone and wrong. Whitie knocked the moisture from it and put it in his pocket.

The party was over.

"Come on," insisted Biggs. "What kind of a party *is* this?"

Somebody hugged the accordion. It gave

a sound like a dying animal. That was all.

Biggs put his hands down. "We're tired," said Whitie.

"Well, me and my bottle will go off and have our own party, by gosh!" Biggs held a bottle to his chest. He walked to the ship and squatted against it, taking a drink from the flask.

Jeff Spender watched him. Spender did not move for a long time. Then his fingers crawled up along his trembling leg to his holstered pistol very quietly and stroked and tapped the leather sheath for a moment.

"All of those who want to can come into the city with me. Come along," said the captain. "We'll need a guard posted here at the rocket, of course, and we'll go armed, in case anything untoward happens."

The men counted off. Fourteen of them wanted to go along, including Biggs, who laughed when he included himself and waved his bottle. Six others stayed behind.

The party moved out into the night, through the moonlight, saying not a word, Captain Wilder and Jeff Spender in the lead, Biggs bringing up the rear, stumbling and swearing.

"Here we go!" Biggs shouted.

They stood on the outer rim of the dreaming dead city in the light of the racing twin moons. Their shadows, under them, were double shadows. They did not breathe, or it seemed they did not, perhaps, for a long time. They were waiting for something to stir in the dead city, some gray form to rise, some ancient, ancestral shape to come galloping across the vacant sea bottom on an ancient, armored steed of impossible lineage, of unbelievable derivation.

Spender filled the streets with his eyes and his mind. People moved like blue vapor lights on the cobbled avenues, and there were faint murmurs of sound, and odd animals scurrying across the gray-red sands. Each window was given a person who leaned from it and waved slowly, as if under a timeless water, at some moving form in the fathoms of space below the moonsilvered towers. Music was played on some inner ear, and Spender imagined the shape of such instruments to evoke such music. The land was haunted.

"Hey!" shouted Biggs, standing tall, his hands around his open mouth. He pointed his face at the city. "Hey, you people in there, you!"

"Biggs!" said the captain.

Biggs quieted.

THEY walked forward on a tiled avenue. They were all whispering now, for it was like entering a vast open library or a mausoleum in which the wind lived and over which the stars shone. The captain talked. He wondered where the people had gone, and what they had been, and who their kings were and how they died? And he wondered, quietly aloud, how they had built this city to last the ages through, and had they ever come to Earth? Were they ancestors of Earth men, ten thousand years removed? And had they loved and hated similar loves and similar hates, and done similar silly things when silly things were done?

Nobody moved. The moons held and froze them, the wind beat slowly around them, the sand shifted in little tremors over their feet.

"Lord Byron," said Jeff Spender.

"Lord who?" The captain turned and regarded the man.

"Lord Byron, a Nineteenth Century poet. He wrote a poem a long time ago that fits this city and how the Martians may feel, if there's anything left of them to feel. It might have been written by the last Martian poet."

The men stood motionless, their shadows under them.

The captain said, "How does it go, Spender?"

"What, sir?"

"The poem, how does it go?"

Spender shifted, put out his hands to remember, squinted silently a moment; then, remembering, his slow quiet voice repeated the words and the men listened to everything he said:

> So we'll no more a-roving
> So late into the night,
> Though the heart be still as loving,
> And the moon be still as bright.

The city was gray and high and motionless. The men's faces were turned in the light.

> For the sword outwears its sheath,
> And the soul wears out the breast
> And the heart must pause to breathe,
> And love itself must rest.
> Though the night was made for loving,
> And the day returns too soon,
> Yet we'll go no more a-roving
> By the light of the moon.

Without a word, the Earth men stood in the center of the city. It was a clear night. There was not a sound, except the wind. At their feet lay a tile court, worked into the shape of ancient animals and peoples. They stood looking down upon it.

Biggs made a noise in his throat. His eyes were dull. He groped out thick senseless fingers, shuffled forward upon the tiles, there to hesitate. His hands went up to his neck, he choked several times, shut his eyes, bent, and a thick rush of fluid filled his mouth, came out, fell to and lay upon the tiles, covering the patterns. Biggs repeated this twice and a sharp stench filled the quiet air.

Nobody moved to help Biggs. He went on being sick.

Spender stared for a moment, then turned and walked off into the avenues of the city, lost to their sight, alone in the moonlight. Never once did he pause to look back at the gathered men there.

They turned in at four in the morning. They lay down upon blankets with pillows under their heads and shut their eyes and breathed the quiet air. Captain Wilder sat feeding the fire little sticks. His hands hung down between his muscular legs. He watched the fire steadily.

McClure opened his eyes for a moment. "Are you sleeping, sir?"

"Never you mind." The captain smiled faintly. "I'm waiting for Spender."

"Isn't he back, sir?"

Captain Wilder shook his head.

McClure thought it over a moment. "You know, sir, I don't think he'll ever come back. I don't know how I know it, but that's the way I feel about him, sir, he'll never come back."

McClure rolled over into sleep. The fire crackled and died out.

Spender did not return in the following week. The captain sent out a party for him, but they came back saying they didn't know where he could have gone. He would be back when he got good and ready. He was a sorehead, they said. To the devil with him.

The captain said nothing, but wrote it down in the log. . . .

IT WAS a morning that might have been a Monday or a Tuesday or any day on Mars. Biggs was sitting at the edge of the canal, now and again lifting his bare feet up and peering at them while he spread the toes with his fingers. Then he hung the feet back down into the cool water and sat there.

A man came walking along the rim of the canal. The man threw a shadow down upon Biggs and Biggs looked up.

"Well, I'll be blistered!" said Biggs.

"I'm the last Martian," said the man, taking out a gun.

"What did you say?" asked Biggs.

"I'm going to kill you."

"Cut it. What kind of a joke is that, Spender?"

"Stand up and take it in the stomach."

"For Pete's sake, put that gun away."

Spender pulled the trigger only once. Biggs sat on the edge of the canal for a moment before he leaned forward and fell into the water. The body drifted with slow unconcern under the slow tides of the canal. It went away and down, making a hollow bubbling sound that ceased after a moment.

Spender shoved his gun into its holster and walked away quietly. The sun was shining down upon Mars. He felt it burn his hands and slide over the sides of his tight face. He did not run, he walked as if nothing was new except the daylight. It was good to take it easy. He walked down to the rocket and some of the men were having a freshly cooked breakfast under a shelter built by Cookie.

"Here comes the Lonely One," somebody said.

"Hello, Spender! Long time no see."

The four men at the table regarded the silent man who stood looking back at them.

"You and them shoddy ruins," said Cookie, stirring a black substance in a crock. "You're like a dog in a boneyard."

"Maybe." Spender sat down and said, "I've been finding out things. What would you say if I said I'd found a Martian prowling around?"

The four men laid down their forks.

"Did you? Where?"

"I'm not saying I did, I just said 'supposing.'"

The four men relaxed. Cookie went on stirring the stuff in the crock. "Well, supposing," said Cheroke, at the table, waiting.

"How would you feel if you were a Martian and people came to your land and started tearing it up?" asked Spender.

"I know exactly how I'd feel," said Cheroke. "I've got some Cherokee blood in me. My grandfather told me a lot of things about the Oklahoma Territory. If there's a Martian around, I'm all for him."

"What about you other men?" asked Spender, carefully.

Nobody said anything, but the silence they maintained was talk enough. Catch as catch can, finder's keepers, if the other fellow turns

his cheek slap it hard. Et cetera.

"Well," said Spender. "I've found a Martian."

"Where?" The men squinted at him.

"Up in the ruins. I didn't think I'd find him. I didn't intend to find him. I don't know what he was doing there. I've been living in a little valley town for about a week, learning how to read the ancient books and looking at their old art forms. And one day I saw this Martian. He stood there for a moment and then he was gone. He didn't come back for another day. And I sat around, learning how to read the old writing and the Martian came back, each time a little nearer, until, on the day I learned how to read the old writing—it's amazingly simple language to learn, and there are tile picturegraphs to help you, and old song-spools you can listen to—

"On that day when I learned the language, the Martian appeared before me. He said to me, 'Give me your boots,' and I gave him my boots and he said, 'Give me your shirt and all the rest of your apparel,' and I gave him all of that, and then he looked at me and he said, 'Give me your gun,' and I gave him my gun. Then he said, 'Now come along, and watch what happens'. And the Martian walked down into camp and he's here now."

The men looked around and then looked at each other.

"I don't see any Martian," said Cheroke.

"I'm sorry."

Spender took out his gun. The first bullet got the man on the left, the second and third bullets got the men on the right and the center of the table. Cookie turned in horror from the fire to receive the fourth bullet. He fell back into the fire and lay there while his clothes caught the flames. It was like stamping your foot lightly, for all the sound it made.

The rocket lay in the sun. Three men sat at breakfast, their hands on the table, not moving, their food getting cold in front of them. Cheroke, untouched, sat alone, staring in numb disbelief at Spender.

"You can come with me," said Spender to Cheroke.

Cheroke said nothing. His lips moved but nothing came out. His eyes widened into a kind of dull blindness.

"You can be with me on this." Spender waited.

Finally Cheroke was able to speak. "You killed them," he said, daring to look at the men around him.

"They deserved it."

"You killed them. Why? You're crazy."

"Maybe I am. But you can come with me."

"Come with you, for what?" cried Cheroke, the color out of his face, his eyes watering. "Go on, get out."

"You won't come with me?"

"No, no, you idiot!"

Spender's face hardened. "And of all of them, I thought *you* would understand."

"Go on, get out." Cheroke reached for his gun.

Spender pressed the trigger of his own gun once more.

Cheroke stopped moving.

Now Spender swayed. He put his hand to his sweating face. He glanced at the rocket and suddenly began to shake all over. He almost fell down, the physical reaction was so overwhelming. His face held an expression of one awakening from hypnosis, from a dream. He sat down for a moment and told the shaking to go away.

"Stop it, stop it," he commanded of his body. Every fibre of him was quivering and shaking. "Stop it!" He crushed his body with his mind until all the shaking was squeezed out of it. His hands lay calmly now upon his silent knees.

He arose and strapped a portable storage locker on his back with quiet efficiency. His hand began to tremble again, just for a breath of an instant but he said "No!" very firmly and the trembling passed. Then, walking stiffly, he moved out between the hot red hills of the land, alone.

CHAPTER III

Reign Of Death

AS THE DAY advanced, it grew nice and warm. The sun burned further along the sky. An hour later, the captain climbed down out of the ship to get some ham and eggs. He was just saying hello to the four men sitting there when he stopped and noticed a faint smell of powder fumes on the air. He saw the cook lying on the ground, with the camp fire under him. The four men at the table sat before food that was cold.

From the ship, a moment later, "Whitie" and two other men climbed down. The

captain stood in their way, fascinated by the silent men before him and the way they sat so quietly at their breakfast. They moved past him and stopped.

The captain's face was pale. "Get the men, all of them."

"Yes, sir." Whitie hurried off down the canal rim.

The captain walked up and touched Cheroke. Cheroke twisted quietly and fell from his chair. Sunlight burned in his bristled short hair and on his high cheekbones.

The men were called in. They looked at each other's faces and counted each other, one, two, three, four, and said each other's names.

"Who's missing?"

"Just a moment."

"It's still Spender, sir."

"Spender!"

The captain saw the hills rising in the daylight. The sun showed his teeth in a grimace as he stared at the hills. "Blast him," he said, in tired tones. "Why didn't he come and talk to me?"

"He should've come and talked to *me*," cried Whitie, his eyes blazing. "I'd shot his bloody brains out, that's what I'd have done, and I'll do it now, by jinks! I'll spill them all over the place!"

Captain Wilder nodded at two of the men. "Get shovels. There'll be a service, and then we'll go up in the hills and find Spender."

"We'll beat his brains out," said Whitie.

It was hot digging the graves. A warm wind came from over the vacant sea and blew the dust up into their faces as the captain turned the Bible pages and said the few necessary words. They were all sweating around the opened earth. When the captain closed the book, somebody began shoveling slow streams of sand down upon the wrapped figures.

They walked back to the rocket, clicked the mechanisms of their rifles, put thick packets of grenades on their backs and checked the free play of pistols in their holsters. They were each assigned to a certain part of the hills. The captain directed them without raising his voice or moving his hands from his belt at the waist. It was like a little sermon on fishing.

"Let's go," he said. . . .

Spender saw the thin dust rising in several places in the valley and he knew the pursuit was organized and ready. He put down the thin aluminum book that he had been reading as he perched easily on a flat boulder. The pages were tissue-thin pure aluminum, stamped in black and gold. It was a book of philosophy at least 10,000 years old he had found in one of the buildings of a Martian valley town. He was reluctant to lay it aside.

For a long time he had thought, What's the use? I'll sit here reading until they come along and shoot me.

The first reaction to his killing the five men at breakfast had caused a period of stunned blankness, then sickness, and now, a strange peace. But the peace was passing too, for he saw the dust going up from the trails of the hunting men and experienced the return of resentment.

He took a drink of cool water from the hip canteen. Then he stood up, stretched, yawned, and listened to the peaceful wonder of the valley around him. How very fine if he and a few others that he knew on Earth could be here, live out their lives here, without a sound or a worry.

He carried the book with him in one hand, the pistol ready in the other hand. There was a little swift running stream filled with white pebbles and rocks where he undressed and waded in for a brief washing. He took all the time he wanted before dressing and picking up the gun again.

The firing began about three in the afternoon. By then, Spender was high in the hills. They passed through three small Martian towns. Really, it looked to all of them, as if the Martians were a tribal or family lot, one or another of the families from one town would find a green spot in the hills and a villa would be built with a pool and a library and some sort of stage and a good many balustrades and tiled terraces.

Spender spent half an hour in one, bathing once more in a pool filled by the seasonal rains, waiting for the men to catch up with him. The shots rang out just as he was leaving the little family town, and some tile chipped up about twenty feet behind him. He broke into a trot, got behind a series of little hills, turned, and, with the first shot, dropped one of the men dead in his tracks.

THEY would form a net, a circle, Spender knew that. They would go around and close in and they would get him. It was a strange thing that the grenades were not used. Captain Wilder could easily order the grenades tossed.

But I'm much too nice to be blown to bits,

thought Spender, that's what the captain thinks. He wants me with only one hole in me. Now isn't that strange? The captain wants my death to be clean. Nothing messy. Because why? Because he understands me and, because he understands, therefore is willing to risk his good men to give me a clean shot in the head?

Seven, eight, nine shots broke out in a rattle. The rocks around him flew up at the explosions. Spender fired steadily, sometimes while looking at the aluminum book he carried in his hand.

The captain ran in the hot sunlight, with a rifle in his hand. Spender followed him in the sights of his pistol, but did not fire. Instead he shifted over and blew the top off a rock where Whitie lay, and heard an angry shout. Suddenly the captain stood up and he had a white handkerchief in his hands. He said something to the men and came walking up the mountain after putting aside his rifle. Spender lay there, then arose to his feet, his pistol ready.

The captain came up and sat down on a warm boulder, not looking at Spender for a moment.

Then he reached into his pocket, Spender waved his pistol a little.

The captain said, "Cigarette?"

"Thanks." Spender took one.

"Light?"

"Got my own."

They took one or two puffs and let it out.

"Warm," said the captain.

"It is."

"Are you comfortable up here?"

"Enough."

"How long do you think you can hold out?"

"About twelve men's worth."

"Why didn't you kill all of us this morning when you had the chance. You could have, you know."

"I know. I got sick. When you want to do a thing badly enough you lie to yourself. You say the other is all wrong. Well, soon after I started killing people, I realized they were just fools and I shouldn't be killing them. But it was too late. I couldn't go on with it then, so I came up here so I could lie to myself some more and get angry, to build it all up."

"Is it built up?"

"Not very high. Enough."

The captain puffed on a cigarette. "Why did you do it?"

Spender quietly laid his pistol at his feet. "Because I've seen that what these Martians had was just as good as anything we'll ever hope to have. They stopped where we should have stopped a hundred years ago. I've walked in their cities and I know these people and I'd be glad to call them my ancestors."

"They have a beautiful city there," The captain nodded at one of several places.

"It's not that alone. Yes, they have a good city here. They knew how to blend art into their living. It's always been a thing apart for Americans. Art was something you kept in the crazy son's room upstairs. Art was something you took in Sunday doses, mixed with some religion, maybe. Well, these Martians have art and religion and everything."

"You think they knew what it was all about, do you?"

"For my money."

"And for that reason, you started shooting people."

"When I was a kid my folks took me on a visit to Mexico City. I'll always remember the way my father acted—loud and big. And my mother didn't like the people because they were dark and didn't wash right. And my sister wouldn't talk to some of them. I was the only one really liked it. And I can see my mother and my father coming to Mars and doing the same.

"Anything that's strange is no good to the average American. If it doesn't have Chicago plumbing, it's nonsense. The thought of that! Oh God, the thought of that! And then—the war. You heard the Congressional speeches before we left. If things work out they hope to establish three atomic research and atom bomb depots on Mars. And that means Mars is doomed, all of this wonderful stuff gone. How would you feel if a Martian came and vomited stale liquor all over the White House floor?"

QUIETLY the captain sat blinking in the smoke.

"And then the other power interests coming in," said Spender. "The mineral men and the travel men. Do you remember what happened to Mexico when Cortez and his very fine good friends arrived from Spain? A whole civilization destroyed by greedy, righteous bigots. History will never forgive Cortez."

"You haven't been acting ethically your-

self, today," observed the captain.

"What could I do? Argue with you? It's simply me against the whole crooked grinding greedy setup on earth. They'll be flopping their filthy atom bombs up here, fighting for bases to have wars. Isn't it enough they're ruining one planet, without ruining another; do they have to foul someone else's manger? The simple-minded wind-bags. When I got up here, I felt I was not only free of their so called culture, I felt I was free of their ethics and their customs. I'm out of their frame of reference, I thought. All I have to do is kill you all off, and live my own life."

"But it didn't work out," said Captain Wilder.

"No, after the fifth killing at breakfast, I discovered I wasn't all new, all Martian, after all. I couldn't throw away everything I had learned on earth so easily. But now I'm all right. I'll kill all of you off. That'll delay the next trip in a rocket for a good five years. There's no other rocket in existence today, save this one. The people on Earth will wait a year, two years, and then when they hear nothing from us, they'll be very afraid to build a new rocket. They'll take twice as long, and make a hundred extra experimental models to insure themselves against another failure."

"You're correct."

"A good report from you, on the other hand, when you returned, would hasten the whole invasion of Mars. If I'm lucky, I'll live to be sixty years old. Every expedition that lands on Mars will be met by me. There won't be more than one ship at a time coming up, one every year or so, and never more than twenty men. After I've made friends with them and explained that our rocket blew up one day—I intend to blow it up after I finish my job, today—I'll kill them off, every one of them. Mars will be untouched for the next half century. After awhile, perhaps the people of Earth will give up trying. Remember how they grew leery of the idea of building Zeppelins that were always going down in flames?"

"You've got it all planned," said the captain.

"I have."

"And yet you're outnumbered and in about an hour we'll have you surrounded and you'll be dead."

"I've found some underground passages and a place to live that you'll never find. I'll withdraw there and live for a few weeks. Until you're off guard. Then I'll come out and pick you off, one by one."

"Will you have something to drink?" The captain threw down his cigarette.

"I don't mind."

The captain poured two drinks from a hip flask.

"If you don't mind, sir, I'll take your cup, you take mine, that way we won't have anyone falling down poisoned."

The captain looked him in the face. "You don't think I'd pull a thing like that."

Spender said, "No. No, I guess you wouldn't. Here."

They drank the whisky slowly.

"Tell me about your civilization here," suggested the captain, casually examining his man.

"They knew how to live with nature and get a long with nature. They didn't try too hard to be all men and no animal. That's the mistake we made when Darwin showed up. We embraced him, and Huxley and Freud, all smiles. And then we discovered that Darwin and our religions didn't mix. Or at least we didn't think they did. We were fools. We tried to budge Darwin and Huxley and Freud, and they wouldn't move very well. So, like fools, we tried knocking down religion.

"We succeeded pretty well in many instances. We lost our faith and went around wondering what life was for. If art was no more than a frustrated outflinging of desire, if religion was no more than self-delusion, what good was life? Faith had always given us answers to all things. But it all went down the drain with Freud and Darwin. We were and still are a lost people."

WILDER was staring steadily at Spender whose eyes had taken on a dreamy expression.

"And these Martians are a *found* people?" asked the captain.

"Yes. They knew how to combine science and religion so the two worked side by side, neither denying the other, one enriching the other."

"That sounds ideal."

"It was. And do you know how the Martians did this? I'd like to show you."

"The men are waiting down on the hill for me."

"We'll be gone half an hour. Tell them that, sir."

The captain hesitated, then rose and called an order down the hill.

Spender took him down into a little mountain village built all of cool perfect marble. There were great friezes of beautiful animals, white limbed cat things, and yellow limbed sun symbols, and statues of bull-like creatures and statues of men and women and huge, fine-featured dogs.

"There's your answer, Captain."

"I don't see."

"The Martians discovered the secret of life in the animals. The animal does not question life. It lives. It's very reason for living *is* life; it enjoys and relishes life. You see—the statuary, the animal symbols, again and again."

"It looks pagan."

"On the contrary, those are God symbols, symbols of life. Man had become too much man, and not enough animal on Mars, too, one day. And man realized that, in order to survive, he would have to forego asking that one question any longer. *Why live?* Life was its own answer. Life was the propagation of more life and the living of as good life as possible. The Martians realized that they asked the question 'Why live at all?' at the height of some period of war and despair, when there was no answer. But once the civilization calmed, quieted, and became economically sound, and wars ceased, the question became senseless in a new way: Life was now good, and needed no arguments."

"It sounds as if the Martians were quite naive."

"Only when it paid to be naive. They quit trying too hard to destroy everything, to humble everything. They blended religion and art and science, because, at base, science is no more than an investigation of a miracle we can never explain, and art is an interpretation of that miracle. They never let science crush the aesthetic and the beautiful. It is all simply a matter of degree. The Earth man thinks:

" 'In that picture, color does not exist, really. A scientist can prove that color is only the way the cells are placed in a certain material to reflect light. Therefore color is not really an actual part of the thing I happen to see.'

"A Martian, far cleverer, would say: 'This is a fine picture. It came from the hand and mind of a man inspired. Its idea and its color are from life. This thing is good.' "

CHAPTER IV

Stone Sarcophagus

CURIOUSLY the captain looked around at the little quiet cool town, sitting in the afternoon sun.

"I'd like to live here," he said.

"You may if you want."

"You ask *me* that?"

"Will any of those men under you ever really understand all this? They're professional cynics, and it's too late for them. Why do you want to go back with them? So you can keep up with the Joneses? To buy a gyro just like Smith has? To listen to music with your pocketbook instead of your glands? There's a little patio down here with a reel of Martian music in it at least fifty thousand years old. It still plays. Music you'll never hear in your life. You could hear it. There are books. I've gotten on well in reading them, already. You could sit and read."

"It all sounds quite wonderful, Spender."

"But you won't stay?"

"No. Thanks, awfully."

"And you certainly won't let me stay, without trouble. I'll have to kill you all."

"You're optimistic."

"I have something to fight for and live for, that makes me a better warrior. I've got a religion now. It's learning how to smell and breathe all over. And how to lie in the sun getting a tan, letting the sun get into you. And how to hear music and how to read a book. What does your civilization have to offer?"

The captain shifted his feet. He shook his head. "I'm sorry all this is happening. I'm sorry about it all."

"I am too. I guess I'd better take you back now so you can start the attack."

"I guess so."

"I won't kill you, captain. When it's all over, you'll still be alive."

"What?"

"Yes. I decided that when I began all this. You would be the one I would leave alive. I never intended touching you. I don't intend to now."

"Well," said the captain.

"I won't kill you, I'll save you out from the rest," said Jeff Spender. "When they're all dead, maybe you'll change your mind."

"No," the captain said, "I won't change. There's too much earth blood in me. I'll have to kill you."

"Even when you have a chance to stay here?"

"It's funny, but yes, even with that. I don't know why. I've never asked myself. Well, here we are." They had reached the place where they had met now. "Will you come on quietly with me, Spender? This is my last offer."

"Thanks, no." Spender put out his hand. "And one last thing? If you win, do me a favor? See what can be done to restrict tearing this planet apart, at least for fifty years, until the archaeologists have had a decent time of it, will you?"

"Right."

"And one more thing. If it'll help you any, just think of me as a very crazy fellow who went berserk one summer day and never was right again. It'll be a little easier on you, perhaps. Do that."

"I'll think it over. So long, Spender. Good luck."

"You're an odd one," said Spender as the captain walked back down the trail in the warm blowing wind.

The captain returned like something lost to his dusty men. He kept squinting at the sun and breathing hard.

"Is there a drink?" he wondered. He felt the bottle put cool into his hand. "Thanks." He drank. He wiped his mouth.

"All right," he said. "Take it easy, we have all afternoon. I don't want any more lost. You'll have to kill him. He won't come down. Make it a clean shot if you can. Don't mess him. Get it over with." He took another cool drink.

"I'll kick his bloody brains out," said Whitie.

"No, through the chest," said the captain. He could see Spender's strong, clearly determined face.

"His bloody brains," said Whitie.

The captain handed him the bottle jerkingly. "You heard what I *said*, through the chest."

Whitie talked to himself.

"Now," said the captain.

THEY spread again, walking and then running, and then walking on the hot hillside places where there would be sudden cool grottoes that smelled of moss, and sudden open blasting places that smelled of sun on stone.

I hate being clever, thought the captain, when you don't really feel clever and don't want to *be* clever. To sneak around and make plans and feel big about making them. I hate this feeling of thinking I'm doing right when I'm not really certain I am. Who are we, anyway? The majority? Is that the answer. The majority is always holy, isn't it? It is always right, is it not? Always, always; just never wrong for one little insignificant, tiny moment, is it? Never ever wrong in ten million years? He thought: What is this majority and who are in it? And what do they think and how did they get that way and will they ever change and how the devil did I get caught in this rotten majority? I don't feel comfortable. Is it claustrophobia, fear of crowds, or common sense? Can one man be right, while all the world thinks they are right. Let's not think about it. Let's crawl around and act exciting and glamorous and run around and pull the trigger. There, and *there!*

The men ran and ducked and ran and squatted in shadow and showed their teeth and tightened their eyes and lifted their guns and tore holes in the summer air, holes of sound and heat.

Spender remained where he was, firing only on occasion.

"Bloody brains all over!" Whitie kept yelling as he ran up the hill.

The captain aimed his gun at Whitie. He stopped and put it down and stared at it in horror. "What were you doing?" he asked of his limp hand and the gun. His eyes widened and shut and he gasped and could not breathe.

He had almost shot Whitie in the back.

"God help you!" breathed the captain. "What are you *doing?* What's happening!"

He opened his eyes to see Whitie still running, then falling to lie safe under an outcrop.

"What goes on?" The captain stared up. From where he lay he could see it all. Spender was being gathered in by a loose running net of men. At the top of the hill, behind two rocks, Spender lay, grinning with exhaustion, great islands of sweat under each arm. The captain saw the rocks. There was an interval of about four inches giving free access through to Spender's chest.

"Hey, you!" Whitie cried. "A bullet in your head. I will!"

The captain waited. Go on, Spender, he thought. Get out, like you said you would.

You've only got a few more minutes to escape. Get out and come back later. Go on, get out. You said you would. Go down in the tunnels you said you found and lie there and live for months and years, reading your fine books and bathing in your temple pools. Go on, now, man, before it's too late.

Spender did not move from his position on the hill. "What's wrong with him?" the captain asked himself.

The captain picked up his gun. He watched the running, hiding men. He looked at the towers of the little clean Martian village, like sharply carved chess pieces lying in the afternoon. He saw the rocks and the interval between where Spender's chest showed through.

Whitie was running up, screaming in fury.

"No, Whitie," said the captain. "I can't let *you* do it. Nor the others. No, none of you. Only me." He raised the gun and sighted it.

Will I be clean after I do this? he thought. Is it right that it's me who does it? Yes, it *is*. I know what I'm doing for what reason and it's right, because I think I'm the right person. I hope and pray I can live up to this. He nodded his head in a jerking move at Spender.

"Go on," he called in a loud whisper which nobody heard. "I'll give you thirty seconds more to get away, to escape. Thirty seconds, boy!"

The watch ticked on his wrist. The captain watched it tick. The men were running. Spender did not move. The watch ticked for a long time, very loudly in his ears. "Go on, Spender, go on, get away!"

The thirty seconds were up.

The gun was sighted. The captain drew a deep breath. "Spender," he said, exhaling.

He pulled the trigger.

All that happened was that a faint powdering of rock went up in the sunlight. The echoes of the report faded.

THE captain stood up and called to his men. "He's dead."

The other men did not believe him. Their angles had prevented their seeing that particular fissure in the rocks. They saw their captain run up the hill, alone, and thought him either very brave or insane.

The men came after him a minute later.

They gathered around the body and somebody said, "In the chest?"

The captain looked down. "In the chest," he said. He saw how the rocks had changed color under Spender. "I wonder why he waited, I wonder why he didn't escape like he planned. I wonder why he stayed on and got himself killed?"

"Who knows," someone said.

Spender lay there, with his hands clasped, one around the gun, another around an aluminum book that shone in the sun.

Was it because of me? thought the captain. Was it because I refused to give in, myself? Did Spender hate the idea of killing *me*? Am I any different than these others here? Is that what did it? Did he figure he could trust me? What other answer is there?

None. He squatted beside the silent body.

I've got to live up to this, he thought. I can't let him down, now. If he figured there was something in me that was like himself, and couldn't kill me because of it, then what a job I have ahead of me! That's it, all right. I'm Spender all over again, but I think before I shoot. I don't shoot at all; I don't kill. I do things with people. And he couldn't kill me because I was himself under a slightly different condition.

The captain felt the sunlight on the back of his neck. He heard himself saying, "If only he had come to me and talked it over before he shot anybody, we could have worked out something, somehow."

"Worked out what?" said Whitie. "What could we have worked out with *his* likes?"

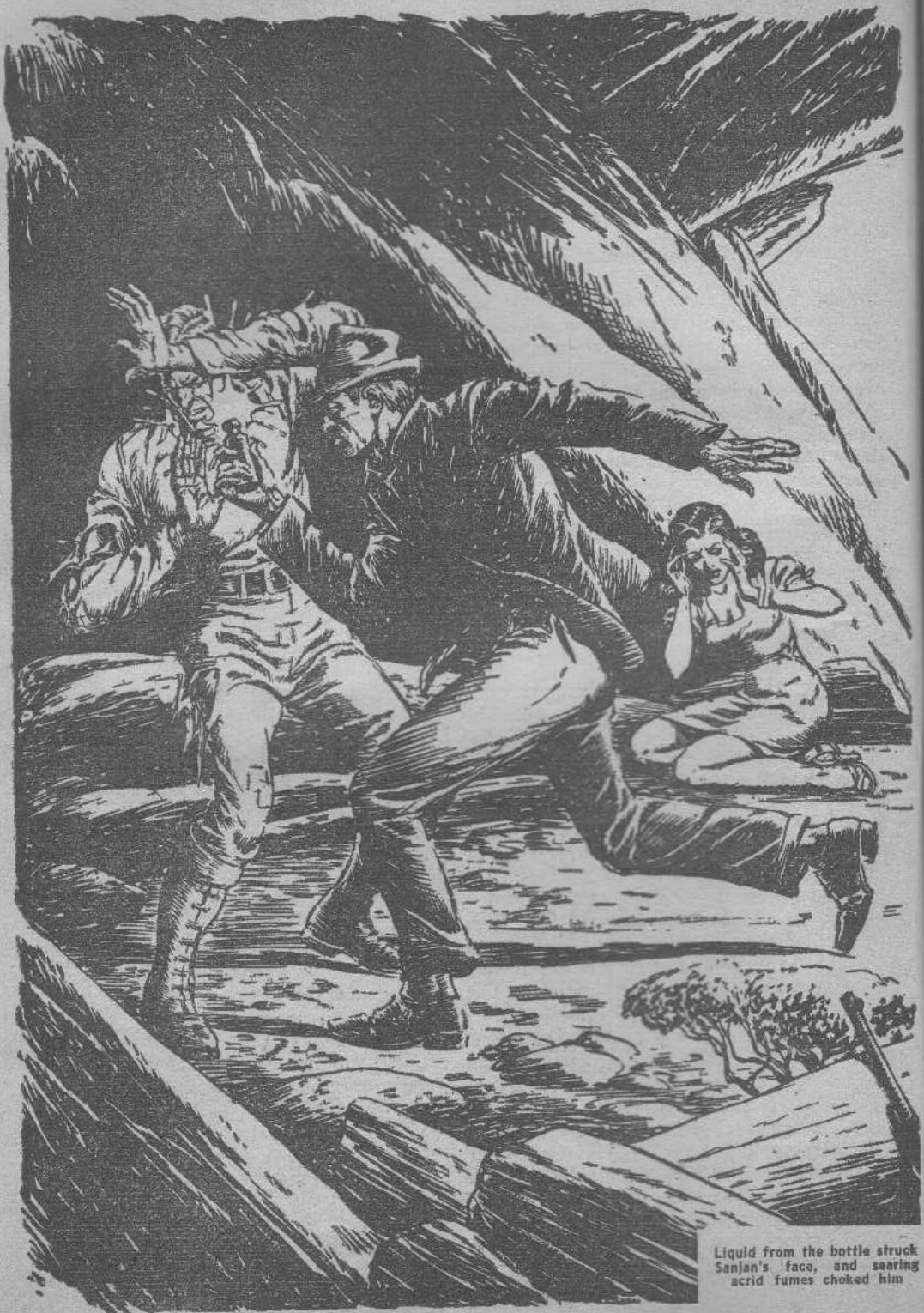
There was a singing of heat in the land, off the rocks and off the blue sky. "I guess you're right," said the captain. "We could never have got together. Spender and myself, maybe. But Spender and you and the others, no, never. He's better off now. Let me have a drink of water from that canteen."

It was the captain who suggested the empty sarcophagus for Spender. They put him into it with waxes and wine, his hands folded over his chest. The last they saw of him was his peaceful face.

They stood for a moment in the ancient vault. "I think it would be a good idea for you to think of Spender from time to time," said the captain.

They turned and walked from the hall and shut the marble door with the name Spender marked on it and the dates 1950—1978 under that.

The next afternoon, Whitie did some target practice in one of the dead cities, shooting out the crystal windows and blowing the tops off the fragile towers. The captain caught Whitie and knocked his teeth out.



Liquid from the bottle struck Sanjan's face, and searing acrid fumes choked him

AHEAD OF HIS TIME

a novelet by RAY CUMMINGS

CHAPTER I

Radiant Child

HE was about two years old when he first became aware that there was always a dim glow of light around him. It was nice, because it shone on the bright-colored little animals, birds and fishes which were on the inside of his white enameled crib. Even in the daytime he was sometimes aware of the glow. In the afternoons, when the summer sunlight was hot and bright, and his mother would put him into his crib when he wasn't a bit sleepy, he would lie staring at the little figures. He could see them plainly, because the pale silver glow was on them.

"But it frightens me, Robert. Our little son—so queer—weird!" That was his mother's murmured voice, as she stood one night with his father at the doorway of his dim bedroom.

"It mustn't fighten you, Mary. After all, you're a scientist too."

Then their voices faded as they went back

Sanjan Thome, the radioactive man, seals his own doom by striving to save the world from ultimate disaster!

into their own room.

Robert Thome closed their bedroom door. He was a famous experimental physicist, and his wife was his assistant. Both of them were scientists. Mary Thome knew, of course, that there were things very strange about this little son, but she was a mother as well as a scientist, and she had tried to ignore it, even while it terrorized her. Thome felt that the time had come now when they couldn't ignore it any longer.

"But Robert, that radiance—the way his little body glows in the dark—is like radioactivity."

"It isn't that," Thome said.

A queer opalescent glow kept streaming from the baby's body. When Sanjan was asleep, it could hardly be seen, even in darkness. The glow grew stronger when he was awake. And when he was angry, it sharpened with a new intensity.

"Not some form of radioactivity?" Mary Thome said. "How do you know?"

Her husband gazed at her solemnly. "I even tried the new Watling refinement of the Geiger counter. It showed nothing of radioactivity."

"You've been experimenting on him, Robert?" Mary Thome's voice was shocked.

"Yes," he agreed. "Why not? We can't ignore it, Mary. But there's no reason why it should frighten us."

"Then if it isn't radioactivity, what is it?"

WHAT indeed? Some sort of power. Something inherent to him. Something which of course some day science would be able to explain, but now could only call an enigma.

And there were other things different about Sanjan Thome. Even now, in infancy, his high cheekbones, thin cheeks and pointed chin were apparent. At two years old he was talking with an abnormal fluency. Everything about him was precocious. The look of bright, dancing understanding in his eyes.

There was that time when Robert Thome had held a bright-colored rattle down into the crib. Sanjan had only been a year old then. He had reached for the rattle, but not with a normal baby's slow, uncertain fumbling. Instead, his eyes had flashed; his tiny hand had darted out and grasped it with incredible speed and accuracy.

"All his perceptions are swifter than normal, Mary," Thome had explained. "The messages his brain sends to his muscles are all speeded up."

A gifted child. Why should they think of him in terms of something gruesome? This small human creature was supernormal—superior. The child was a sudden advancement in the slow normal development of the human race. It was as though he had jumped the gap of generations. A human ahead of his time.

Robert Thome no longer felt justified in hiding his secret from his scientific associates. He brought them in. Gravely they studied and tested little Sanjan, who stared at them with his dancing eyes, chattered his grown-up baby talk and was amused and excited by it all.

There was a flurry of comment now, in print and on the radio. Newscasters called little Sanjan a freak, and his mother was appalled and resentful.

"Robert, you're going to ruin his life. You're making him a bug on a pin."

"But Mary, science needs to know. We've something wonderful here."

But public interest died out. The world soon forgets. Science called Sanjan Thome a biological abnormality. To science he symbolized a new eugenics, a product of the New Era of Atomic fission, a mutation. Mary Thome, as a war prisoner in Japan, had been in the outskirts of Hiroshima when the first atomic bomb was dropped.

Seemingly, the radioactivity to which she had been exposed, had wrought no serious effects upon her. But the effects were there. And Robert Thome had been for years one of the key physicists working on the developement of atomic fission. He had been in the Manhattan Project, from the beginning, until that first bomb was tested in New Mexico. Then, when the war was over, he had been in Operation Crossroads, meeting Mary about that time, and marrying her. He had always been careful, with Geiger counters to mark when one should no longer expose himself. Or had he sometimes been too eager? Too reckless, in his enthusiasm for this new and wonderful atomic power?

Something had changed within both the mother and father of Sanjan Thome. Science coins names for almost everything, glibly speaking of genes and hormones which are altered by radioactivity, so that they produce something new. What is so mysterious about that? Even the creation of life still is a mystery beyond human ken.

And so Sanjan Thome was a mutant. . . .

Ten years passed, and one day Sanjan was having a quarrel with the little girl next door.

"I didn't!" said Sanjan.

"Yes you did, too! I had only six pieces, you had seven!"

"I didn't!"

"Yes you did, Sanjan Thome. You had seven, and this one is mine!"

But like a darting rapier, Sanjan snatched the last chocolate candy from the little girl and stuffed it into his mouth. She stood startled, it had been so quick.

"Why, you horrid little boy! That's what you are!" She stamped her foot and burst into tears.

"And you're just a cry baby," he taunted. "Besides, I'm not a boy now. I'm a man. I'm ten."

VANA Grant was the little girl next door. She was his only playmate. Her father was the mayor of the town. The Grant garden adjoined that of the Thomes, with only a small hedge between. Long ago, now, Robert Thome had withdrawn his strange child from the world. School was impractical. Sanjan had his own tutors. Peter Grant, Vana's father, was a close friend of the Thomes.

The Grants and Thomes had built a high wall around their two houses and within it was Sanjan's world. Already, he startled his tutors with his ability to learn. At ten, anyone would have called him well educated. Yet mixed with his maturity, there was normal childishness, so that he could play with Vana and quarrel with her.

"I hate you, Sanjan Thome! I hate you, and I'm afraid of you!"

Then as she started to run into her house, he stood stricken.

"Come back, Vana! Don't cry!"

"No, I won't come back! You're a horrid little boy!"

"I'm sorry I took your candy, Vana."

Then he was so immensely relieved when she came back.

That night he said his father:

"Dad, I took a piece of candy from Vana today. It was hers, but I took it because she couldn't stop me. That's human nature, isn't it? Being greedy. Taking what you can get, because you're stronger?"

"Yes," Thome said gravely. "Yes, it is."

"And if people are that way, of course, nations are that way too," Sanjan said. "They do what I did to Vana. Only when it's nations, it's called war."

Then out of another silence, Sanjan said, "And the atomic bomb makes a nation pretty strong. I can see why every nation wants it."

The atomic bomb—Sanjan, of course, had heard of it all his life. His toys had been built around it and the childish books with which he had learned to read, had told about it. And as he learned more of what it had done in the war that finished just before he was born, the fear of it grew in him.

He said now, "The next war will be pretty awful, won't it, Dad?"

"We hope there won't be any," Thome said solemnly.

Long since, the nations had given up the idea that by some international agreement they could do away with the atomic bomb. There was no way that they could enforce any international laws, save by starting the war they were trying to avoid. So they were making bigger and better bombs, and more of them.

Each day the world hovered upon the brink of monster catastrophe.

CHAPTER II

Impending Catastrophe

A VERY strange little boy was Sanjan Thome. It was only a few days after his evening talk with his father, that a new aspect of his strangeness was made apparent to him. Fortunately, only to him; and it frightened him at first so that he kept silent about it.

Little Vana saw some of it but, of course, she didn't understand. That afternoon, when she and Sanjan were playing in their garden, one of the village boys climbed the ten-foot wall. His head and shoulders suddenly appeared, and he shouted to some of his companions.

"I see 'im! Here he is, fellas! Sanjan Thome, the freak!"

And the chorus of their voices arose, "Yah! Sanjan the freak! Sanjan the freak!"

Then Vana saw Sanjan's thin, pointed face go pale. His eyes flashed. The glow that was always around him grew stronger, so that Vana could see it, even here in the

shadowed daylight of the garden.

"You stop that!" Sanjan called.

"Yah! Freak! Freak!"

"I'm not!"

"You are! Freak! Freak!"

"If I could get out there, I'd show you!"

Little Vana was puzzled, because Sanjan, who had been right here beside her, had vanished. She thought he had run around the house, hoping to get out the front gate. Next she heard Sanjan's voice outside the wall.

"I'm not a freak!"

"Ya are!"

"I'm not! You take that back! I'll—I'll make you take it back!"

The frightened little girl ran upstairs. From the window up there she could see over the wall and saw the fight. The boy was older, bigger and stronger than Sanjan. But Sanjan stood there with his opened hands flicking out. The bigger boy's blows were thrust aside. Sanjan's movements all were so quick, it was like a cat fending off a clumsy dog. And occasionally Sanjan would cuff his antagonist in the face. There was a ring of boys around him, but none of them could touch him. Sanjan taunted them. Suddenly they grew frightened and turned and ran.

Vana hurried downstairs. Sanjan was back in the garden when she got there. He was panting, flushed and laughing, and there was something new and strange about the strange face she had come to know so well.

"You got back quick, Sanjan. Is the front gate open?"

His laugh vanished. He looked a little frightened. "Why—why I don't know. Why, I mean—yes, I guess it is."

"I didn't know you knew how to fight, Sanjan."

"I don't." He grinned. "It just came naturally, I guess. It wasn't hard to keep them from hitting me. Everybody moves so slowly, you know. It takes them a long time to think what they want to do, and then to do it."

They talked of other things. But that evening, Sanjan was silent. This new thing that he had discovered in himself was alarming.

Years passed. One night when Sanjan Thome reached manhood, he leaped from his bed and stood in the middle of his dark bedroom, drawn to his full height. Solemnly he spoke:

"I can't let it go any longer! I've got to stop this coming war now! If I wait even a few days, I may be be too late. And I can do it. I have the power!"

There was that strange thing about himself which he had discovered when he was ten years old and had fought the boys beyond the garden wall. Cautiously Sanjan had experimented, careful always that no one should witness it. Through all these years he had said nothing to anyone about it, except Vana. It was their secret. And Vana understood; Vana, wide-eyed and frightened, still was his comfort and his inspiration as he planned what he must some day do.

AND now Sanjan, the man, stood in his bedroom, telling himself:

"No one in the world could stop this war now, but me. Since I can do it, surely, I must try."

Because war at last was at hand! Absolutely inevitable now; and only this afternoon Sanjan had learned of it. The thing still was secret from the world public. But Peter Grant had been to Washington, and had returned today. At once he and Robert Thome had conferred and Sanjan had overheard them. Definite ultimatums had been sent. A dozen nations were mobilizing because it was obvious that the ultimatums would be rejected. Someone would strike, with atomic bombs.

There was a mirror on the wall of Sanjan's bedroom. The glow of the faint streaming opalescence from his pajamaed body showed him his reflection—his tall, slim, muscular figure, with his strange high-cheek-boned face shaded by his crisp, unruly blond hair.

He would need the proper clothes and a few simple accessories for his task. He had told Vana that, as they sat out in the garden just the other day, and Vana had promised to get him the things at once, from some other town where she was not known. She would leave them under the porch of her house. Perhaps she had them there now.

It was a comfort, telling Vana his plans. He had told Vana that he had to make the try, and almost tearfully she had agreed with him.

"You can see, Vana, that I must avert this war, to avert the deaths, the maiming of millions. I can do that—hold it off for my lifetime."

"By then," Vana said, "conditions may have changed. Another war may never start brewing."

Sanjan laughed. "You're a dreamer, Vana.

Nothing can change human nature."

"This may," she said. "This strange thing you hope to do."

His smile faded. "Everything about me is so strange, Vana. It is, isn't it? And yet I feel perfectly normal."

"Sanjan, you are not strange, not to me."

"I love you, Vana. I think I have always loved you."

She was grown now—eighteen years old. She was tall and dark. She smiled at him.

"I used to be afraid of you, Sanjan, when I was a little girl."

He smiled. "But not now?"

"No, not now. Because I know now that you are one man in all the world that nobody should be afraid of."

"Some should," he said. "Some will." His luminous eyes flashed. "Believe me, some will, Vana." . . .

In his bedroom now, Sanjan drew a bathrobe over his pajamas. It was midnight. He and his father were alone in the house, for Sanjan's mother was dead now. His father perhaps might still be working in his little experimental laboratory downstairs. Sanjan descended the steps and entered the workroom.

"Oh, it's you, Sanjan. I thought you'd gone to sleep."

"No, Dad, I want to talk to you."

"Why, of course, son. What is it?"

The glow of the fluorescent tubes on the big littered table laid its eerie sheen on the thin figure of Sanjan's father. He was a man of nearly sixty now, with twenty-five years or more of this atomic fission work behind him.

"You look very tired, Dad," Sanjan said.

Thome was haggard. His face was drawn. He smiled in a tired way.

"Yes," he agreed. "I suppose I am tired. Just a little thing here is baffling me and I've got to solve it. So much depends on my experiments."

"Yes Dad, I can imagine," Sanjan said. There was a bond of love between these two.

"I've got to put it over," Thome repeated. "The laboratories in Washington—the whole resources of the Bureau of Standards, will develop my findings. I've got to do it tonight."

"I understand," Sanjan said. "The urgency—Mr. Grant came back from Washington this afternoon, didn't he?"

"Yes, he did. And—"

"You needn't tell me, Dad," Sanjan interrupted. "War is coming. Positively. No chance of avoiding it now, is there, Dad?"

"No," Thome said. "No chance now. And so I've got to finish this job here. I've got to finish it tonight."

ROBERT looked weary, almost ineffectual, with the tubelight on him and the paraphernalia of his science around him. He was just a tired old man trying his best to cope with the maelstrom of whirling world events. It made Sanjan, with his youth and strength and the knowledge of his power, feel an added urge that he must end this sort of thing in the world.

"Dad, don't think I'm talking wild," Sanjan said. "Dad, listen, there's a chance that I can stop this war."

"Stop the war?"

"Yes. Never let it start. Make it impossible. I think I can do it, Dad."

Thome could only stare at his strange young son. Sanjan plunged on.

"I'm going to try and destroy the war plants and materials of war all over the world."

"Sanjan!"

"Or at least, what I can't destroy, I can make ineffective, useless."

"Sanjan, what do you mean? Such talk is preposterous."

"I can do it, Dad. I really think so. Alone. Just me, alone. Naturally, it would have to be me. There is no one else."

Puzzled, and with a sudden apprehension on his thin drawn face, Thome mutely stared. He had so often heard Sanjan say strange things, but nothing like this. Then Thome murmured,

"You say you can do a thing that's impossible, Sanjan? How? How could you do it?"

"I'd rather not tell you, Dad," Sanjan said gently. "At least not now. It would only worry you. And I imagine you'll say I'll never be able to accomplish such a task, even with the power I have."

"Power? Power, Sanjan?"

"Yes, Dad. Something about me which I've never told you. In fact, I've hidden it from you." Sanjan jumped from his seat and put his hand on his father's shoulder. "I don't want to tell you now. I don't want you to try and dissuade me. I love you very much, Dad. I respect you, but I'm going to try this. I may be killed. I don't know. I'm going away."

"Away?" Thome echoed. "What do you mean away?"

"I wouldn't have told you at all, but I didn't want to worry you, when you found I wasn't here. I'm going tonight."

"Going where?" Thome demanded. "Sanjan, you know that's not practical. We've agreed that's it's best for you to stay here in just this house and the grounds. I know it's been a horrible handicap, son, but—"

"I'm going, Dad. But I'll come back. And if there are people killed—please, you'll understand I'll avoid that as much as I can."

There was real terror on Thome's face now. Had a madness descended on his strange son? Some new development in the supernormal mental and physical makeup which was Sanjan?"

"People killed?" Thome ejaculated. "What do you mean by that?"

"I'll avoid it when I can, Dad. Please, please don't be so frightened!"

"You—you plan to be a murderer, Sanjan? Why, I never heard you talk like this before."

"If I could stop the war, that would prevent mass murder on a scale unthinkable," Sanjan retorted. "And to do that some persons must die."

"Sanjan, please," his father interjected, "don't let's talk about it now. Tomorrow, yes. We'll discuss it tomorrow, son."

"Tomorrow I'll be gone. But I agree there's no sense of us discussing it."

"Just go up to your room, and go to sleep," Thome said soothingly. "You're all wrought up, and I don't blame you, of course. So am I. Tomorrow we'll—anyway, you'll go up to your room now, won't you?"

"Yes," Sanjan said. "And by tomorrow, you'll begin to understand. And don't be frightened. I'll take care of myself—and I know I'm acting for the best. Good night, Dad."

He almost had said good-by, but he choked it back. He stood in the doorway of the little laboratory, smiling gently. "Good night, Dad," he repeated.

"Good night son," Thome stammered. "I'll call you in the morning."

Then Sanjan closed the door and was gone. For a moment Thome sat numbed, with terror rising in him. Then on impulse he went out the little side door of the laboratory, across the moonlit garden and into Grant's house. At least it would comfort him to unburden himself to his friend.

CHAPTER III

Sanjan's Mission

PETER Grant was alone in his ground floor study, poring over papers which he had brought with him from Washington. He was a squarely built, stolid man of fifty. Essentially practical.

"Well, hello, Robert," he said. "How are the experiments coming along? Have a drink old man. You look all in."

"It's about Sanjan," Thome said. And then he poured it out to his friend—Sanjan, suddenly mentally deranged? Peter Grant agreed silently, though he would not say so to his friend.

"What am I going to do?" Thome asked him.

"He says he's going away," Grant said. "I think you ought to put him under good medical care.

"Lock him up?" Thome emitted a gasp. "My son—incarcerated? No! *No!*"

"Well, not just that, Robert. Don't call it that. Just—take closer care of him, until we find out what this means?"

"No! No! I'll take care of him—I always have!"

"He says he'll be gone," Grant responded practically. He hesitated, and then he added, "You forget, I'm the mayor here, Robert. Silly little job, but I'm it, just the same. And there's a responsibility. By the way Sanjan talked of destroying property and killing people, if it had any meaning at all—well, you could call him a menace to society. You could, couldn't you?"

Grant didn't press the point. He soothed his friend, and presently Thome went back to his laboratory.

But as soon as he was gone, Peter Grant called the police. . . .

Sanjan didn't see his father go into the Grant home. From the laboratory, Sanjan went to his room, stayed there a few minutes, and then he went to where he found the things Vana had left for him under the porch.

Back in his room, he dressed himself—heavy lumberman's boots, heavy stockings, thick dark trousers, shirt, and a warm jacket. There was a wide leather belt around his slim waist—a belt on which he could hang a

small, sharp hatchet, a knife, an iron mallet. Such simple things, in the great modern world of weapons. But he could think of nothing else that really would be useful to him. . . .

He was surveying himself in the mirror, when suddenly there was a knock on his door —a knock imperative, followed at once by pounding.

"Come in," he said. "That you, Dad?"

He had forgotten that the door had a spring lock, which fastened it when he had banged it closed. He opened it now. Then he stepped back, drawn up against the wall as the men streamed into the room, bulky men in uniform, the police!

"Sanjan! Sanjan, lad, I didn't do this! Believe me, I didn't!"

That was his father, standing by the doorway, gray-faced, terrified and shaking.

Sanjan's alert gaze flicked to Peter Grant who moved into view. Grant was tense, nervous, trying to smile. "I did it," said Grant. "I sent for the police, Sanjan. Just for your own good, my boy. You know I've always been your friend."

"Of course," Sanjan said. "I don't blame you, Mr. Grant."

"We're detaining you for your own good, Sanjan, until we understand what you've got in mind. Now don't get excited."

"I'm not excited," Sanjan said. He stood backed against the wall, regarding the line of men before him. The Law! They had come for this menace to society. But they were still undecided. The leader, a police inspector, turned to Robert Thome.

"Tell him not to make any trouble, Mr. Thome."

"They won't hurt you," Sanjan's father said.

"No," Sanjan said. "I know that, Dad." There was an ironic smile on his lips, but no one noticed it.

"You're not being arrested," his father said. "They just want you to go with them to a comfortable place that's better than this. I'll come there in the morning, Sanjan."

"I understand, Dad, of course."

"Go quietly with them," Peter Grant said. "We don't mean it as any indignity, Sanjan."

"I understand, Mr. Grant."

BUT he did not move. The men started forward, with a great show of braveness because they were the Law—and the Law must be obeyed. Sanjan's lip curled.

"I am not going with you," he said to the police inspector.

One of the policemen let out a rough, jibing oath.

"Good-by, Dad," Sanjan said suddenly. "Try not to be worried over me."

Sanjan put his thoughts on the Great Smoky Mountains and that war plant there in Tennessee. Sanjan knew that there was a huge laboratory there. The finished atomic bombs were not assembled in the war plant; merely the basic materials, and the intricate parts of the firing mechanisms. There would be no atomic bomb explosion. He did not want that, here in America.

But it would be a good place to start. When suddenly the Great Smoky Mountain plant, so famous, was wrecked, it would shock all the world.

Thoughts are instant things. As the policemen rushed at Sanjan, and his father was pleading in terror, Sanjan's intense thoughts of the Great Smoky Mountains seemed to bring them before him like a threshold opening up. They were a wide, dim threshold in a great gray void where things were surging, fleeting things taking form, evanescent as thoughts themselves.

There was an instant, briefer than anyone might mathematically name, and during it Sanjan knew that he was thrusting himself forward, so that his bedroom and the uniformed men and his father were dimming into a memory and he himself was a part of the evanescent things which were growing plainer.

The Great Smoky Mountains formed themselves into solid, serrated ranks of dim purple, rising up against the distant starry sky.

Sanjan could feel his feet standing on rocky ground. Moonlight was falling on the little rocky declivity here, where stunted mountain trees were growing. Smoke curled from the chimneys of a rambling group of wooden buildings down in the valley which, he knew, were the big laboratories and the factories where the parts of the firing mechanisms of the atomic bomb were being made. Though it was midnight, the place was humming with activity. Naturally this would be so, in this world crisis!

Sanjan smiled grimly as he gazed at the plant. How pleased the leaders of the enemy nations would be when they got the news that the Great Smoky Mountain Plant was wrecked! But their pleasure wouldn't last

more than an hour or two—he could promise them that!

A little cave mouth opened beside Sanjan. He turned and went back into the darkness of the grotto and sat down on a rock. He would sit here for a while, planning, and then go into action. . . .

Back in the Thome residence the sudden disappearance of Sanjan had brought consternation and amazement to the police, Sanjan's father and Mr. Grant.

"My gawsh, he was right there!" yelled the inspector. "He may be hiding behind some of the furniture. Search the room." But a hasty hunt failed to disclose Sanjan and, at last, the police were forced to conclude that in some way he had escaped.

Another policeman, not trying to invest the vanishment with science, explained it neatly. "He was right there, and then he wasn't!"

Despite Robert Thome's care, news of it soon got out. Even while Sanjan was still sitting in the cave in Tennessee, the news of what had happened in the quiet suburban home of Robert Thome, the physicist, was ringing around the world, by press, the radio, the television.

"Sanjan Thome, the mutant, son of Robert Thome, demonstrates his supernatural power!" went out the word. "Supernatural monster threatens wholesale murder!"

FOR that moment the great world of modern civilization, busy and tense as it stood on the brink of war, paused momentarily in its billion billion war-making activities, to contemplate this new sensation. At first everyone believed it was a hoax, but the myriad channels of the news very soon convinced them that it wasn't.

Supernatural! Even the word itself inspires a thrill of instinctive fear. The Unknown! No one can face it without a surge of emotion. Even now, just at the beginning of Sanjan's activities, the very thought of him was inspiring terror—a terror which was to prove his greatest asset.

The Unknown. Already Science was explaining it.

"Sanjan's power, miraculous as it seems, of course can be explained scientifically." That was the verdict of a learned scientist, who for a big fee had been summoned to a broadcasting studio in such a rush that he had to plan his talk enroute. "The strangeness of it is only that we have not witnessed it before."

Within half an hour, other savants were expounding a theory. One could listen and think surely that he understood the learned phrases, which cited the fundamental instability of all matter, that in last analysis can be reduced merely to motion. Why, Professor Eddington said just that, way back in 1910! Thus, motion is the basis of Matter. And matter has only a seeming solidity, like the whirling of propellor blades. When in motion, the blades seem like a solid disc. They feel like it, if you put a hand against them. And motion Itself, which creates matter, is the motion of what? Eddington had the answer to that! It is motion which is just a maelstrom of nothingness!

And so many others have spoken and written of a latent power—something which might be within one's self—a power with a vibration so infinitely rapid, so infinitely tiny, that it could be compared only to the vibrations of thought. And yet, it was something different. It consisted of a power which could disassemble all those basic whirlpools which make up the human body, and hurl them elsewhere in that same instant with the speed of light, to reassemble them.

And the learned scientists, with their minds on the big fees and their personal prestige, mentioned the Quantum Theory.

"There is no continuity of existence of anything material. For an infinitesimal instant it exists, instantly is blotted out, re-existing again an infinitesimal instant later. And each time it is not what it was before. Each time it is changed. Just a little—but changed both in itself and in the different part of space which it occupies."

And this monster Sanjan—what was he?

Whatever he was, certainly he was not miraculous.

The actual, factual news, during this first half hour while Sanjan himself was sitting quietly in the darkness of the little Tennessee grotto, could only explain that the weird mutant son of Robert Thome had vanished in a glow of radiance. But the terrified Thome felt now that he must tell all he knew, so he explained what Sanjan had said to him. And Peter Grant joined him in the telling. Sanjan had vanished, but he would reappear somewhere else. And his plans were sensational!

The channels of news were babbling garbled versions. Leaders of nations everywhere in the world, some of them roused from sleep,

went into hasty, startled conferences. This fiend was going to strike at their war plants! The guards must be redoubled! But that was futile. This was a thing supernatural. Or was it just a hoax?

Already, in a way he had never envisaged, events were helping Sanjan. For a little time at least the war plans of the world were being neglected!

And then, in the Great Smoky Mountains of Tennessee, Sanjan struck his first blow.

CHAPTER IV

Master of Destruction

THE cave mouth behind him was a dark, yawning little pit but the path down the declevity was white with shining moonlight. Sanjan had left his heavy, fleece-lined jacket in the cave as the night was warm and the jacket would only impede him.

He started down the path. It would be a long climb down into the valley, where the buildings showed as a cluster of lights and the moonlight glistening on the roofs of the low, squat buildings. It appeared to be a long climb down, but he suddenly smiled. For him, it need only be a flash of thought. The laboratory building would be the best place to start.

In that moment as he stood there in the moonlight of the path, Sanjan did not see the blob of a man's figure, below him, on a crossing path. The blob was in the inky shadow of a big pine tree. Though Sanjan, of course, could not know it, the blob was Officer Jonathan McGuffy, of the local police. McGuffy had finished his long day's work and was on his way home. Down in the nearby village he had heard the startling news with which the world was ringing.

Then, quite suddenly, he saw a figure on the other path above him, plain in the moonlight. It was Sanjan, the supernatural fiend! McGuffy had heard the radio descriptions of how Sanjan looked, how he was dressed. He was sure the figure above him was the mutant human who had tonight startled the world.

McGuffy's revolver seemed to leap into his hand. He leveled it. In McGuffy's moment of gasping shock, he didn't stop to think that he might be wrong—that this might be merely some stalwart young mountaineer of the region. Nor did it occur to him that, so far, Sanjan, the superhuman fiend, actually had done nothing for which he deserved death. McGuffy was only thinking how wonderful it would be if Jonathan McGuffy could spring into world fame, right now, by killing the monster.

He steadied himself, bracing his arm against the tree. He took careful aim. He was a crack shot. Though Sanjan did not know it, that was his first moment of supreme peril. His body was only human. A bullet would kill him. He was thinking of the interior of the big laboratory down in the valley. A gray threshold was opening before him.

McGuffy's finger did not pull the trigger. He gasped. There was nothing up there in the moonlight of the other path, nothing but the faintest tinge of opalescent radiance, mingling with the moonlight where the figure of Sanjan had been.

If McGuffy had had even the faintest doubt that he had seen Sanjan the fiend, it was dispelled now. For a moment he stood transfixed with disappointment. What an opportunity! Cautiously he picked his way up to where the figure had been. Then he saw the cave mouth and, exploring the little grotto, he came upon Sanjan's jacket. The inference was obvious. Sanjan expected to return here.

If McGuffy had done what perhaps he should have done, he would have notified his superiors at once of what he had seen here. But he didn't. He was picturing himself, alone and unaided, killing this monster, and delivering Sanjan's body in triumph. By tomorrow, everyone in the world would have heard of Jonathan McGuffy. At the very least, he would get on the Nashville force. He'd be Captain McGuffy!

So McGuffy stayed where he was. In a corner of the cave he crouched, with drawn revolver. He was alert, watchful. But inside he was shuddering. . . .

The big interior of the Great Smoky mountain atomic laboratory was a blurred scene of eerie lights and a litter of apparatus in the midst of which the figures of the workmen moved with silent efficiency. Suddenly one of them looked up, pointed toward a doorway and yelled:

"Look! Who's that?"

In the dim glow of his opalescence, weirdly apparent here, Sanjan was standing motion-

less, as he looked around. In the corridor behind him, he could hear the outer guards calmly talking with each other.

"What you want?" one of the workmen called. They had been so busy here, during this last hour, that they hadn't heard about Sanjan. But at this first quick glance they saw nothing weird about him.

THEY all stood staring now at the intruder, a hundred or more of them. "Who the devil are you?" somebody called. "No one's allowed in here!"

"You must all leave," Sanjan said. "You'll be killed if you stay." Then behind him, he could hear the alarmed guards coming on the run. They were shouting.

"Hey! What's goin' on in there?"

One of them fired a warning shot. It whistled over Sanjan's head, thudded into the ceiling above him. It startled him. Never must he forget that he was human!

Then the workmen in the laboratory were gasping, numbed, suddenly mute with incredulous astonishment. The figure of the young man intruder clad in heavy high boots, broad leather belt and heavy dark shirt, had suddenly vanished from the doorway! Only the glow of him was there. But almost instantly they saw him again at the other side of the room.

"Run!" Sanjan shouted. "Get out of here! You'll be killed, I tell you!" With a sweep of his arm he smashed a line of glowing retorts.

Incredible saboteur! Suddenly it was as though the room were full of duplicating mirrors, each of them in succession holding a fleeting image of the appearing and vanishing Sanjan. As though a dozen of him were present on the little iron balcony; over there in the corner, smashing with a mallet the controls of the electric furnace.

In the panic of the room, the running inmates met the oncoming guards, forced them back. One of the guards had heard the news over the radio.

"It's Sanjan the fiend!" he shouted. "Run! Run for your lives! It's the fiend!"

Then Sanjan knew he was alone, with acrid fumes and smoke rising around him. For just another moment he stayed, with his iron mallet crashing at the wires and tubes. The deranged electricity crackled, sparkled with showers of colored sparks. And the derangement spread. Short-circuits followed, and explosions of chemicals from retorts which had crashed. A hissing, crackling, spluttering turmoil in the midst of which flames were rising, spreading, attacking the interior woodwork of the room. . . .

On the path by the cave, Sanjan stood gazing down into the moon drenched valley. Smoke and flame were down there—flame mingled with the constant bursts of explosions. All the buildings were aflame now. A great burst of fire gushed up as one of the roofs fell in, the blurred, reverberating roar of an explosion coming a moment later. A yellow-red glare spouted heavenward with billows of smoke rolling up.

For a moment the panting Sanjan stood on the path, gazing down. He was tired, winded. One of his hands was burned a little. He would lie in the cave for a while, and then—the Ural Mountains war project perhaps should be next.

He found himself in the cave. He had left his jacket here. Where was it? By the glow of opalescence from his body he could see that the jacket wasn't where he had thought he left it. Then he saw it, lying on a nearby rock.

Some tiny sound, instantly apparent to Sanjan's swift, acute senses, gave him a flash of warning. Across the cave he saw the blob of a dark crouching figure with a revolver leveled at him!

In that flash, when he became aware that he was being attacked, Sanjan could have escaped. Thought of that munitions plant in the Ural Mountains again came to him, but he thrust it away. He must not always vanish when attacked, like a craven coward. To the world then he would be just a fugitive, to be hunted and assailed with impunity. This was his chance to show his prowess.

Officer McGuffy's revolver spat yellow-red flame. The bullet sang through the radiant space where Sanjan had been. McGuffy gasped as Sanjan loomed beside him. Perhaps in a normal fight the burly McGuffy would have given a good account of himself. But he was too dazed and terrified now. With a blow of cat-like swiftness Sanjan knocked the weapon from his hand.

"You're not quick enough," Sanjan said. "Come on! Can't you fight?"

McGUFFY did. Or at least, in his desperate terror he tried to strike back at this weird, glowing adversary. He straightened, staggered, and then Sanjan was cuffing him, nimbly avoiding the bigger

man's bull-like rushes. With doubled fist he struck McGuffy in the face, parried what to Sanjan was a slow, clumsy swing, and hit his assailant again. McGuffy went down. Sanjan bent over him. Sanjan's knife point was at McGuffy's throat.

"Don't—don't kill me!" McGuffy gasped.

"I'm not going to kill you," Sanjan said. "But you realize that I can, very easily. You go back and tell them that. If you don't, I'll seek you out and kill you next time. You tell them, whoever attacks Sanjan will *die!* You understand me?"

"Yes—yes—I will!" McGuffy yelled.

In the next instant he knew that he was alone in the cave, with only a brief faintly lingering radiance to mark where his weird antagonist had been.

To inspire terror, Sanjan knew that was his greatest single asset, and he knew he needed it. Already he was beginning to realize the monumental size of the task before him. And the little incident in the Tennessee cave with McGuffy immediately was helpful. Sanjan found an unoccupied house in the dark, nearby village. He found a radio in its living room, turned it on, and for a moment listened.

"The Great Smoky Mountain Laboratories and factories have been destroyed by Sanjan, the supernatural monster!" an announcer was crying. "The Tennessee war plant is in flames and almost total destruction has been reported, with a death toll of thirty-three."

Sanjan listened grimly. He had done his best to minimize those deaths. There would be more, of course. Soon Officer McGuffy was mentioned.

"—and in a nearby cave, Officer Jonathan McGuffy of Pine Ridge, met the fiend in personal encounter. . . He's an unkillable monster. . . ."

The dazed and terrified McGuffy had garbled it considerably. Sanjan chuckled grimly as he listened. McGuffy was convinced that his bullet had gone through the fiend, and had not harmed him, that Sanjan was an unkillable being, in the guise of a young man, wholly supernatural! It was what Sanjan had hoped. Surely the McGuffy incident would inspire a new terror which would be helpful.

The warplant in the Ural Mountains now required his presence.

Sanjan a moment later stood on a rocky height of snow-clad peaks, gazing down at the huddled group of buildings in the hollow, with their lights and electrified fences and alert guards. Fighter planes droned overhead. This plant would be more difficult. He needed to know just what was inside, just where the munitions were located, and to determine how he could cause an explosion.

Soon he stood in a corridor, listening at a doorway to the men who were talking inside.

He investigated one building, then another. He had not been seen, not as yet. There was no alarm . . .

An hour had passed perhaps, since he had sought refuge in the unoccupied little house in the Tennessee village and listened to the radio. He knew now, here in the Ural Mountains, how when the proper time came, he could inspire panic by making his presence known, leaping with a flash of thought from one part of the buildings to another so that the panic-stricken workers would flee. Afterward he would set off a bomb which would detonate all the explosives here.

His was a strange power—so gigantic in its practical workings, and yet so queerly limited. In these few hours he was hungry, thirsty, tired. His muscles ached. These were simple human needs which had to be supplied, and he was just one person, with the whole gigantic world teeming with the activities of war.

For that moment as he thought of it, Sanjan was appalled. There were warships on the high seas. Just for a moment now, he sought one of them out. In its engine room he appeared, shouting,

"I am Sanjan! I have come to sink this ship!"

ON THE bridge he stood beside the Captain. "I am Sanjan! I order you to abandon ship!"

Like a will-o'-the-wisp, appearing only for seconds in a myriad parts of the huge vessel, until at last it lay wallowing in the seas, abandoned. This task had only taken a few minutes, but the ship was just one of so many!

Sanjan saw now that he must bring other factors than mere sabotage to aid him in stopping this war. There must be intimidation of the world's leaders. The Ural Mountain plant still was unharmed. The Tennessee plant was destroyed. From what the world knew, so far, this monster Sanjan was only attacking America. Sanjan realized that this was the strategic moment for

him to appear in Washington. He stood on the bridge of the abandoned warship wallowing in the seas off Cape Hatteras, and thought of what he must do, in Washington. . . .

The President and his cabinet were in a midnight emergency session. The Secret Service men were watchful outside their closed doors. Then the grave-faced leaders of the greatest government in the world looked up from around their big polished mahogany table and they were terrified, mute with dazed incredullty as they stared at the glowing intruder in their midst.

"The fiend!" someone gasped. "Sanjan is here!"

"Sanjan, the mutant," Sanjan said. "Don't cry out. Quiet now! You can see that I can kill any one of you. But I won't. I've just come to warn you."

One of the cabinet officers recovered his wits a little. "Sanjan Thome," he said. "You're an American—and you turn your power against us! You are using your diabolic power against your own country."

"It would be too bad if I stuck to that policy, wouldn't it?" Sanjan said. "Our enemies, just for this moment now—well, I guess they're gloating. You and your allied governments sent them an ultimatium. Today."

"It had to be sent," the cabinet member explained. "Don't you understand—"

"I tell you now to withdraw it," Sanjan said. "Make that public now. It will give me time. You'll do that because you know that I can come back at any time and kill any one of you. How can your guards protect you?" His eyes flashed and every man in the room knew that he meant what he said. "I can kill you—at your desks—in your bedrooms!"

CHAPTER V

World In Terror

WITHIN an hour the world's radios were blaring the news.

"At an emergency press session, the President at three a. m. this morning, announced that the ultimatums sent today have been temporarily cancelled. The Ambassadors involved have been instructed immediately to cable their governments."

And there was another conference taking place, high up in an Alpine retreat. Sanjan quietly listened to it; learned what he wanted to know. Then he appeared and warned the officials as frightened interpreters there mumbled a translation of his words:

"The ultimatums from America and other nations have been withdrawn. You can save face with your people now and you have no need to cross that border. Your armies are mobilized, ready to sweep forward. I know that. Order them back! If they're on the march now, order them back!"

He made a sudden movement toward one of the dazed, uniformed men—a man gaudy with the military decorations, a leader of great importance to his hypnotized people.

"You!" Sanjan said menacingly. "It would give me great pleasure to come back and stick a knife into you!"

Radiance quivered where he had been, and then he was gone. . . .

With the quickness of thought, Sanjan returned to the Ural Mountains to carry out his plans there. Within twenty minutes a powerful radio was announcing to the startled world:

"The great Ural Mountains plant has just been destroyed by an explosion. Sanjan, the monster, has made his appearance in Europe."

In England and America great multiple presses started to roll, rushing out special editions of newspapers. Excitement mounted throughout the world.

But the inflammatory ultimatums had been withdrawn and in mid-Europe, the massed armies did not move. A week passed. Then another. The world had been upon the brink of war, but there had been a change, a halting change, perhaps merely temporary. Every leader, as he went to bed, could not help thinking:

"Will the supernatural monster come here and try to kill *me*? Our war plants are being destroyed. Without our weapons of war, we will be defenceless against the enemy. Sanjan *must* be trapped!"

For days and weeks now, the prospects of war had taken secondary place. The outraged, frightened world was hunting for Sanjan. News of him continued to pour in.

"The monster has been seen at the Greenland International Airbase." Then: "The fiend appeared last night on a hill in Malta.

Subsequently, several vessels of the Mediterranean fleet were wrecked."

There were times, when in any secluded place he could locate, Sanjan had to sleep, always with the danger that he might have been seen and might be killed while sleeping. Many times, at night, when hungry and thirsty, he skulked along the roads and among the houses of villages, seizing what he needed.

Like a fugitive, with the world hunting him, was Sanjan! It was the world's most hated and feared name. But, day by day, night after night, the destruction went steadily on.

"Singapore Naval Base has been severely damaged . . . The Smolensk atomic bomb plant has been wrecked . . . The Alaskan airbase has been attacked by the monster! . . . Great atomic bomb plant explodes in Chile, and the area of dangerous radioactivity spreads. Santiago has been evacuated! South America, last night, received its first visitation by the supernatural monster. Panic is spreading in the capitals of the southern Republics. Conference in Buenos Aires forms new plans for hunting down this menace to the world."

How could there be time for nations to be making war on each other? There was only the cry:

"Sanjan must be destroyed!"

At the conference in Buenos Aires, Sanjan for a little time stood ironically smiling and listening, listening behind portieres. Spanish was one of the languages he had readily absorbed from his tutors when he was a child.

He listened to the futile plans which were being made here to trap him. Then, for just a few seconds, he appeared in a distant, open corner of the room and told them in Spanish

"You fool yourselves. I cannot be caught. I cannot be killed."

Quickly he was gone, with only his radiance lingering after him . . .

A FEW days later, the Head of the Federal Bureau of Investigations, in Washington, was conferring with the President, the cabinet members, congressional leaders and police commissioners from the leading cities of the nation.

"Every effort must be made," the President was saying. "We must try and persuade him to turn his activities only against our enemies."

They discussed it.

"But he couldn't be trusted," the F.B.I. head said. "That's obvious. He is deranged mentally." Sanjan departed.

The leaders in the Alpine retreat were, almost at that same time, saying the same things.

"He is deranged. He must be killed."

The listening Sanjan smiled and Sanjan appeared among them. He was blazing with anger. He could speak enough of their language to rip out:

"While I live, you will never resume your plans. I shall stop destroying property soon, and destroy only the world's leaders!"

His grim words were still echoing in the room after he was gone.

At long last his thoughts had turned homeward, for a great nostalgia had overcome him. In a few seconds he was there again, back in the garden where he had spent his youth. He concealed himself behind some bushes and slept soundly for a time. Then he sought out Vana Grant and told her all that he had done. She knew most of it from the radio and the newspapers, but she heard it all over again, from his lips.

That afternoon they spent in the Grant garden, hidden safely by the trees and shrubbery. Here they could not be seen or heard from the houses, if they talked softly. Finally she threw her arms around him and gazed fondly into his face.

"You are so changed, Sanjan!" she said.

His boots were worn, his clothes ripped and soiled, burned in places. There was a growth of ragged beard on his face and he was haggard and drawn.

"I wanted to see you, Vana," he told her. "Just to be near you, for a little while."

"Yes, I know."

She held his head against her, like a mother comforting a tired child.

It was good to be with Vana again. It was lonely, being a hated outcast, reviled, feared; a monster, hunted by all the world.

"There is still much to do, Vana."

"Yes. I know."

"So much more than I realized." He was trying to smile, but it was a wan, discouraged smile. "I don't think I've accomplished very much, Vana."

"But Sanjan!" she protested. "If it hadn't been for you, the world would have been at war by now."

"Yes, that's true," he agreed. "But I've

only postponed it."

"But that's something, Sanjan." She shuddered. "A week or two of atomic war, with bombs falling, would have reduced the world to ruins."

"Just a postponement," he said bitterly. "Don't you see, they've all stopped thinking of war, just because they're so busy hunting Sanjan."

"But what you've destroyed—"

"Nothing at all," he said, "compared to the whole. They'd never even miss it. With me out of the way, within a few weeks they'd—"

"Sanjan! Don't talk like that!"

"I have just this one human body, Vana. Maybe I've had a lot of luck—not killing myself, or being killed, long before this."

"Sanjan, dear."

She could only hold him, try to comfort him. The woman's place, perhaps not fully to understand, but always to comfort, giving the strength of her spirit to the man.

"Sometimes I am afraid, Vana."

"No, Sanjan, you mustn't be."

"Not for myself. But the world is so big."

TO LEAVE the task uncompleted, that would be failure. So quickly the dread name of Sanjan would just be a memory and the world could resume its normal activities. It would go on, of course, just as it had before. That universal cry, "We need defense!" would sound again. And Sanjan knew there was truth in that, of course. Everyone, weak or strong, must have the means of war—or they all must have none.

"But if I should fail, Vana?"

"You will not. You cannot. It's too important, Sanjan."

And as she held him, caressing him, he felt a new strength; and presently he drew back from her arms and sat straight.

"I shall not fail, Vana."

"No, of course not, Sanjan."

"I shall go on and on, until it is done."

"But sometimes you must rest," she murmured.

"Yes, I do."

"Where?"

He smiled. "Wherever I am, or think that I would be." And then he gestured past the trees of the garden, out to where the setting sun laid a sheen of yellow and gold across the sky. "Sometimes I come and sleep, quite near here, Vana, to be near you. Somehow it seems less lonely."

"Where, Sanjan?"

He lowered his voice. "You remember that little cave, up there on the hill, where we used to play when we were children?"

"Smee's Cave?"

"Smee, the pirate. Remember?"

"He had a hook for a hand. I was so afraid of him—"

"And you were Wendy," Sanjan said. "And I was Peter Pan."

"And we had a little bell to ring. That was Tinker Bell, the fairy. Oh Sanjan, we were so happy then."

He held her close. "We will be happy again, Vana. That's what I'm trying to do—help to make the world a place where people can just be happy and not afraid."

For a time he was silent. Finally he said, "I was up in the Alps. I told them there that soon I would begin destroying, not just property, but the leaders of the nations themselves."

"Deliberate murder, Sanjan?"

"I know," he said. "And then I got to thinking. Which of the leaders can you actually blame? From my viewpoint, surely not our own President. He is doing his best, as he sees it."

"Yes, I suppose so," she agreed.

"I have threatened them, so that perhaps they'll think more in terms of compromise and less in terms of war. And if I killed some of them, what good would it really do? Others would step into their places. Things would go on just the same."

"But the world may change, Sanjan," Vana said. "At least, you are showing them the way."

"I know it. And I'll keep on."

His quick ears heard the sound of someone coming from Vana's house. His glance warned her. He drew back from the warmth of her arms. He stood up.

There was just a little glow of radiance where he had been. . . .

CHAPTER VI

End of a Dream

SMEE'S CAVE it was called. It had been one of the fancies of their childhood when love and peace and happiness had

reigned in their lives. A few nights after he had talked with Vana in her garden, Sanjan came back, tired, and stretched himself to rest at the mouth of the cave. He had been in mid-Europe. After a day and night of careful investigating, he had caused a monstrous atomic explosion there. Factories crowded with bomb-bearing rockets had gone up, and many of the finished bombs themselves. But so many people had been killed; and so wide, so crowded an area was devastated by the deadly radioactivity that Sanjan decided it was almost as horrible as war itself.

Sanjan lay shuddering. And then with tired, wandering, drifting thoughts, he was thinking only of Vana. It was comforting, at least, to be here in the little cave so near her home, a hallowed little place, which now, to Sanjan, seemed a symbol of what most of mankind really wanted.

The sudden sound of a loose stone rattling brought him out of his drifting thoughts. He snapped into startled alertness; and then he turned and saw the figure of Vana with the moonlight on her as she came up the stony little path.

"Vana! Vana, dear!"

"You're here, Sanjan! Oh, I'm so glad! I just wanted to be near you—to hold you again."

"And I wanted you. Just you, Vana. Nothing else."

The moonlight wrapped them as they sat in the mouth of the cave.

Hardly any warning came to Sanjan. There was Vana's love, her arms around him, with perhaps some faint little sound intruding. Then it flashed to him that Vana had been tricked. She had been watched, and now had been followed here! The shapes of men were suddenly here in the shadows.

"Vana!"

He felt her start at his murmured warning. In an instant Sanjan freed himself from her arms and tried to leap to his feet. A man's low voice muttered to someone else and another man lunged forward, with his arm drawn back.

Simultaneously, Sanjan's wary, protective thoughts leaped! That mountaintop in Labrador! He could be there now and escape this attack. But the threshold opening before him drew together and closed as he heard Vana's frightened cry.

That fatal cry from Vana! She did not mean it, of course. It burst from her.

"Sanjan! Sanjan!"

He lingered, fearful that she might be hurt, with every instinct in him springing to her protection. He turned, momentarily, with no thought at all, except for her. Next, he was aware of a man's arm coming forward, a hand hurling something, and a liquid struck against his face with searing, acrid fumes choking him, and eating into his eyes with a searing pain up into his brain, like fire spreading there.

"Sanjan! Sanjan, dear! Go! Go!"

But to Sanjan there was no moonlight here now—no sight of Vana. Nothing was here but his whirling thoughts, and the burning horrible pain on his face, in his eyes, his brain, and a ring of muttering voices in the blackness around him.

"Watch out!" they cried. "Be careful of what he may do. *Ah-h-h!* We've got him!"

"No! Kill him now! We can kill him now!"

"Wait! Wait! He could have gone already, but he hasn't!"

Next came Vana's despairing cry, so that he tried to stumble in the darkness toward her. Labrador! He would be safe in that little hideout in Labrador . . .

But with the acid eating into his eyes, there was only the darkness of Sanjan's futile thoughts. There would be nothing but this eternal darkness for him now, in Labrador, or anywhere else. Alone there, he would be helpless.

"We've got him."

"He doesn't go! See, he stays here."

"We did it! Maybe a bullet wouldn't have killed him, but this did the business. He's helpless and he knows it!"

"What can a blind man do?"

Sanjan was murmuring. "Vana! Vana, dear."

SOON he found her. Down on the ground he found her, and she sobbed and held him . . .

"We've captured him at last. Send out the news, Jenkins. What a night's work for us! Send out the news! We've got Sanjan—we've got him alive and helpless!"

Like a wild beast, they had caught Sanjan, alive and subdued. Within an hour the world of civilization was ringing with it.

"Oh, Vana!"

"You can't go, Sanjan?"

"What's the use, now, Vana?"

The Valley of the Nile? The mountains

of Carpathia? He could be there now, in the darkness. But he would be lost always in darkness.

What could he do, anywhere, just stumbling in the dark?

"They've got me, Vana. It's all over."

She held him. She was sobbing.

They let her hold him, through all those hours when all the world debated what to do with him. Study him? Experiment on him? Science wanted to do that. Or would he rebel?

Would he, with a last desperate effort, go somewhere?

Even though in the darkness of the blind, might he not seek out some world leader, try to assassinate him because of some crazed idea of vengeance?

The leaders of the world feared to let him live.

He must be destroyed.

And here in Smee's Cave, he clung in the darkness to Vana, in the warmth of her arms. They both heard the babble around them, but they hardly heeded it.

A little wooden runway had been erected, from the cave down to where a huge electronic furnace now yawned with its open pit of monstrous heat. And on the ragged, stony hillside here at dawn, a crowd of people now had gathered to witness the execution. Sanjan, the fiend, was going to his death . . .

THEN as the eastern sky was brightening with the coming sun of a new day for the world, Sanjan heard a man's voice; and he could feel that the man was standing here before him and Vana.

"The decision is that you must die, Sanjan," the man announced.

"Yes," Sanjan said. "I realize it. Oh Vana, please don't cry."

His father came and spoke in a choked voice. "Sanjan, son!"

"Oh! . . . Hello, Dad."

"I fought so against the decision," his father was saying. "All night I've been fighting it. I've tried so hard."

"Thanks, Dad. And—good luck to you. Good luck to you all."

Then in the darkness he could feel Vana and his father being taken away from him. . . .

The blood-colored sun of the new day was peering over the eastern horizon when Sanjan stood up and was guided to the runway. In the flush of pink dawn-light, the watching people on the hillside were suddenly hushed with awe as they stared at the lone figure. But some of them were murmuring to each other:

"Will the war come now?"

"If only he could have succeeded!"

"Impossible!"

"He has to die. He's a man ahead of his time!"

"But some day, John—"

"Yes, some day."

Slowly in the flush of the dawn, the lone figure moved down the runway. It was a ragged, almost pitiful figure now; but it moved steadily, with arms outstretched.

"Sanjan! Oh, Sanjan dear!" That was Vana's last little murmured cry as she clung to Robert Thome.

On the runway, Sanjan was walking slowly, steadily down.

Sometimes his outstretched hands touched the side rails to guide him. Just a ragged youth, blind and helpless.

But there was a radiance from him.

At last he reached the brink. He paused, with the glare and the heat of the furnace on him.

And then he took another step, and went down.

The radiance which was Sanjan mingled for just an instant with the monstrous, consuming fire of science—and was gone.

●

The Triumph of the Egg!

ONE of the oldest and most perplexing riddles to plague mankind—whether the chicken or the egg came first—has been finally solved by science, according to Professor Alfred S. Romer of Harvard University. The egg came first!

The development of the hard-shelled egg was a vital step in the progress of evolution, says Professor Romer. Thanks to its growth reptiles were enabled to lay eggs on land, thus freeing themselves of dependence on water as a hatching agent and allowing purely land creatures, among them ultimately the chicken, to evolve. So the ancester of the Sunday dinner staple was, however remotely, a wriggly pollywog or embryonic plesiosaurus.

Carter persuaded Helen to put on the learning cap

The Knowledge Machine

By EDMOND HAMILTON

Pete Purdy and James Carter establish Electrical Education as a shortcut to learning, but fail to foresee the result!

I WISH now I'd never heard of Electro-Education! Sure, it made me a multi-millionaire. But what else did it do to me? What did it do to everybody?

The trouble with me was that I was too ambitious. I had a nice wife and we were planning on a family. I wasn't satisfied with just being Pete Purdy, the best electric repair-man in New York. I wanted something bigger and better for *my* family. Boy, did I get it!

It began when I was called over to Gotham University to repair a motor-generator that had gone sour. It was in the laboratory of Doctor Lewis Kindler, the big psycho-physiologist research man there. Of course, I

didn't know then who he was. To me, he was just a thin, haggard old guy who looked like a nervous wreck as he told me about the generator.

"It must be repaired immediately—at once!" he shrilled. "We're just completing an epochal research. Epochal, you hear?"

I shrugged. "I'll do the best I can. But this model's complicated. It'll take a week to rip her down and rewind the coils."

"A week?" he screeched. "Impossible!" "We can't wait that long!"

His colleague, a stocky, bullet-headed young scientist named James Carter, tried to soothe the old boy down.

"Doctor Kindler, you really must rest! You have been working too hard for months on these experiments. You know now it's a success. Why not try to relax?"

"Relax?" screamed the old scientist. And then, all of a sudden, he went clean off his head.

He just collapsed, raving about rays and neurones and a lot of other stuff. Young Carter called doctors and officials of the university quick. They took him away, yelling at the top of his voice.

Next morning as I was working in the laboratory on the generator, Carter came in looking pretty blue.

"Doctor Kindler has had a complete mental breakdown from overwork," he told me. "He's been removed to a sanitarium, and may remain there in a schizophrenic state for years."

"Schizophrenic? That's tough." I wondered what it meant. "I guess the old man was a pretty big shot in science, huh?"

"We had just completed the greatest discovery in the history of psychology," Carter said. "He was tops in the field."

I kept on working at the generator, while young James Carter walked up and down the laboratory looking pretty moody.

He kept staring at a big machine in the corner. It was nothing I could recognize, for I'm a good electrician but these crazy scientific hookups are way over my head. To me, it looked something like a permanent wave machine, with a metal cap like the dames put over their heads.

Carter spoke as though he was talking to himself, gritting his teeth as he looked at that big machine.

"A discovery that means millions, billions! If I only had enough money to develop and exploit it!"

I PRICKED up my ears at that. Scientific discoveries don't interest me so much, but millions interest anybody.

"What is the thing?" I asked. "Some new kind of rig for atomic power?"

"No, no, it's nothing like that," Carter muttered. "It deals with the mind. I could revolutionize the world with this thing if I had money enough to develop improved apparatus."

"Won't the university put up the dough for the stuff you need?" I asked him.

He laughed kind of sour. "Of course they would. But they would also then appropriate all title to it. Whereas if I could develop it myself, it would make me the richest man in history."

That interested me a lot. Here was I, Pete Purdy, with ambitions for Helen and the family we planned to have, and maybe I'd stumbled on a chance to get in on the ground floor of something big.

I got up and went over to Carter and looked at the machine with him.

"How much dough would you need for new apparatus?" I asked. "And what is the discovery, anyway?"

Carter looked at me, his eyes narrowing a little as though he saw me for the first time.

"You mean that you might be interested in investing in it, Birdy?"

"Purdy," I said, and I hedged a little then. "I don't know. I've saved some money and also my wife's Uncle Dimblewitt left her a legacy last year. We've got thirty thousand and I was figuring to open up my own electric repair-shop when I got a little more."

Carter bit his lip. "Thirty thousand," he muttered. "It might be done with that. It just might."

"Hold on, don't spend my dough so fast!" I told him. "First, what is the gadget?"

He got all eager and excited as he explained. "It's a new method of education."

"Oh!" I said, and I guess my voice was plenty flat. "Well, that's fine. But I don't think there'd be much profit in that."

"You don't know what you're talking about!" Carter blazed. "This method of education is *new!* It's something entirely undreamed of until now."

He asked me:

"When you learn something, when you learn that the Earth is round, for instance, how does your brain do it?"

"I don't know," I said. "How does it?"

"The nerve-cells of your brain, the neurones, already contain the ideas of *Earth* and *round*," he explained. "Constant repetition of 'Earth is round' establishes a connection between the two neurone-groups, by gradually lowering the resistance at the synapses of neurone-contacts. Thus, when in future you think of *Earth*, the thought-impulse flashes along that low-resistance path to the specific neurones containing *round*."

Being an electrician, I could dimly understand that.

"So that's how it's done?" I said. "And that's why you have to study things so long to learn them?"

Carter nodded quickly. "Long study and repetition establishes the neural paths necessary for remembering. But suppose, by applying a tiny electronic impulse from outside, you could *artificially* establish a low-resistance path between those two neurone-groups?"

I got that, too. "Then I'd know that 'Earth is round' without having to bother learning it?"

"That's the idea!" Carter said. "And that's what Doctor Kindler has been working on for years. I worked with him, of course," he added hastily. "The discovery is as much mine as his."

"You see," he went on, "we invented a scanner that can change the labyrinthine neural-connections of the brain by tiny electronic impulses, just as you can rewire that generator's coils. With it, we can set up any desired neural paths in an instant by applying just the right electronic impulses at the right points in the network.

"Any ordinary set of facts requires thousands of new neural paths in the brain. To learn a subject like Sanskrit, for instance, requires tens of thousands. The scanner can put these new neural connections in your brain in a flash, by projecting a pre-determined pattern of electronic impulses."

"Can it be done?" I asked him.

"We *proved* it could be done!" Carter told me. "Doctor Kindler knew French, and I didn't. The scanner first scanned his neural patterns, isolated those having to do with word-meanings, and recorded them on a moving tape. Then we ran the tape back, reversing the scanner so it would repeat that pattern of electronic impulses on my own brain. It took ten minutes. At the end of that time, I knew French perfectly!"

THAT was a little hard to swallow.

"You mean, you didn't have to study it or anything?" I said. "You just knew it, all of a sudden?"

"Exactly," said Carter. "I see you look incredulous. I can soon prove the thing by running the same tape through on you."

He grabbed the big metal cap that was connected to the machine by a lot of cables, and jammed it down on my head.

I began to protest. I didn't like the idea of anybody fooling around with my mind. But Carter switched on the machine before I could stop him.

There was a humming, and a tape started unwinding inside the machine. I didn't feel anything except a queer tingling in my head. In a few minutes the humming stopped, and the tingling stopped too.

Carter took the metal cap off me and looked at me.

"Well, I don't feel any different," I told him.

"*Vous savez le francais maintenant?*" he shot at me.

"*Oui, parfaitement*," I shot right back at him. "*Mais—*"

I broke off, and goggled. "Holy cats, it worked! I do know French, just like that!"

I did, too. I could speak it as easy as English. And I'd never known a word of it in my life before. The thing floored me.

"Now do you believe?" Carter asked.

"And how!" I managed to say. "But I still don't see how there's millions to be made from it."

"Think, man!" he said. "It takes a student four years and several thousand dollars to get a university education. Suppose he can go in and get it off tapes for a few hundred dollars?"

The possibilities of it hit me, just like that. "Say, there'd be millions of students for prospects, every year!"

"And college students are only a small part of the market," Carter pointed out. "Everybody would like to know more than they do. Everybody would like to know higher mathematics or Latin or architecture or a hundred other subjects. They don't learn them because it takes too much time and work to study them. But if they can just *buy* them?"

"Why, there's no limit to the market!" I said. "How many different subjects could you pour into a guy's brain with the thing?"

Carter explained that there was a limit to

that. "The potential neural paths in each brain are limited in number. We found that the average person has a neural index that will allow him to absorb the equivalent of a Ph.D. education from the tapes, but not much more."

He added quickly:

"But there'd be a chance for repeat business even so. The scanner can *erase* this new-found knowledge from the brain, by using a neutralizing electronic impulse. Then the student can learn entirely new subjects."

Right then and there, I saw my big opportunity and I grabbed it.

"You can count me in!" I told him. "But mind, if I put up the dough for the apparatus, I get one-third interest."

"One-third?" said Carter, kind of puzzled.

"Sure, one-third for me, a third for you, and a third for Doc Kindler," I reminded him.

"Oh, certainly," Carter said hastily. "I'll put Doctor Kindler's share in trust for him. But you understand we'd better not use his name at all in developing this. It would prejudice people if they learned that the co-inventor of the method is now a mental wreck."

Next day, without telling Helen, I drew out our thirty thousand and Carter and I signed the partnership papers.

He'd kept Doc Kindler's name out, as he said. And he'd decided to call our firm the "Electro-Education Company."

Carter rented a small building up in the Bronx, and there we put up the apparatus that he assembled from the stuff I bought.

"How about those learning-tapes, Carter?" I asked him at the end of the week. "We've got to be able to sell people more than just French."

He grinned at me. "I've got a lot of tapes on every subject, all ready. You see, some of the best scientists and scholars in the world are on Gotham University's faculty. Under pretext of X-raying their brains, I used the scanner to make tapes of everything they know."

That kind of shocked me. "It sounds like stealing their knowledge, without them suspecting it. I don't want anything like that."

"Stealing?" Carter answered quickly. "Why, of course not! We'll pay them a fat royalty every time we use the tapes, of course."

We tried the tapes out on each other. They worked fine. I went home that night, bursting with a dozen professors' knowledge.

HELEN had her brother Harry and his wife for dinner that night. Harry has always snooted me, on account I'm an electrician while he went to college and works in an office.

Tonight, I was loaded for bear when he started making one of his highbrow cracks to show off. It was a crack about astronomy.

"Harry, you're a million miles off base," I told him. "The Riemannian conception of space you're talking about is a dead pigeon. It's been proved mathematically—" and here I went into the equations.

Helen and Harry and his wife all looked at me bug-eyed. I kind of enjoyed it, and I carried on from there.

I delved into ancient history, gave some chatty remarks on modern biophysical theory, and then compared a Sanskrit drama with an old Greek tragedy by quoting yards of each in the original.

"Where in the name of all that's holy did you pick up all that, Pete?" gasped Harry.

I just laughed lightly. "Oh, I'm not one to brag about my learning. I kind of like to keep my lamp hid underneath a bushel."

"I notice that your grammar is still hidden under a bushel," Helen, like a wife does, put in.

That dashed me a little. I'd forgotten that my grammar still wasn't so hot. We hadn't had any tape on elementary English Grammar.

That night after the others went, I told Helen the whole story and how our money was now invested in the Electro-Education Company.

She hit the sky. I had been trapped by a swindler, I was an idiot, and we were going to die in the poorhouse. Next morning she went with me to give Carter what-for and demand our money back.

Carter handled her beautifully. He inveigled her to put on the learning-cap, and then shot French, Music, Art and a lot of other stuff into her. From then on, Helen was enthusiastic.

So next week, we hung out a sign and advertised in the newspapers. Carter had written the ad, and it was a good one.

"Do you want to know more?" it asked. "Do you yearn to learn? But are you repelled by the dreary prospect of months and years of study?

"Electro-Education is the answer! Study,

classrooms, schools, are now obsolete. We guarantee to bestow on you in a few hours enough higher education to pass any university's graduation examinations."

Next morning we found a half-dozen prospects waiting to get into our Electro-Education shop. Only it turned out they were all reporters who had come to write funny pieces about our project.

Carter was smart. He didn't get mad, he just kidded them along and got one of them to try a sample course. Then he shot a full course of Higher Accounting into that chap.

It seems that that reporter was a guy who never had been able to add two and two, he had such a blind spot for arithmetic. When he got up and realized how much he knew, he let out a yell.

The other newshawks accused him of faking, at first. But the argument induced some of the others to try it. Carter gave them Chinese, Nuclear Physics, anything they asked.

That night Electro-Education hit the front pages of the newspapers with a bang! Some of the articles still claimed it was a fake, but a lot of the writers swore it worked. The result was that we had a crowd around our EE shop next day.

Most of them were just curious, but there were a few with money enough and curiosity enough to try a few tapes. When they went out and told the crowd about it, others started coming in.

Being near Gotham University, in two days we were handling a crowd of students so big they lined up for blocks. They came in with their money clutched in their hot little hands, and they went out crammed with every bit of knowledge their own professors had.

Then after three days, the Better Business Bureau, the District Attorney's office, and the police all came down on us.

"This thing is a barefaced swindle of some kind and I shall see that these two men get prison for it," the D.A. announced.

Carter had been expecting just that, and had a lawyer all ready when the preliminary hearing was held.

He brought in our witnesses—joyful college students who had quit going to classes altogether because they were dead sure of passing anyway.

Then Carter sprung his clincher.

"Your Honor," he said to the judge, "the courtroom janitor has agreed for a consideration to let me demonstrate Electro-Education on him. Is the court agreeable?"

THE court was agreeable. So right there in the courtroom, Carter set up our EE apparatus and used it on the janitor.

This janitor was a big fatheaded old guy they called "Puddinghead," on account everyone around court knew how dumb he was.

Well, Carter shot all our law courses into him. He gave him not only Civil Law, Criminal Law, Corporation Law and Theory of Jurisprudence, he also gave him graduate courses in such fancy stuff as the Justinian Code and Medieval Ecclesiastical Law.

When it was over, and it took little more than an hour, old Puddinghead got up and talked. He not only proved that he knew everything now about the law—he proved that the judge himself was woefully ignorant about a lot of it.

"Electro-Education is obviously all it claims to be," said the judge quickly, to stop this painful expose. "Case dismissed."

The courtroom exploded with excitement. Reporters crowded wildly around Carter. I found the judge himself plucking my arm.

"Mr. Purdy, in confidence, could you give *me* those courses too?" the judge asked timidly.

Overnight, Electro-Education became the sensation of the country. It was like a bomb going off.

I'll admit that it sort of floored me. I'm a modest kind of a guy. I'd figured on profits, on maybe even a chain of education-shops some day, but I hadn't figured on what EE rapidly became.

It didn't grow—it exploded. Within a month, Carter had branches started or under way in every big city in the country. He'd bought up a factory to turn out the EE apparatus. We trained our own operators. It was simple, since we just ran an EE tape to teach them.

Our advertising plastered the newspapers, the billboards, the radio. We made the whole country EE conscious, overnight. One of our best ads was:

WHY GO TO COLLEGE FOR KNOWLEDGE?
Would You Drive a Horse and Buggy To Work?
GET SMART THE MODERN WAY!

And there was a big billboard picture that showed a guy sitting with one of our EE caps on his head. It advised:

DON'T BE DUMB, CHUM!
Put On Your Learning-Cap Today!

For the classier trade, the advertising men had worked out displays that showed a dumb cluck cringing in the middle of a lot of brilliant-looking conversationalists.

"Do you envy your friends when they discuss learned subjects?" the ad asked. "Why be inferior? EE will make a new man of you mentally."

They poured into our EE shops. They came in such droves that the police had to establish lines at every shop.

Carter and I had big offices down in the Monarch State Building, by now. My work wasn't hard—I arrived at eleven each morning, smoked a cigar, and then went to lunch for a few hours. The afternoon was not quite so tough.

But Carter really worked. I never saw a guy with so much ambition. It kind of scared me, the way he kept EE mushrooming out bigger and bigger each day.

The universities and colleges had gone nuts. They tried first to suppress us but they couldn't. They forbade their professors to sell us knowledge-tapes. But we offered such big money that the professors did let us put their stuff on tapes, on the sly.

So the universities just gave up and closed their doors, all except a few bitter-enders. Then it was the turn of the high schools and the public schools.

Senators got up in the State Legislatures and demanded a new educational system.

"Why should we support a vast, expensive, outmoded school-system when EE can give every child better schooling at a fraction of the cost?" they asked.

The teachers all fought that, of course. But what chance did they have? The taxpayers didn't want to keep up the schools. The parents didn't want to, when their kids could learn it all so easy by EE. And the kids themselves sure were wholehearted for EE from the start.

The result was that the State set up, instead of schools, EE dispensaries in which our own operators gave the kids their stuff. Every kid had to go to school—one hour a year. He got his year's work shot into him by tape, and that was that. And the State paid us a set fee for every pupil.

Money? It came in by tons, by carloads. All over the country, all over most of the world, EE was replacing the schools and colleges. And still Carter wasn't satisfied.

"What we have got to avoid is saturation of the market, Pete," he told me. "As soon as everyone is full of knowledge, they will quit buying education."

"Well, there will still be the new generation of students each year and that brings in a big, steady profit," I said.

"That's not enough," he said in his determined way. "What we need is repeat business, like the movie industry gets. I'll work on that."

And he did. He got big new advertising campaigns planned, that kept the public needled by successive waves of advertising.

FOR a while, we plugged science. A man couldn't understand the world unless he was full of science. A woman should be ashamed to meet her bridge-club if she couldn't discuss higher physics or colloid chemistry.

It wore people down, all right. A lot of them came in and had us erase other stuff and fill them chock-full of science.

When a man reached his neural capacity we had to erase to put new knowledge in, of course. We'd had a few sad experiences with guys who wanted to know absolutely everything and who went batty from too much EE. To avoid trouble with the law, our operators were strict on that now.

When our sale of science-subjects began to fall off, we switched our advertising to concentrate on art. We made expert knowledge of art all the rage. Sure enough, people came in by thousands to have their science knowledge erased so they could take on a cargo of art.

Carter had worked out advertising that made young people good repeat customers, too. If they didn't feel satisfied in their professions, why not try a new one?

Lots of young lawyers, for instance, would decide they'd rather be doctors. They'd simply come in and have their legal knowledge erased, take on a full course of medical subjects, and hang out a shingle. Maybe two weeks later they'd be back, wanting now to try engineering.

Me, I was on top of the world, literally. I lived in the highest and biggest penthouse in town. And Helen was in the clouds, mainly on account of our new baby boy who had been born a year after we started EE and who was now husky and thriving.

"And little Percival is going to be proud of his father when he attains maturity," I

told Helen. "Not only because of my wealth, but because of my erudition."

I really talked like that, by then, for Helen had insisted on me taking a full course in English Grammar soon after we started business. I had also taken all the other advanced EE courses my brain would hold, so that in those days there were few wiser guys than me in the world.

"Yes, dear, it is wonderful to know that Percival can be proud of his parents when he grows up," Helen said happily.

Well, that's all you ever know about the future. For it was the very next morning that the whole thing busted.

It busted when an old guy who looked vaguely professorial came crowding into my office in spite of my four secretaries.

"Are you Peter Purdy, the vice-president of Electro-Education Company?" he asked me.

"Yes, yes, but if you have a knowledge-record to sell you should take it to our Knowledge Purchasing Agent," I told him. "I do not handle details like that."

He just stood and stared at me and then all of a sudden he let out a yell.

"The electrician!" he yelled, pointing at me wildly.

Suddenly I recognized the old boy, and I got my feet down off the desk and got out of my chair.

"Dr. Kindler!" I said, all surprised.

It was him, all right—Carter's colleague that had been in a sanitarium all this time being a schizophreniac. But he didn't look out of his head now, at all. He just looked mad.

"Doctor, I'm overjoyed to see you," I said. "And so will Carter be. We had no idea you were cured—"

Doc Kindler interrupted me by shouting at me every dirty name a scientist could think of.

"You blind fools, to turn my discovery loose on the world without knowing more about it! You don't know what you may have done!"

Then he shouted even louder:

"Police!"

I hate to tell what followed. When Carter came in and saw the old doc, he turned a sickly color and started to scram. But the police were already arriving, and then the whole thing busted wide open.

No need to give you the whole bitter story. It's had publicity enough, and enough people have called me a dope. I suppose at that it's better than to be convicted of theft, like Carter.

Yeah, Carter had just deliberately stolen the old doc's invention and hadn't helped invent it at all, like he told me. He'd figured Doc Kindler was away in the sanitarium for life, not guessing that shock-therapy would finally succeed in restoring the old doc's mind.

I don't blame the old doc for blowing up the way he did when he came back and found out, nor for the names he called me in court. I'd rather be called "a stupid stooge" than a thief, any day.

Sure, they took the penthouse and the big bank-account and everything else away from me. I was lucky that they gave me back my original thirty thousand. Doc Kindler had relented enough to me to stipulate that, when he turned all rights in EE over to the Government.

YOU know what the first thing was that I did when I got out of court that day? I went into the nearest EE shop and had them erase every course I had, even my grammar.

And I did it because I was worried. I was worried by what Doc Kindler had said that day in the courtroom.

"My crooked assistant and this dolt Purdy whom he deceived didn't realize all they were doing when they exploited my discovery!" Kindler said. "When I collapsed, my experiments with Electro-Education were not yet complete.

"I had discovered that the minute electronic impulses used in Electro-Education have a permanent effect on the germ-plasm as well as the soma, but hadn't yet found out what the effect is."

"Will you state your meaning in less technical terms, doctor?" the judge asked.

Kindler's voice was grave. "I mean that the EE impulses have a powerful mutational effect on the genes that control the brain-development of the unborn child."

I got worried.

"Is my little boy going to be dotty because Helen and I took a lot of EE before he was born?" I asked him.

"That, I can't say yet," Kindler said grimly. "I was trying to determine the nature of the effect when I collapsed, and you let Carter talk you into appropriating my work."

That was what scared me into having all

my EE erased before I went home that night. And Helen threw a fit when she heard about it.

"Now don't get hysterical," I begged. "The doc said he didn't know what the effect on Percival would be. It might not be so bad."

"But you and I were almost the first people to take EE, and whatever's going to happen to people's babies because of it, will happen first to Percival!" she sobbed.

We went in and hung over his crib. I couldn't see a thing wrong with him and I said so. He was as fat, healthy-looking a year-old baby as you'd want to see, as he lay there looking up at us.

"Yes, but what about his mind?" Helen sobbed. "He should be trying to talk by now, but he hasn't said a word."

"Maybe I could get him to talk, if I worked hard enough with him," I said desperately. I chucked Percival under the chin. "Say mama, Percival! *Kuchy, kuchy*—say mama!"

Percival opened his mouth and spoke. He spoke in a rather wobbly and shrill little voice.

"I presume, Father," he said, "that the encouraging sounds you are directing at me are onomatopoeic in origin and are designed to stimulate the faculty of imitation. Nevertheless, I must beg you not to continue making such utterances."

Helen and I gaped at each other. "He talked!" I choked out. "He talked like a professor! You heard him!"

Helen stared, wide-eyed. "But he never said a word before—not a word!"

Percival appeared to be bored. "Really, you could hardly expect me to join in the sort of unintelligent conversation that goes on in this house!"

Yeah, that was the effect of EE's electronic impulses on the unborn. Every EE course that Helen and I had ever taken was in Percival's brain when he was born! The fact that we'd had our own knowledge erased hadn't affected him in the least.

And I was going to have a son that would look up to me. That is a laugh. Our Percival loves his parents, but we will never see the day when we know half as much as he did when he was born!

It was the same with all the other kids born after EE, of course. Every last one of them came into the world equipped with a full cargo of knowledge.

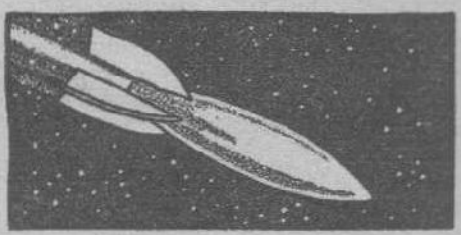
You know how it's changed things. They had to cut the voting and office-holding age to zero, of course.

We couldn't restrict office to adults, when our own kids were ten times smarter than we were.

Half of Congress is under ten years old these days, and the big offices are mostly filled with kid geniuses. I hear there's a twelve-year old out in California that they're grooming for President.

What gets me, though, is this:

These kids of ours still keep piling new knowledge into their brains with EE. Now, twenty or thirty years from now, what are *their* kids going to be like? I do some wondering about that.



HOW DEEP IS THE COSMOCEAN?

RECENT instrument recordings made from V-2 rockets indicate that the peak intensity of cosmic radiation is found about 30 miles above earth and remains more or less constant to heights of at least 100 miles, as high as such recordings have been made.

However, according to Dr. Donald H. Menzel of Harvard College Observatory, there may be a definite ceiling upon cosmic ray intensity, although this ceiling will be an extremely high one. It is his theory that the rays are created from local clouds of ions in space within "a few million" miles of Terra.

The so-called showers of cosmic rays are caused, Dr. Menzel believes, by long-wave radiations from the sun. These radiations may energize the ions to the extent of 100,000,000,000 volts, coming in groups rather than in steady procession and, at their peak, causing such disturbances as radio static on Earth.

Rickey, the mascot, had certainly exploded

SPACE-CAN

By MURRAY LEINSTER

A routine visit to Ganymede disclosed a deadly Martian conspiracy—and Lieutenant Joe Peabody was on a spot!

WHEN the *Winship* landed on Ganymede, it was on one of those errands that are handed over to destroyer-skippers, commanding the tin-cans of the space-fleet, because nobody with silver braid wants to do them. Lieutenant Joe Peabody had been officially directed to proceed to Ganymede, land in 10° north latitude and 10° west of the zero longitude echo-beacon, and contact a Ganymedian chief called Yloop.

He was to deliver to that Ganymedian chief one swamp-car, assure him that Earth Government was very happy to give him the

present he had requested, and then make what efforts seemed wise to promote cordial relations. Then he was to return to base.

It was just the sort of job that anybody with silver braid would wish off on somebody of lower rank. The *Winship* carried two officers, ten men, and one dog. The dog was Rickey, the official mascot of the ship and an animal of some reputation. He'd had more and taller tales told about him by the crew than less imaginative men could invent for their ship's mascots.

Such as the story that when the *Winship* was based on Luna, every time she came back to port there were seven girl-dogs and a Venusian vroom-cat waiting at the space-yard gate when Rickey sauntered out on his first liberty.

The *Winship's* armament consisted of meteor-repellers, pressure-fused signal-flares, and a pop-gun of no conceivable use out of atmosphere. In combat—if war did come with Mars—her function would be to scout ahead of the Earth battlefleet and try to get off a warning of contact before she was smashed by a guided missile. In peacetime, she ran errands not desired by anybody else and acted as one of the guinea-pigs for the technical brass.

At the moment she was still choked up inside with the three-foot lead-cadmium sheathing—put on in three-inch plates—applied to her fuel tanks when she was sent on a long and purposeless cruise to test the efficiency of pre-bombarded and therefore radioactive fuel. The fuel wasn't efficient at all. Dick Harkness, her second in command, still swore at that sheathing regularly.

HE SWORE again as the little ship settled down through the misty Ganymedian atmosphere. The ground below, as seen through the snooperscope, was utterly featureless save for some hundreds of thousands of identical clumps of gannygrass. That was Ganymede—gannygrass and swamp.

"Remember the recruiting posters we saw, last time on Earth?" growled Dick Harkness to Joe. "'Deep Space is calling you! Ride a Comet and see the Worlds!' There oughta be a law! Look below! Who wants to see this?"

Joe Peabody watched his instruments, scratching Rickey's head absently. He'd picked out a patch of gannygrass to land on, and the snakeye corrected course if the little ship swerved by a hairsbreadth. But he watched, anyway.

"Things could be worse," he said. "They've got to recruit spacemen somehow. If glamor-posters make 'em join up, why not?"

"Glamor!" said Dick. "Look below! They ought to put a Ganymedian on the recruiting board. He'd fix those posters! Be a Destroyer Spaceman! Spend your time running errands! Visit Ganymede and See the Swamps! Learn to Salute!' That's the way a Ganymedian would make the posters read!"

The *Winship* swung ever so slightly and settled toward the chosen grass patch. Joe nodded in satisfaction. Dick Harkness grumbled again.

"Look at the doggone place! Venus is bad enough, with an aerosol for an atmosphere, and Mercury is worse! But at least the natives are human, after a fashion! Shut your eyes and listen to a Mercurian trying to bargain you out of your back teeth and you feel almost chummy. Hold your nose and watch a Venus-girl dance and you almost get sentimental! But these Ganymedians, with the way they—"

"Yeah," said Joe. He pushed the landing-cushion button. There was a tiny impact, and an infinitesimal movement in the gannygrass began directly below them. The bending spread out like a wave.

"Have to warn the crew again, Dick. Tell 'em to remember all over again that Ganymedians talk like paymasters figure. Specific. Exact. They don't understand exaggeration and they don't understand jokes. If you tell them something that isn't literally true, they think you're crazy."

"They're not human," said Dick gloomily. "They never lie and they make you mad. Huh! They send word by space-radio to a passing freighter that this chief Yloop wants a swamp-car. Then they wait for it. We'll deliver it and they'll look at it and say, 'Yes. This it.' Or else they'll say, 'This not right.' And that's all! Then they'll go off with the swamp-car."

The *Winship* hung low, now, barely above the thirty-foot stalks of gannygrass. A Ganymedian peered up, bracing himself against the landing-cushion field, which transferred the weight of the ship to the ground below and very neatly contracted as the little ship descended.

"True enough," admitted Joe, "but brass says we must cultivate cordial relations. Tip off the hands, Dick. We'll touch, now."

Gannygrass stems sprang up alongside the ship's ports as the landing-cushion field con-

tracted and stayed pointed straight down. The descending motion ceased without a jar. The *Winship* rested on the yielding, matted roots which were the soil of Ganymede where it wasn't swamp. Joe flicked switches and the ship was grounded.

"We won't be here long," he observed. "They'll come for the swamp-car and they don't go in for the amenities, so we'll be off again pretty soon. You tip the hands about how to talk while I remember not to smile when I try to act pleasant. To them, a smile is an expression of rage just before it turns to murder."

He put on a light atmosphere-suit and went out the lock.

THERE were a good many Ganymedians on hand. From overhead, the innumerable clumps of grass had seemed without life. Gannygrass grew thirty feet high in semi-floating islands that were roughly two hundred feet across. In between the clumps was swamp. The Ganymedians lived in what amounted to burrows in their floating islands, and progressed from one grass patch to another in queer, skittering hops startlingly like the running steps of a heavy bird just about to take off upwind.

They had a civilization of sorts, but nobody could gather more than minor information about it. Questioned, they either answered exactly and literally, or else ignored the questioner. They had no manners at all by earth standards, and their morals were not matters of interest to anybody who had ever seen a Ganymedian female.

Ordinarily there would be one family group to a grass-clump, and one grass-clump to a family group. Here, though, there were very many on hand as Joe went out the lock. Their numbers increased momently. From overhead they had been nearly invisible, but they must have begun to move toward the *Winship's* landing-place as soon as it could be identified. Joe saw at least a dozen wearing the belts of swamp-bear claws which were signs of chiefhood.

He remembered not to smile politely.

"Yloop?" he asked.

One of the bloated figures moved. The others, as always, either stared with opaque blank eyes or paid no attention whatever to ship or skipper, even though they'd come to see it.

"Yloop, me," said the bloated figure.

"Your swamp-car," Joe told him, unsmiling, "is in the ship. We will get it out very soon. It is fueled for—" He paused, calculated, and said carefully, "—it is fueled for half a year of Ganymede."

Yloop listened. He made no reply. He offered no expression of gratitude nor committed any of the small hypocricies which make human contacts endurable. Sam found himself frowning irritably. Ganymedians got under a human's skin.

Another bloated figure stirred.

"Me Ychan," said the lipless mouth.

"I suppose," said Joe ironically, "you want a swamp-car too?"

"No," said Ychan tonelessly. By the double belt of swamp-bear claws about his middle, he was high chief. "Yloop want swamp-car. Not Ychan. Ychan want talk."

Joe's eyebrows lifted. Almost he was tempted to be sarcastic. Talk was a novelty. But—

"Talk," he said flatly.

Behind him, the lock opened again. Dick Harkness and two of the crew came out in atmosphere-suits. With them came Rickey, the ship's mascot, in the tiny, canine space-suit which was the result of infinite labor in the crew's quarters during long hours of standby duty.

"Just for the heck of it, Joe," said Dick, grinning, "the hands decided to send Rickey to see what he'll do when he sees a gannygrass stalk that he'll take for a tree. The trick is he's in his space-suit and can't sniff at it."

"Wipe off that grin!" snapped Joe. "Take the dog back! I told you no jokes!"

Dick Harkness' face went blank. "I forgot! Sorry, Joe!"

He herded the crewmen back into the lock. But they still grinned. Ychan stared at them with expressionless eyes.

"Men mad," he said. "Why?"

Joe wanted to deny it, but a smile or a grin was to Ganymedians an expression of the ultimate in fury,—and if you said something they did not believe, they though you lunatic. A very literal-minded folk, these people of Ganymede.

"Oh—dog bad," said Joe curtly. "Kill four men. You talk."

He waited. Ychan stared as blankly as before.

"I talk," he said without expression. "You think you leave Ganymede. Martians say no. I say maybe."

Joe Peabody blinked. Then he stiffened.

"Sit," he said shortly.

A GREAT curved plate in the ship's side opened. The crew of the *Winship* was opening the destroyer's store-hatch to roll out the swamp-car. Ychan squatted on the ground, where he looked like a wetly glistening anthill. Other Ganymedians moved to watch the swamp-car roll out.

They would watch Yloop climb into it and finger its controls and then—amazingly, the Ganymedians had a knack for the machinery their minds found logical but some literal quality kept them from making—begin its operation with practically the skill of a human who had been carefully instructed in its use.

Joe also squatted, for formal conversation. He frowned, which was courtesy here, insofar as there was any courtesy at all. It was at least a sign of attention which they recognized.

"Talk," said Joe.

The Ganymedian spoke deliberately and without emotion. Like his fellows, he was cold-blooded in all his ways. He had very few words. He used those in their baldest sense. But he knew what he wanted to say. In five minutes Joe had the complete picture. He felt a little cold chill running down his backbone.

The swamp-car came out of the ship, with its huge, inflated tires that were wheels and floats in one. There was a seat modified for non-human use. A truck body and a tiny motor which would drive the unwieldy thing at twenty miles an hour through swamp and thirty or better on solid ground.

Yloop got into it. He tried it. He drove it experimentally on the relatively hard grass-root soil, drove it into the swamp, and made a single circuit of the gannygrass clump.

Then he stopped and beckoned. His mate waddled to the edge of the island and skittered out to it over the mud. Three of the incredible Ganymedian young skittered after her. They climbed aboard. Yloop started the swamp-car again and drove away. He had asked for it. He had gotten it. He went off with it. That was that.

Then Joe stood up. "I hear," he said ungraciously. "I think. I talk later."

He turned his back on Ychan and walked into the reopened airlock. His expression was one concentrated scowl. He knew it, but he knew that to Ychan that expression meant simply tranquil and untroubled meditation. For Joe to have conveyed his actual emotions to the Ganymedian, he would have had to grin until his throat split.

He was pacing up an down the control-room of the *Winship*, deliberately coddling his fury to combat the cold chills that wanted to play tag up and down his spine, when Dick Harkness came in again. Rickey followed him sedately, at a sort of regulation distance.

The crew, of course, swore that Rickey knew Fleet regulations as well as an admiral, and that when he'd been caught with a lady Pomeranian visiting him on board, he'd confined himself to quarters for six weeks to the day. Now he looked warily at Joe.

"I'm sorry, Joe," said Dick Harkness contritely. "I went and warned the hands about grinning where Ganymedians could see them. But they were making bets on what Rickey'd do in a space-suit and unable to sniff, when he saw what he'd take for trees. It was too good a joke to resist. How'd you explain the grins? And shall I report our landing and delivery of the swamp-car?"

"I said," Joe told him bitterly, "that we were mad because Rickey'd killed four men. And you do not use the space-radio unless you want to commit suicide!"

Dick Harkness stared. "What—"

"Ganymedians," said Joe bitterly, "don't lie. They don't understand lying. Ychan just told me we'll be blown to bits if we use our space-phone or try to leave Ganymede."

"What's that? Who's going to try to stop us?"

"Martians," said Joe with exquisite bitterness. "Did you ever hear that there is some slight friction between the Martian government and that of Earth? Did you ever hear that if the Martians thought they had one percent edge over fifty of wiping us out and taking over the solar system they'd try it? Did you ever hear that only the technical superiority of Earth science has held off a war this far?"

RICKY moved up beside Dick and sat down. His tongue lolled out happily. The *Winship's* crew insisted that he'd had Venusian lockjaw once, and now always kept his mouth open to keep it from coming back.

"Sure I've heard that!" Dick Harkness said. "That's why there's so much research going on all the time—why we've still got three feet of lead plating around our tanks, too."

"The Martians," said Joe savagely, "also

research. They have made a gadget. They think it might be decisive. They think it might win a war for them. But they're cagey. They want to try it out first. On us!"

Dick Harkness looked blank. "But—blast it! We can't fight back to count! We'd be a sitting duck for a battle cruiser! We'd better get in our report."

"There's a Martian scout-cruiser overhead," Joe told him. "It took off as we landed. The gadget is on the ground here somewhere, trained on us. If the scout-cruiser picks up the beginning of a space-radio message—and it's listening with all four ears—the scout flashes word down and we go pouf!"

"But that's nonsense!"

"Did you ever hear of catalysis?" asked Joe ironically. "Did you ever hear of ultra-violet radiation acting as a catalyst to turn carbon dioxide into sugar? Chlorophyl has to be present, but so has ultra-violet. The Martians have found a wave-form or frequency that acts like ultra-violet on drive-fuel. It synthesizes drive-fuel into energy. If they turn it on us, our fuel will blow."

"Either the Martians would use it and brush off their hands, or they'd never let us know."

"There's a Ganymedian at the trigger of the gadget. There's a Ganymedian listening to the space-radio. A Ganymedian has to give the fire-at-will signal, and a Ganymedian has to pull the trigger. But when that happens, we fly apart into little pieces. Ganymedians don't lie."

Dick Harkness sat down on the settee at the back of the control room. He didn't look scared. He looked incredulous.

"But—why? They haven't any grudge against us! They've nothing to gain."

"They've coldblooded fish," Joe said furiously, "and they can be on the winning side! The Martians offer them incredible bribes! Don't you see? It's like that Spanish civil war the history books tell of, when the Germans tested out their weapons by helping one side in the civil war, without risking having another first-class nation fight back!

"The Martian government won't risk a war it isn't sure it will win. But it sees a chance to make sure! If the Ganymedians will keep their mouths shut, the Martians can make a base here. With this new gadget they can snipe our ships, one by one. If anything goes wrong, the Martian government will say it was a little group of earth-haters and they're so sorry! But if everything goes right, they'll have half our fleet before we know what's what!"

Dick Harkness' mouth opened and shut.

"If we don't get back," raged Joe, "Headquarters will query by space-radio. The Ganymedians will simply not answer. They do that sort of thing. Headquarters will send a ship here. It will disappear too, when its fuel blows. They'll send another and another. When they start sending squadrons, either the whole Martian Navy—armed with these gadgets—will jump them, or there'll be a sneak attack on all our bases, all our fuel-dumps will go—and what good's a fleet without fuel reserves and bases?"

"Then why warn us?" demanded Dick Harkness.

"The Ganymedians! Don't you see that either? The Martians can't do a thing without their help. They've got to keep their mouths shut! And they've said they will keep their mouths shut if the Martians will prove they're going to win! So the Martians are going to prove it—on us!"

Dick Harkness, his features slack and bewildered shook his head.

"But—"

"The Ganymedians are cold-blooded. They won't risk anything. They say that something might go wrong. A ship might get away and warn our fleet. But if the Martians can win even after we know what they've got, why, then they'll play. So they've told us what the Martians have got. They won't let us use space-radio, or they let go.

"But if we prove we can lick the Martians after we've been warned, they'll consider we'll win, and they'll play with us. But if the Martians blow us up—" Then he added, gritting his teeth, "They're still around because they can jam our space-radio. If we try to send a report, or try to lift, they'll duck and use the Martian gadget. They're playing it safe all around!"

DICK HARKNESS looked dazed. "But—but—" Then he shook his head as if to clear it. "Logical people, aren't they? No manners, no morals, no weak spots at all. Not even pets! It sounds crazy, but they've never been tricky."

Rickey pricked up his ears. That sounded like his name. Joe paced up and down.

"They're too darned literal to be tricky!"

Rickey was sure he heard his name. He stood up, his tail wagging. He pawed at Joe's foot. Joe stopped short. He stared down at

the ship's mascot, then spoke feverishly.

"But they won't expect us to be tricky either! Look, Dick! They saw you grinning at Rickey and I told 'em he'd killed four men. With no sense of humor they aren't capable of understanding. They simply can't conceive of anything but coldbloodedness. They haven't any weaknesses, and that's one terrible weakness! Now listen!"

It was very, very simple. Less than an hour after Ychan told him of his situation, Joe Peabody went out of the airlock again onto the yielding, intermatted roots which were the solid ground of Ganymede. Inside the ship, Dick Harkness painstakingly finished the fitting of a pressure-fuse into a small smoke-bomb made in the shape of a padlock. And that was all.

Joe scowled, outside the air-lock, which to the Ganymedians meant tranquil and untroubled meditation. A Ganymedian looked at him blankly.

"Tell Ychan I talk," said Joe curtly.

He squatted down. Only minutes later Ychan waddled up and plumped down in a heap that looked like a glistening ant-hill. Joe spoke without preliminaries.

Because of the utterly literal minds of Ganymedians, and their scorn for indirection of any sort, it was necessary to phrase things especially for their comprehension. Scowling, Joe talked in the monotonous tone and idiom used for the strictly business like conversation of Ychan's kind.

Earthmen, said Joe, were prepared against the Martian weapon. He had passed his time inside the ship simply in setting up detectors for the detonation-beam in case the Martians were fools enough to try it. If they did, with Ganymedian assistance, Joe and the *Winship* would prove to them how completely foolish it was. If the Martians were fools enough to make war on Earth, they would be wiped out. And their friends. *And* their friends!

Joe paused to let that sink in. Ychan had listened without emotion. Now he said tonelessly.

"How?"

Joe said shortly that if the Martians tried to destroy the *Winship* that he, Ychan, would have personal experience of the method. But he would explain. The Earthmen had a weapon the Martians knew nothing about. It destroyed all living things. It killed them by turning them to vapor. Turned upon a space-ship, the Earth-weapon turned its crew to smoke and vapor, and left the space-ship unharmed. Turned upon a planet, the Earth-weapon would make all its vegetation explode, and all its people, and even the fish in its swamps.

Ychan listened. "How?" he asked stolidly.

Joe answered scornfully that he would demonstrate it—so that the Ganymedians would not make fools of themselves and be wiped out. But he would have to take precautions to avoid undue destruction. If he pointed the weapon at the horizon, all living things to the horizon would flash into clouds of vapor.

If he pointed it down to the ground, not only all life immediately below it would burst into steam, but life on the other side of Ganymede would cease to exist over a large area. The Earth-ray would penetrate a planet and destroy life on both sides simultaneously.

Ychan listened with no trace of emotional reaction.

"You show," he insisted.

Joe scowled more deeply still and observed that for his forbearance in not destroying all life for, say, a hundred miles all around him, there would be a price. A small price. But when he had proved the Earth-weapon he would make a demand.

"What?" asked Ychan flatly.

Joe said negligently that he would ask for the useless Martian gadget. Earthmen, he said untruthfully, had earlier models and had been amused by it. But just in case there had been improvements, he would trade a local demonstration instead of a general one for the device. Just the device. He did not care about the Martians.

Then he waited, scowling as deeply as possible to show complete indifference. Ychan made his decision.

"Yes," he said.

IT WAS a bargain and a treaty, because Ganymedians did not lie. They used words as mathematicians use figures. For results.

"All right," said Joe shortly, over his shoulder. "Get going. And you can grin."

The outside microphone picked up his voice. The airlock opened. It was full of the lead-cadmium plates that had been put around the fuel-tanks when radioactive fuel had been tried on an experimental cruise. There was barely room for the two crew-members, in atmosphere-suits, who began to unload it.

"We make shield," said Joe curtly. "Stop weapon here."

The men began to lay the slightly curved leaden plates to cover a fairly large space. Ychan waddled over and felt one. It was solid metal, three inches thick and two feet by four feet in size.

The men laid a floor twenty feet square. They laid a second layer. Then they began to build a platfrom in the center, seemingly solid, of plates stacked up for thickness.

They made a platform eight by twelve feet and six feet high, using antigrav handlers to lift the unwieldy pieces of metal. The airlock was filled again with the stuff for them to use. They used all that had been in the ship.

Ganymedians arrived by scores and hundreds. They watched with expressionless eyes until they understood what the men were doing. Then they lost interest. But they came back to attentiveness when the airlock opened a third time and two grinning men came out with atmosphere-suits on themselves, but a tiny canine space-suit on Rickey. The dog's suit was of hand-formed glassite and he was plainly visible inside it.

The grinning of the men, to the Ganymedians, meant rage at the murder point. And Rickey was hopelessly uncomfortable in his space-suit. He loathed it. He looked imploringly up at the men and licked out his tongue, and grinned sheepishly, dog-fashion—which meant rage on his part too, to Ychan and his fellows. Rickey's space-suit had been made with infinite care, but he did not like it.

"This," said Joe, scowling, "is dog. Dog is bad. Killed four men. He dies."

The humorless, factual men of the small planet could not possibly imagine anyone having a pet animal. And they saw no reason to doubt the deadliness of a small animal. Their own swamp-bears were even smaller than Rickey, but they were deadly.

The bloated figures regarded Rickey as he was dragged to the elaborately constructed platform of lead-cadmium plates. It was lucky that they had heard only one imaginative tale about him. If anybody had told them about the time when he allegedly barked in space-code to warn the skipper when sneak-thieves from another ship were stealing beer from the *Winship*—!

The two members of the crew took Rickey—their mascot—to the center of the leaden platform. They fastened him there while he squirmed and tried to lick their hands through his glassite helmet. They padlocked him in place. But the chain which held him was rather queer.

"Ship go up," said Joe briefly. "Use weapon. Then come back for Martian thing. Or—"

He permitted himself a faint flicker of a smile. Then he turned to Dick Harkness.

"Take her up to a thousand feet and let 'er go," he commanded. "Be sure to hit it squarely. A miss would be bad! I wait here."

For him to stay on the ground was wisdom, but he felt horribly lonely as his little ship lifted and left him behind. If he stayed on the ground, the Ganymedians would stay and witness the demonstration of the Earth-weapon. If he didn't stay, they might slip away—and miss what they ought to see.

It was very simple and very effective. The *Winship* rose to a thousand feet or more and hovered over the cadmium-lead platform. Suddenly there was a faint, bluish glow beneath it. Instantly there was a billowing, expanding cloud of smoke where Rickey had been.

It cleared. Rickey was gone. Even his chain had vanished. He was living matter, in a space-suit. The Earth-weapon had been trained upon him, after an elaborate shield had been made to keep it from destroying all life in a huge area on the far side of the planet.

He had, unquestionably, exploded. Joe saw it. He grinned. And Ychan turned those milky-gray opaque eyes of his on Joe, and saw the expression which to him meant the ultimate of satisfied rage as regarded the animal which had killed four men. A ripple went over Ychan's glistening hide.

"Earthmen," said Ychan with finality, "would win war. You wait. We bring Martian thing."

WHEN the *Winship* took off from Ganymede, the lead-cadmium plates were stored again. Joe would have abandoned them for speed, but there was a reason for retrieving them. Speed was called for, because he had a Martian gadget on board—made with that finicky, uselessly detailed artistry of all Martian objects—and it was desirable to get it to base, fast, for examination so counter-measures could be worked out.

But there was a reason for retrieving the lead, too. After all, it would not have been wise to abandon it and let the Ganymedians take the platform apart. If they found that in

its building a neat cavity had been left in its center—that it had been covered by a slab doctored to remain in place even under Rickey's weight, but to tilt decidedly when a meteor-repeller beam came on it—!

They might not work it out, but they might. The meteor-repeller beam, of course, had set off the pressure-fuse which made so impressive a mass of smoke, hiding Rickey completely as he slid squirming into the crypt in the platform when the beam came on.

It hadn't been difficult to smuggle Rickey back on board, though. The Ganymedians drifted away. Joe suspected that they intended to go over and watch whatever happened to the Martians with the fuel-exploding device.

They would probably fight, and the Ganymedians would probably be very firm, because they would not want the Earth-weapon used against them.

Dick Harkness came into the control-room, Rickey frisking about his feet.

"Cussed dog!" said Dick fondly, looking down at him. "He hates that space-suit of his, though it protected him perfectly when that smoke bomb went off."

"Mmmm," said Joe.

"Do you think that Martian scout-ship will try for us?" asked Dick hopefully.

"No chance," said Joe. "They want to get back with news of our new weapon. Martian technical brass will go crazy trying to figure it out."

"Huh!" said Dick gloomily. "Nothing ever happens on a space-can! Headquarters will hush-hush the story, too. What a life! And those recruiting posters say 'Deep Space is Calling! Ride a Comet and See the Worlds!' It's a lie! There ought to be a law!"

Rickey sat down, his tongue lolling out. He looked alertly up at Dick.

"Say!" said Dick. "The hands have got their story worked out. They're going to swear that Rickey subdued Ganymede and stopped an alliance with Mars. The high spot in the story is where Rickey saw a tree and in his space-suit he couldn't sniff at it, and he got so mad that steam came out of his ears and the Ganymedians thought he was a dog-god and bowed down to him instead of helping the Martians!"

The *Winship* drove on through space on the way back to base.

THE READER SPEAKS

(Continued from page 7)

qualified persons, he selected what he called the "Hundred Great Books" and used them—they ranged all the way from Homer to Freud—as the basis of his curriculum.

His theory was that the student, with the methods of the masters of human creative and critical thought inculcated into his intellect, would possess a sound knowledge of how as well as what to think when tackling a new problem, thus to some degree achieving inoculation against the deadening qualities of research.

The idea is currently being carried further by President Hutchins and Dr. Luther Adler ("How to Read a Book") of the University of Chicago in collaboration with the Encyclopedia Britannica. They have concentrated upon great human ideas—vice, virtue, God, the atom, the subconscious mind and the like—of which they have numbered 102.

Despite such simplification, before they conclude with the necessary documentation, history, controversial thought and scientific developments required, they may well have achieved such an appalling weight of needed research that the idea of getting through all of it may overwhelm even the talented student. But it is a step in the right direction—which is the freeing of the currently overweighted human brain from the limitations of specialization.

Perhaps we may have to go all the way back to Darius, the Persian emporer, who had an army of a million men and knew each of them by name. Some development in the speed, comprehensiveness and retentiveness of the human memory may be the only answer.

Come what may, it is a problem worth pondering!

OUR NEXT ISSUE

NOEL LOOMIS, whose IRON MEN and CITY OF GLASS in STARTLING STORIES, our companion magazine, are still remembered favorably by those who read them, starts things rolling in the August issue of TWS with a highly unusual novel of alien life entitled MR. ZYTZTZ GOES TO MARS.

Don't ask us how to pronounce Mr. Zytztz —we nearly fractured our tongue trying it not to mention two back molars. Mr. Zytztz, however, is one of several score of plant men, the only form of life discovered on Mars when the first expedition gets there. He is befriended by a young Space Cadet, Healey, and the attachment between these two utterly different forms of life with utterly different origins, becomes ultimately one of the epics of early space travel.

Despit prejudice, official hampering and thousands of yards of red tape, Mr. Zytztz, always willing, always amiable, fights in his own quiet way to win a space pilotship. And when, at last, he does get his ship with the aid of Cadet, now Admiral, Healey, his true purpose at last becomes apparent.

It is a purpose as astonishing to Healey as it was to us and will be to you. This story is one of the finest in emotional appeal, in "feel" of space travel and alien beings and in brilliant satire directed toward humanity as we remember having read. A fine fascinating job!

Thanks to the new enlarged format, TWS offers not only the above novel but three novelets, headed by CLIMATE—INCORPORATED under the author's aegis of Wesley Long. This is the story of James Tennis, young scientist who, through a truly astonishing device which brings next summer to this winter, manages to make it June in January in one of our northernmost states.

Unfortunately, however, the governor's daughter falls in love with him and Tennis soon finds himself in a welter of political skulduggery as the implications of his invention become clear to the rivals of his fiancee's father.

The result is disaster, not only personal and political but scientific, as more careless opportunists overdo things and bring almost arctic catastrophe upon the countryside There is laughter as well as drama and amazing pseudo-scientific ingenuity here in a novelet on the lighter side.

Those of you who unabashedly like space opera are going to get space opera in its most original form in the second novelet for our August issue THE IONIAN CYCLE by William Teen, who is certainly one of the newer bright stars of science fiction.

THE IONIAN CYCLE chronicles the story of the First Deneb Expedition, which does not quite get what it sets out for. What it does get is a series of blood-curdling horrors on a generally waterlogged planet which was not the intended destination of the expedition.

However, its leading members are scientists, including biologists and the like, and ultimately they discover that what look like horrors are something else indeed—something utterly novel in stf (as far as we know, that is), which makes THE IONIAN CYCLE outstanding among recent novelets received here. It should provide a startling thesis for the more thoughtful among you and plenty of thrills for all.

Final novelet listed for August is MEMORY by Theodore Sturgeon, a story in which this veteran top-flighter among stf authors utilizes all of his writing skill to promote an ingenious plot woven about one of the most interesting developments in practical science.

Against an interplanetary background of industrial exploitation and high tension personal feuds, Sturgeon has woven the story of Jeremy Judd—a young man of enterprise who has the wit to interpret a code message left by his brother in a plastic object which has a "memory" of its own under certain conditions.

It's a good yarn, one of Sturgeon's recent best, and should have you well up on the edge of your collective chair.

There will be short stories, of course—selected from a roster which includes Murray Leinster, Ray Bradbury, George O. Smith and Margaret St. Clair, all of them tops in their various types of science fiction. And, of course, your Editor will be present in THE READER SPEAKS and the SCIENCE FICTION BOOK REVIEW. August should be a good month in our new and enlarged era.

LETTERS FROM READERS

MAYBE we are getting young or something but the crop of letters this time seems to us to be far above average both intellectually and critically. We are opening with an excellent missive which should help to finish the laying of a feud we seem to have walked into with our eyes shut—namely the Lovecraft controversy.

H. P. LOVECRAFT, GENTLEMAN
by Mrs. Muriel E. Eddy

Editor: I've been besieged with requests for more information about Howard Phillips Lovecraft, the late

Providence writer of weird yarns—so here goes! Lovecraft used to come over to our house and read his manuscripts night after night. Once, he gave my husband a new kind of hair-cutter and advised him to learn how to cut his own hair. It would, he averred, save many a barber's bill. He assured us he always cut his own hair and shaved himself.

Lovecraft was the soul of neatness, and always looked like the old-fashioned gentleman of culture he preferred to call himself! He once visited the oldest church in Rhode Island with Mr. Eddy and, while there, signed his name in the register—"H. P. Lovecraft, Esquire, Gentleman."

My hubby's uncle (now dead) owned and operated a huge second-hand bookstore on Weybosset street in Providence. His name was Arthur Eddy. Lovecraft spent hours at night, talking to our ancient uncle and poring over musty volumes in the basement. He never appeared in daylight—but always turned up around the Witching Hour of twelve. Uncle liked H.P.L. and stayed open until the wee sma' hours of morning, to humor this then embryo writer. He once predicted that, with the years, Lovecraft's fame would mount. How right he was!

Lovecraft asked us to do much of his typing. He used an old, old machine on which he occasionally typed a story—one of the "invisible type" variety, no longer made. It is to be regretted that this typewriter was sold to a second-hand man when some disinterested outsider was cleaning his apartment after his death. I'm sure it would have been a collector's item, had it not been sold to this unknown person, to whom the name "Lovecraft" meant nothing!

I have pictures of H. P. Lovecraft as a small child, and also pictures of his mother and father. Last summer we ascertained where his grandfather had lived during his boyhood, and took interesting snapshots of the yard in which H.P.L. used to play—when he was not ill, for he was not a rugged child. I have a photo of his grandfather (who had brilliant dark eyes, a Loevcraft characteristic) and of his birthplace as well as of the grave in which he is buried (his body was placed in the ground, not in a vault).

I feel that memories of this man are precious indeed—and I even have a letter he wrote to us, congratulating our cat when she presented us with several kittens—written just as one would write to a human mother—because Lovecraft was noted for his great devotion to felines!

By the way, my favorite story in FEBRUARY TWS is: "THE SHAPE OF THINGS" by Ray Bradbury. It is written in such a manner that one wonders if—MAYBE—it couldn't be true! Fantastic but truly fascinating stuff to ponder over! I enjoyed all the stories and I loved the monstrous hairy spider (?) on the cover! I'll keep reading TWS!—*125 Pearl Street, Providence 7, Rhode Island.*

A fine letter, Mrs. Eddy. HPL must have been a fascinating person to have turning up around the house. And thanks for the kindly comment on the February TWS—but that "thing" on the cover was supposed to be a giant, economy-sized house fly—albeit with rather bloodshot eyes.

EYES FRONT TO REAR!
by Paul Cahendon

Dear Editor: As of a later date than Theodore S., I am bound to comment on the good things that have happened to TWS. That is a bit of a passive way to say it, for one can imagine some rare and beautiful souls at your office getting together and deciding that this shall be done, and that, in view of the acceptance of science by the popular mind. Yes, there was obviously a change of heart!

I guess it must be the stuff included between front and rear covers which gets me. Thank you, first, for keeping the TWS basketful of goodies in the background. Honest, she is just as disturbing there, and framed rather ingeniously in a raised masculine arm. Then there're the interiors.

Used to be they had that bargain-permanent look, but this issue you've been to a better parlor where an artist whose full name is initialed V.F. does the honors. So far I've been somewhat cursory with my inspection of the stories, but a cursory inspection of the Bryce Walton tale promises us exactly that quality by which TWS has improved.

More than anything else, really, the new letter section tells the tale. It is here that the personality of a magazine comes out if there is any. And it comes out.

Well, a lot of years have passed since my last letters. I've been legman on a dozen newsheets, and have made enemies of half that many city editors (not really) but I've every now and then picked up a stf magazine to read the occasional dillies.

And now I find myself wistful again, this time to write a fistful of these here now stf stories and have them published in a magazine where a person yclept Sarge often sounds like he's teetering on the edge of being damfool uncommercial enough to slip a company check off to one Aeschylus for first serial rights to "Agamemnon."

That would be damfoolishness (as well as involve some science-fiction devices which I am prepared to believe will be invented) but it's still positively wonderful to see the lads gathering for a literary tea in the back room of TWS. Well, maybe I will send you some copy.

Anyway, I wanted you to know that the new tone which has come over the magazine illuminated me like one of those pinball machines ringing up 8000. Slam bang tinkle wham. The whole poolroom sat up with that one. I'm all set to drop some more nickels come next issue.—*La Marquise Apartments, Apt. #101, 535 So. Gramercy, Los Angeles, Cal.*

We're beginning to feel as if we're—if not engaged—at least glamorous and use you-all-know-what. But at least, in your figurative pinball machine, you didn't light up the TILT sign. And we hope any copy you choose to submit us runs up enough numbers to score a win.

As for Aeschylus, please let us have his address. We're always in the market for new authors, even ancient Greeks.

TIME MACHINE FOR TWS
by H. L. Stapleton

Dear Sir: To hand your February issue of TWS on the 5th day of January. What do you boys use up there? A time machine?

You have been receiving a number of enquiries lately from England for copies of stf mags. Science Fantasy Publications, 16 Rockville Road, Liverpool 14, England, place subscriptions to TWS and SS (couldn't you have told them that, ed?) so would you mind including their address in the next TRS or TEV? Thank you.

Mr. Alvin R. Brown in February's TWS thinks that the October stories are either very good or horrid. Those are my thoughts about your latest effort. Under the former classification comes the novel, the two novelets, the three short stories, TRS, SFBR, and the cover painting. All the remaining features come under the latter.—*30 Hatrick Street, Wanganui, New Zealand.*

As you are a New Zealander, Mr. Stapleton, we suppose we would be qualified in returning, in your case, to an old term of endearing (?) used by the late Sarge Saturn—to wit kiwi. Or do those wingless birds come from somewhere else?

Thanks muchly for the address of the British agency, which, as you see, we gladly run. And thanks for that somewhat inverted but extremely kind review of our February issue. By the way, are you any relation to novelist-philosopher Olaf of approximately the same name?

WHAT FLAVOR SOUPSTONE?
by Joseph M. Wilson

Dear Sir: For some time I've been wanting to ask Margaret St. Clair to tell us about the time they sent out Jick to reorganize the shipping facilities at the soupstone mines, and Oona went along. And after all, soupstone is almost as interesting a commodity as whoset, even though it is only a mineral. Some of my friends say it is a fine thing eaten with toasted breadfruit. Though I don't care for it that way, I really enjoy it in the granular form, braised with onion and celery (I'd say that the best grade for that was 6 to 10 grit, although an ounce of 36 or 60 grit improves lentils wonderfully).

And while I was in the hospital last winter I really enjoyed 400 grit mixed with my cocoa, while 200 grit does very well mixed half-and-half with the flour when making gravy. But there is one form of it I can't stand—soupstone in coffee—in spite of the way the space-prospectors lap it up (I have heard that most of them got the habit by running lumps of it through their coffee mills along with the coffee beans, to save time in camp). You see, some of the amino-acids in the soupstone combine with the caffeine to form those odd-tasting esters.

And many congratulations on your improving tone, which I like very much, particularly the last issue. I can take my quota of thud-and-blunder like a little man, but I don't care for stories in which the leaders of an advanced civilization pontificate at length, but sound very much like a second-rate author trying to work in another two hundred words. It is almost as rasping as the assumption that naturally the historians of the future will pick out 1948 A.D. as the standard of comparison with their own time—why, no one but the authors know.

Again, congratulations from an original Wonder Stories reader.—*507 N. Oak Street, Normal, Illinois.*

Somehow, out of that welter of crud, we get the impression that you relish Oona and Jick almost as much as ourselves—and we've been dying over them happily since the first O&J epos crossed our desk some months ago. For your coffee, we beg to suggest a certain form of silicon known as glass. Very tasty when ground and inserted in the bottom of the cup—also in applesauce.

So 1948 A.D. is no year of destiny to you. Well, Joe, it ain't over yet.

SHE LIKES THEM BUILT
by Doris Duncan

Dear Ed: This is my first try at breaking into print via the back door, so to speak, as usually I am the one who opens it and receives all the complaints and boos. However, the February issue of TWS impels me to write a short blurb, beginning with the front cover, which is one of the first in a long time to be realistic, and, if you nice gentlemen will look at your own shoulders and biceps in the mirror you probably won't see what Mr. Bergey put on paper, but I'm sure you would like to. The rebellious Mr. Deker was really built, and the lovely Peri was a fitting physical companion for him anyway.

"The Sleeper" business was valuable for its psychological aspects and perhaps more of our great "Brains" should read this type of thing to find out where we are heading. Other than that I like the Bud Gregory stories, mostly because we have a guy so much like him down in these here Virginia backwoods, except that he does not do it by guess, but by real good figgerin'. No matter what kind of a piece of machinery you have he can make it work, and if you need one certain kind he can usually make it for you. But he reads science fiction and lives back here away from civilization and we all laugh at the rest of the world and wait for it to tear itself up.

Some of our factual friends are continually amazed at the progress of science these days. We try to tell them that Science Fiction in all mags had mapped out atom bombs and jet planes about twenty years ago but do you know, they won't believe it? Thanks for listening, world, give us a bigger magazine, or a special quarterly or issue some famous books in our price range.—*Dixie Angora Farm, Skippers, Virginia.*

Well, Doris, you've got your bigger magazine at any rate. And the various fantasy publishers are doing a whale of a job at getting out classics at comparatively modest prices ($3.00 per book is standard).

Also, in view of what lies ahead in this column, we appreciate your appreciation of the Bud Gregory opera. They seem to have stirred up a lot of orthodox souls who steadfastly refuse to believe any man can fix an egg beater unless he has at least an I.C.S. degree in mechanical engineering. They should see what some of you girls can do with a hairpin.

Best to you and to the ANGORA RABBIT MAGAZINE. (Miss Duncan is Associate Editor—ED.).

IT'S A LONG WIND
by Joseph de Celis

Dear Ed: Isn't it about time we had a few letters apropos of something besides what the girls look like on the cover, the condition of the magazine's edges, and the illustrations for the stories? Not that I like the girls on the covers or the illustrations inside. The most useless aspect of reading science-fiction regularly (and the same is true in other things, as listening to popular music, looking at conventional art, *and* reading "literary" books) is that it is as patterned as anything can become patterned.

There is no originality in the world—we know that, and may as well be resigned—but only unrecognizable variations; the poor memory of mankind makes these variations successful, and if they are ingenious enough, we call them original. In science-fiction, the variations have lost their covering of originality and stand bare and revealed as repetition.

I am writing particularly of contemporary science-fiction stories, by such hackneyed writers as Margaret St. Clair, Manly Wade Wellman, George O. Smith, Edmond Hamilton and Polton Cross. Perhaps it is unjust of me, but whenever I open the magazine and find these names, I ignore the stories, feeling that I shall miss nothing, knowing that these stories have all been written many times before.

The illustrations repel me, too, for to me a drawing and its accompanying story are irrevocably linked, and if the drawing is some mussed-up piece of trash, I feel that the story shares in the ignominy. I have read enough of these stories, en passant, to be certain that my analysis is true. I know that science-fiction, even through its most svelte exponents, can not vie with the magnificent literature of the world, with the autobiographical novels of Marcel Proust, the time-filled novels of Thomas Wolfe, or the perfection of Guy de Maupassant's short stories.

Probably you are now wondering why I read it. I read it because I like it. But I have no illusions about it. It is important only for its presentation of ideas; it can boast of nothing else. And because there are so many precarious schizophrenics in the world seeking escape into fantasy, it has insulted them, producing work for their reading, without thought of quality. Quantity, quantity, is its war cry. The very thought of all the crouching mass of science-fiction stories waiting to devour us hurls me into an anguish and a frenzy. What shall I read? I cry. What shall I leave? What will I miss?

I write, yes, but much better material. Maybe you'll read it some day. Are you going to print this letter?

Which reminds me, you are quite witty in your antiphonals in the reader's department. I suppose you either have to get angry or get witty, and the latter is more rational. One more personal comment: In case people reading this may think me an old man, I am twenty-one years old.

Did you know that an occasional science-fiction story finds its elegant way into The New Yorker magazine? The last one was called "The Decline of Sport," a parable about the deterioration of sport in the future. Confidentially, it was horrible. So apparently, science-fiction is socially eligible in the highest coteries!

What is all this dissension about Lovecraft? Lovecraft must have something people like; he is virtually the only legend to survive from the literature of the macabre, or supernatural, or fantastic. He is about the sole writer of the weird I would include with the best of older horror writers—William Hope Hodgson, Arthur Machen, and Algernon Blackwood. Do you know that Finlay has illustrated Lovecraft? He illustrated, I believe, "The Shuttered House." If the inhabitants of the far future do find remains of our civilization sealed in tubes, I think that they will laugh more at our science-fiction theories than at our horror tales. I guess this means that I like Lovecraft's stories. I do. I am not at all ashamed at having a volume of his stories standing in my bookcase, touched on one side by a volume of James Thurber and on the other by a volume of Emile Zola.

Will any readers who agree with me in any of my opinions please write me a few letters.

I have been depreciating science-fiction, but note this—I collect it. I wonder what Spengler would think of that? Hasta la vista.—*Box 194, Gramercy, Louisiana.*

Well, we might as well start at the beginning and rip through—after having to endure such a ripping through of ourselves. We quite agree, however, with Mr. de Celis' reason for writing. It *is* about time et cetera, et cetera.

As for Joe's lugbriousness over lack of originality—what does he expect? We can only repeat a suggestion made in this column more than once, we believe, that he look up a translation from the French (very erudite indeed) entitled, THE THIRTY-SIX POSSIBLE DRAMATIC SITUATIONS. The book was primarily based on an exhaustive study of the ancient Greek dramatists and is still regarded as an up-to-date job.

The point is that only about a quarter of the limited thirty-six can be used by a modern author in play or story form. The others, having to do with incest and other objectionable themes, are strictly tabu today. So what can a writer seek but local and character variations and twists upon the hoary themes—or maybe, if he comes up lucky, an occasional switch? It's tough going and if Joe is an author himself he should know it.

As for the authors he dislikes—well, that's his own opinion. Personally, we find Mrs. St. Clair far from hackneyed and Wellman, along with Messrs. Smith, Hamilton and Cross, has written a good deal of interesting and even provocative fiction—much of it for these pages.

We'll skip the illustrations for the nonce and concentrate on the the three literary titans he next mentions. We always thought Marcel Proust was simply the name of the author who symbolized culture in Gene Tunney after he passed his pug-Shakespearean era—something a little naif for naif folk to belabor their brains with. De Maupassant was definitely a minor master in spots, but Thomas Wolfe was never a novelist at all if a novel is supposed to be fiction to qualify. He merely wrote unbearably spatulate historical novels about his own life.

As for your lament against quantity—well, we wouldn't last long if we sought the same literary-tea, parlor-pink level of advanced thought which belongs only in the so-called "little" magazines. At that, we probably get away with more in the way of uninhibited ideas and ideals anent everything from scoiology to nuclear physics than any other class of popular magazine. Frankly, bub, we wonder if you have yet attained your majority after reading this self-consciously tortured lament of yours. Better seek an adult philosophy.

Thanks for accusing us of even occasional wit—we only wish it were so. And thanks for the note on stf in our esteemed rival. But stf in upper circles is really nothing new—nor has it been for centuries, from the legend of Daedalus through Gilbert and Sullivan and Dunsany and the like to—well, the current IT IS GREENER THAN YOU THINK.

Anent Lovecraft, see Eddy's letter and our comments thereon. And hasta la Spengler—to say nothing of Nietzsche—yourself.

EAST GREENBUSH RIDES AGAIN
by Marion "Astra" Zimmer

Dear Editor: Over the holidays I have found time to read the February TWS and catch up on this tremendous pile of letter-writing which has been hanging fire since the Thanksgiving holidays.

The first thing which hits my eyes—and I DO mean HITS—there is a very violent impact—is the cover. It is the worst this year. After the beautiful symbolism on the last cover, how you could go back to BEMS and damsels is beyond me!

As for the stories, however, I've no complaints—well, almost none—to make. I am going to adapt my friend, Guerry's Broen's system of rating in nulls. This is a null *. Only, being "Astra", I'm going to call them "Astra-isks" like this. *. One astra-isk is lousy. Two is fairish. Three is good and four swell. More than that, perfect.

THE SLEEPER IS A REBEL: * * * * * Bryce Walton, for my money, is the best writer to hit your pages since Kuttner submitted his first. While this yarn wasn't the best Walton could do, still it left me with a swell feeling. The characters—especially Gans, the hunchback—were excellent, sharply defined. His poetry is excellent.

THE SEVEN TEMPORARY MOONS * This was the

worst of all the Bug Gregory yarns, so far as I am concerned. I have NEVER—and I mean, NEVER NEVER, read such a lousy story. I sincerely hope that Bud has settled down for a GOOD LONG REST. I'm sick of him.

TRANSURANIC * * * * * This could go on forever. Multiply those astra-isks to the twelfth power and you'll have some approximation of my opinion of Hamilton. How the creator of Captain Future could turn out such beautiful, beautiful yarns as COME HOME FROM EARTH and this latest, will never fail to surprise me. There are those who call Hamilton a hack, but believe me, I'll always be among the ones who rave over Ed. Sallaam!

So much for the long stories. The shorts were all short and sweet. THE DOBRIDUST rates about * * * for a clever yarn, though I dunno—she's running Oona and Jick right into the ground. She can do other work, why hold her to this thirtieth-century CLAUDIA AND DAVID set-up?

THE SHAPE OF THINGS—I could exhaust my whole store of Astra-isks on this one story. What can anyone say about this one except that I had to stop and swallow hard a few times before I could go on to the next yarn.

THE LONG WAY BACK has a distinct flavor. Oh, about * * Why in EVERY wreck, do the two who are saved HAVE to be a man and a girl? A special dispensation of providence, maybe? And the idea has been done before, and far better. Grrrrrr! Why not have two girls rescued for a change? Or two men? Or a—nope. Can't say it. You'd cut it. Anyway, you'd lose the element which looks for love interest. So go on have yur old gal-guy element.) Only I'm getting sick of it.

I would like to take a brief slam who said Kuttner's novels were inferior to those of A. Merritt. The only Merritt I ever read which could surpass Kuttner was THE WOMAN OF THE WOOD. Kuttner, also, is versatile. His characters live, breathe, vibrate. You almost see them. The writing, in places, is sheer poetry. If anything more eerie than CALL HIM DEMON has ever been written, I hope I may have the fortune to read it. Even "DRACULA" failed to chill me as did the Kuttner yarn.

THE DARK WORLD is the best fantasy *EVER* written, in my humble opinion. It even surpassed DWELLERS IN THE MIRAGE, which it resembled in many ways. VALLEY OF THE FLAME had the finest scene in fantasy literature, I thought; Raft's imprisonment by the living swamp. His scene with the mad king reminded me of a similar scene in SHIP OF ISHTAR only far more neatly handled.

His villains, too, surpass those of Merritt. The wolf-man Matholch in DARK WORLD, the Vampyre Medea in the same. The Huntsman in LANDS OF THE EARTHQQUAKE. La Boucherie in LORD OF THE STORM. And his heroines—Jannissa, Aries, the Oracle—are far superior to the dream-like, exotic creatures of a Merritt-tale. Merritt's heroines are like statuettes; Kuttner's although unreal for beauty and character, are far more human . . . and any benighted individual who could prefer Kenton or even Dwayanu to Ganelon or Brian Raft should be locked up. Only Larry O'Keefe ever touched a Kuttner here in scope. What a pity Kuttner never revived ELAK OF ATLANTIS in TWS. And Merritt never created a humorous character. At which Kuttner excelled.

But I could rave on all night about Kuttner. My fingers are sore already! Oh, please—isn't it about time for another Kuttner full-length fantastic?— *R.F.D. #1, East Greenbush, N Y*

Well, you partially restore our faith in ourselves, Marion, not to mention our ditto in those who type our screeds. Re Kuttner—by this time you will have read Kuttner's grand novel, THE MARK OF CIRCE, in the May SS. His next appearance will be in the Hall of Fame of the July SS with WHEN THE EARTH LIVED, which also rates the cover.

Our own October TWS, however, will have a fine lead short novel along lines you should enjoy, MOONFIRE, by Leigh Brackett. And we think you'll enjoy the full length novel in the September STARTLING, WHAT MAD UNIVERSE by Fredric Brown. There is a novel made for the revelry of fans as well as everyone else. And Kuttner has another novel, a true Hall-of-Famer for future reference, entitled THE TIME AXIS, due to appear in a later STARTLING. Will that hold you? It should.

TITAN OF THE JINGLE
by Paul Anderson

An editor, brilliant and bold,
Scoffed at those stories of old.
Of monsters who creep
To you from some deep
And horrible space, dark and cold.

Well, things went along for him fine,
Until someone sent him a line
In characters fireous
On ancient papyrus
Concerning the way monsters dine.

Of his voice he was prouder than proud,
So he read those ten dark words aloud.
He was dinner that night.
And they've eaten him, quite!
The last words he heard were, "Don't crowd!"

Dear Editor, take my advice.
For you know what will happen to mice
When they squeak in the dark
Thinking life is a lark?
(Yog Sothoth, Please save me a slice!)—*6702 Windsor Ave., Berwyn, Ill.*

Becomingly pickled in brine
With a pig's foot I thought to call thine
We wait, dearest Paul, having given our all
For Yog Sothoth to sit down and dine.

CHARTERED CHARTERISES
by Thomas Millstead

Dear Sir: That immortal piece of literature, *The Darker Drink*, by Leslie Charteris, published in your October issue, seems to have drawn quite a bit of reader comment. Which interests us very much. I say "us" in reference to our society, THE UPPER BERKELEY MEWS HALOES, a cosmopolitan group of aficionados who study, discuss, and idolize Simon Templar and, to a lesser degree, Leslie Charteris and who wage relentless war upon the Ungodly.

Actually the question, as discussed so heatedly by many of your readers, of whether *The Darker Drink* is or is not the best of Templarania is not important. (Although we must admit we look back longingly on those good old swashbuckling days.) What matters is that it is the Saint, which should send every true devotee down on his knees, sobbing and slovering in an ecstasy of joy.

From reading your column, editor, we get the impression that you are a nice sort of genial bloke and we hate to hurt you, but, to be brutally frank, old boy, we are not science fiction addicts. However, our chapeau is doffed to any editor who publishes a Saint story, and you may feel free to hop into your Hirondel anytime and join one of our stimulating meetings.

Eventually we plan our organization to be on a parallel with the Baker Street Irregulars, for surely the Saint is as alive, if not much livelier, and will remain in the memories of those who know him as long, if not longer, than Sherlock Holmes. Among the luminaries in the UBMH is the Patriarch himself, Leslie Charteris. (Or, as Mr. Russell Harold Hoodman would have it—Leslie Charles Bowyer Lin. Actually, it is Yin, but no matter how you say it he's still a great old gaffer.)

At the moment we are engaged in the monumental task of cataloguing and writing a descriptive sentence about every character in the Saint Saga, and have other projects in mind for the future. We would be delighted to hear from any Charteris readers who would like more information or who would just like to exchange pleasantries, if they will write to the following address:—*733 Lathrop Avenue, Racine, Wisconsin.*

We're still slovering, Scribe Thomas, but wish you and the Upper Berkeley Mews Haloes all the beatifical luck in the two worlds—this sphere of atom-torn reality and that brighter globe through which Simon Templer so recklessly and fecklessly strides.

THE FUTURE IS NOW!
by Idella Purnell

About twenty-five years ago, in Virginia, a ten-year-old boy read Jules Verne's A TRIP TO THE MOON. We can imagine him talking it over with his father. "Pop, do you suppose someday a guy'll really be able to go to the moon?"

"Well, Sammy, you'd better do your homework now and put that stuff out of your head. If men ever fly to the moon it'll probably be so far in the future you'll never live to see it."

But Sammy wasn't sold on this idea. To him the future didn't look that far away! He studied astronomy and mathematics. And in 1932, when Samuel Herrick was a graduate student in astronomy at the University of California, he began seriously studying navigation—not as applied to the ocean and its currents, but as applied to space!

And now Dr. Samuel Herrick is giving the first course in rocket navigation to be offered by any university in the world! The successful development of jet-propulsion at California Institute of Technology and the Nazis' successful use of rockets has brought that future that little Sammy would not live long enough to see into our here and now!

Dr. Herrick is sure that rocket travel is a matter of very few more years. Just as when the first railroads were built there were no trained railroaders and yet, in a few years, our country furnished all that were needed, so he is sure that, when the first rocket ships become available, the pilots too will be ready. His interest is not in rocket travel across the surface of the earth, but in such travel from the point of view of astronomy—when the ship has begun to escape our air drag and is into space.

For successful piloting a sure knowledge of the movements of the heavenly bodies as well as of the theory of motion will be needed. The pilot must know about the gravitational attractions of the sun and moon and air perturbation.

At present there are only seven students in Dr. Herrick's unique class. Three are interested in rocket engineering, two want to use the knowledge gained in his course in weather studies and two are students of astronomy.

Dr. Herrick plans to continue giving this course, anticipating that the demand for it will grow as rocket travel becomes a closer and closer reality. He is also writing a book about his unusual subject.

The future is now!—*321 East Grandview, Sierra Madre, California.*

Okay, all you would-be hot rocket pilots—there's a chance to learn a little something of how to get around up there. If Robert Heinlein proves correct in his prediction that space travel is but from five to fifteen years away, now would be a good time to start getting eager noses close to the right printed pages—and watching problems unfold on the right blackboards. Next!

AN AYE FOR AN AYE
by George O. Smith

Dear Editor: Regarding the editorial in the Feb. TWS regarding humor, I agree heartily and applaud loudly. Life would hardly be worth living if we couldn't get a snort out of something; and it is well known that the safety-valve that keeps a lot of people from the looney locker is the happy faculty of seeing something rather amusing or ridiculous in their own tight situation.

However, it does obtain that humor in science fiction is rare.

This I believe is not because the average guy who belts the words out at so much per is lacking in any sense of humor. Most of the writers I know are rather amusing fellers and all are willing to go along with a joke. I've even known some of them to set up a joke on themselves because they were the only ones who knew it well enough to take it off—and the joke was worth laughing at.

There seem to be two kinds of fans as far as humor or no-humor goes in science fiction. One kind is responsible for the storm of letters objecting to the treatment of any serious subject (such as space flight or split atoms or atomic doom) in a humorous light. Apparently they do not like to be identified with being laughed at, or something akin to that feeling. I say this because it is natural that any reader who is truly interested in his story becomes the bird in the tale who is holding off the villain with a ray-gun whilst supporting the Bergey Sweetums on one arm.

The other kind of fan objects to the fact that all too few truly humorous yarns ever hit science fiction—and then, when a lulu comes along that has 'em rolling in the aisles, they laugh like mad while reading it but haul off and mark their ballots in favor of the doomed civilization et al.

This is the reason for a lack of science fiction humor. No writer really likes to see his stuff running in the lower brackets of opinion. He knows that any humorous treatment will get him the post-war equivalent of a jug of fiat Xeno, preferably with a dead fly in it. Ergo he stays away from it.

I do not have a hat, but I'll buy one to bet that if a few of the letters lauded some bit of humorous writing instead of either ignoring it or damning it, there would be more. After all, we are only trying to write what the reader would like to see—because unless we do, Ye Ed will hurl it back at us with a kindly note of apology.—*YMCA—Germantown, Green and Chelon Streets, Philadelphia, Pennsylvania.*

Keep reading, George, old lad, you may have to buy that homburg yet. But get a load of what comes next.

TAKING ISSUE
by Rick Sneary

Dear Editor: I here with take issue with you on your editorial. I feel I have a right, as I was one of thos who disagreed with you in the first place, and thus brought it on.

First of all I still do not like Exit the Professor, and I doubt that I will like any sequal that is done the same way. But for the love of science-fiction not becouse it was funny. My ghad, I didn't even know that it was supposed to be funny.

I like hummor in stf. And you have printed a lot of funney stuff yourself that was good. "The Iratated People", "Garentee", "Donkeys to Boldplat". Just in the last year. And there was the de Camp funtasy. All good clean fun. I don't remember off hand, but I think the other fans liked them. I did. But then comes along this thing. The story itself is poor. The idea ridiculous, reather than humorous. What I ask do you laugh at in the story. You laugh at the odd action of the Hogbens. Thus you are laughing at freeks, and very much like the little dog you spoke of.

In "The Iratated People" and "Garentee" you laugh at the idea. You tend to place your self in the story and then laugh at your action. You laugh with the story not at it. And in "Donkeys to Boldplat" one

laughs at the comic satire on stf stories as a whole. The hack casting of a reporter, mad Doctor, and beeeeuuteeefull daughter was enough to make one eather roll on the floor or throw the mag out. I—well I didn't throw it out.

Now you have a right to think it was funny. I see a few fans agreed. I wouldn't stop buying (or subscribing as I am now) just becouse of a bad story, or a bad issue. And I expect you to dissagree if I say some one you like stinks. But just becouse a few fans tread on your toes is no reason to go editorial about it. You apear to take the stan that as you like it and think it funny we should think so to. No one will question you right to think so, but by George I wont have a story cramed down my gulet.

You are the editor, and you know best. I'll admit you were right and I was wrong about St Clair. (But of course you could read stories ahead, and her worst stuff was used first.) But when so maney reads say they don't like something. Like the Gregory things, why do you go ahead and use more. Or at leest why go out on a limb defending it. Some one is apt to try and saw it off.—*2962 Santa Ana Street, South Gate, California.*

Okay, Rick, as usual you're a tough man to argue with. But we still think the Hogbens are so appallingly and horribly fantastic that any "laughing at freaks" is digging pretty far for an objection. And we were using that one story only as the first example to come to hand in a very real protest against what was beginning to look like a solid core of fan stuffed-shirtism (we never intended wittingly or otherwise, to include you in the category, Rick).

However, your protest against our protest was well taken even though it bespoke a certain element of the very thing we struck out at. And, to conclude, we don't so know best. We only try to figure things as best we can, send the stuff to the printer and then close our eyes, shuddering and waiting for the bombs to start falling.

THAT MONSTER FLY!
by Wilkie Conner

Dear Editor: Well, having completely digested the February TWS, including the ads, I hereby take pen in hand to compose a missive. (That is, if two swell kids and an equally swell wife will remain quiet long enough for me to apply the necessary concentration.)

Concerning your editorial notes about humor in science fiction: I heartily agree with you. I pity the poor souls who cannot appreciate humor. There have been far too few humorists in the fantasy and stf fields. Either too few humorists or too few editors who would take a chance on publishing light stories.

Several well-known professional authors with whom I have corresponded have shown an amazing ability to write side-splitting letters. Yet their stories are usually along the sober themes. To me this is proof they feel the urge to laugh, but when they write for pennies instead of fun, the situation becomes serious. I enjoy serious literature as well as anyone. But I like to laugh, too.

Henry Kuttner's *Hogben* yarn was a supreme example of the type of humor stf needs. I was surprised to see some people classed it as "junk." Those people are probably ones who listen to the sobbing soap operas or who compose those sickening songs about the little rosewood caskets or the miner's children or Uncle Sid's Funeral or who read Lovecraft or Poe's tragic cries to dear, departed Lenore.

They are people who read the sobby "comics" about little orphan children being buried in the snow or get a big kick from the obit columns of their newspapers. Truly, it would be a sad world indeed if one couldn't appreciate the art of laughing! I hope I shall never be unable to appreciate real humor. And when Hank writes humor, it is *real humor!*

The monster fly on this issue's cover reminds me of the cover on the first copy of *Wonder* stories I ever read. 'Way back in the 30's. It doesn't seem I could be *that* old. Come to think of it, I am no longer a youngster. Especially when I read so many letters from youngsters just entering college or just out of high school, do I feel like an old fogie. Yet, I am only 29.

When I was as young as some who now write letters to fan columns, most of the letters were from people over twenty-five. Truly, the young are getting more intelligent as the years go by. Here and now, I go on record as saying the younger generation definitely isn't going to pot!

I liked John Barrett's "The Long Way Back" better than any other story this issue. Finlay's pic for it was nice, too. Incidentally, could Barrett be Kuttner with whiskers? Bradbury's "Shape of Things" was nice too. Almost tied with "The Long Way Back." "The Dobridust" wasn't half bad either. In fact, it was darned hard to decide just which was the best of the shorts.

The shorts this issue outclassed the novels. Yet, all three novelets were extremely fine. Could it be possible that this issue was 100% good? I think so. Every story, every pic, exceptionally good! Can it be possible for another issue to equal this one (Incidentally, I've asked myself that question after reading the last four issues. Always the next issue was superior to the last!)?

Was this the last "Bud Gregory" story? Murfree promised him he wouldn't call on him for any more gadgets—that he'd invented the gadget to end all gadgets. If this is the last one, I hope the demand for his return will be so great Fitzgerald will have to do a Sarah Bamhardt and make many last appearances. (With Bud, that is. I know Fitz will be back many times!)

Art Cosling writes a darned intelligent letter. He seems to know the mechanics of the writing trade well. Could be maybe he'd write a yarn or two . . . huh? Bet he could. That's all from this end.—*Box 2392, West Gastonia, N. C.*

Good stuff, Wilkie. Evidently you have wife and children well broken. That monster fly is getting into our soup—but then, this issue is already passé, praise Allah. Your comment anent the anti-humorists suited us perfectly.

Barrett is Barrett, not Kuttner—and he wrote a nice story. Wish he'd tee off on some more fiction. We could use it. The SEVEN MOONS thing is the last of the Gregory stories to date and no more are planned at present. But Fitzgerald and THE DEVIL OF EAST LUPTON, VERMONT are still around. Okay?

AFTER MY LAUGHTER . . .
by Rosco E. Wright

Dear Sir: Must we weep the more? Must we shed tears for our contemplation of a better tomorrow? Must we say that laughter is to be confined to the whimsy and satire of fantasy? Must we say that the dignity and vision of Science Fiction does not allow that greater dignity, that greatest human value, which is the ability to face all the backbone, decorations and faiths of oneself and laugh at them?

Science Fiction is supposed to deal with that ever existing element of change in our environment. Only as long as man can laugh can he meet that change for the stiff collar wilts in the rain and a wise man laughs at all the sturdiness of the stiff collar and puts on a thin raincoat.

I am serious about Science Fiction but not deadly serious. It is better to travel a broader way where there is more room to dodge the pestilence. The theme

of life, the mashed potatoes, is serious, but we also need the salt.

Let the story be serious for it must, but let the character be wise. Let the character fashion his pearls of philosophy and then stand back and see whether to laugh or to string them. Laughter admits of error and error is abundant but error is never error unless it be overlooked or found too late.

It would be well if Kuttner and his Hogbens were only the prelude to more and greater humor sprinkled in Science Fiction. It would be well if you would let the Bud Gregorys laugh and also the Lords of the Storm.—*Rt. 2, Box 264, Springfield, Oregon.*

Well—and again, *well!* How swanlike, Rosco! But we have avoided mashed potatoes like the plague since, upon gaining an adolescent voice in family circles, we convinced our parents that we were tired to death of that old Sunday dinner combination, roast chicken, mashed potatoes, peas and iced cream and, with the cook's backing, effected a Great Change to roast beef, Yorkshire pudding and any decent vegetable from eggplant through artichokes to asparagus (in season).

We are also a trifle perturbed over your free use of the fruit of the oyster—namely the pearl as philosophically applied—and especially by certain among authors. But basically, despite their insistence upon suckling pig over seafood, we are in hearty agreement with your findings.

We have now talked ourselves into a drooling condition and must take time out for lunch.

PO' BUD!
by Bob Shea

Dear Editor: I will not dwell on the point but nothing could make me happier than to have you print my letter.

This letter marks my entrance into the active fan field, and, since I am rather inexperienced at writing fanotes, I will be brief. Ray Bradbury's story was the best in the February issue. That man can really WRITE! The lead novel had a good basic idea but the writing was not too competent and the note of futility that crept in gave it a flat taste.

Despite the criticism that Bud Gregory has come in for lately I enjoyed THE SEVEN TEMPORARY MOONS. I hope, however, that this will be the last of the series. Fitzgerald is a good writer but even the best ideas can be overworked, so get him to turn his talents to something else.

In the letter column a projected fanart contest came in for a lot of favorable mention. I can understand how your past experiences were enough to sour you against contests for life but this seems to be a pretty popular idea. If you were to limit the contest drawings to one subject you ought to get at least one or two good specimens. Give it a whirl.

Finally, I would like to compliment you on the fine job you, as editor of TWS and SS, are doing. They are shining examples of the best in Science-Fiction.—*150 Bennett Avenue, New York 33, N. Y.*

Okay, Bob, a nice letter. But if nothing can make you happier than to see the above in print we fear you may be in for a rather drab existence henceforth. Come now—there *are* other pleasures.

We repeat—that was the last of the Gregory yarns or the last projected to date. Poor old Bud—what a beating some of you have been giving him! As for the fanart contest, what subjects would you suggest? We find ourselves at a loss.

ATOM IS ALL
by Erich K. Zeger

Dear Sir: After reading the February issue of TWS, I come to the conclusion that:

(a) There are entirely too many Bud Gregory stories. In almost every science fiction mag., at one time or another, a different author has used the same basic plot—only one poor underrated guy in the whole world can save Earth from destruction, whereupon he does with the help of some very simple device he has constructed.

(b) Mr. John Barrett should use a little more logic in the building of his plots.

In Mr. Barrett's story, THE LONG WAY BACK, his characters traveled through an atom. Mr. Barrett says there is nothing smaller than an electron. He contradicts his own story—his characters are made up of atoms the same as everything else in the universe.

How could the atoms in their bodies shrink so small as to pass through another atom if there is nothing smaller than an electron? There would have to be something smaller, otherwise the trip would be impossible. Space would have to be infinite to make such a trip possible—another contradiction, as this example in logics proves:

All material is composed of atoms.
All atoms are material.
All atoms are composed of atoms.
All atom's atoms are composed of atoms.
All material is infinite.
The universe is material,
therefore, the universe is infinite.

If the first line be true, then the last line must be true, also. With only a slight exertion of his brain, Mr. Barrett can see this.

Since his characters were so small as to pass through an atom the whole journey must have taken place in the smallest fraction of a second after Carl, the philosopher in the story, broke the reduction lever. Furthermore, they would have traveled only the smallest fraction of an inch with interstellar drive, much less interplanetary drive as was used in the story.

For instance, compare an atom with our solar system, then imagine a reduction machine which could instantly shrink a man to proportionate size on an electron (planet) as he would be on Earth. An assistant operating the machine would have to switch it on and off as fast as his hands could move even to bring back the bones of the man he sent a second before, because during that second thousands of years would have passed on the electron.

If Kant's idea of a curved space is true, then there could be no such thing as a straight line, which would make the science of geometry just so much wasted time.

I think, in years to come, that some great mathematician will prove Einstein's Theory of Relativity wrong as other "fact" theories have been proved wrong in the past.

As Jesus said our Creator has no beginning and no end, who am I, or anyone else, to argue the point. I prefer to believe The Creator and all Creation is infinite, rather than all the "scientific proof" in the world, otherwise.—*1253 El Camino Real, San Mateo, Calif.*

Well, we aren't going to argue with the Creator but we have a medium-sized bone to pick with you, Erich. You seem to have enjoyed tearing an interesting if highly imaginary and problematical theory, as projected ably by Mr. Barrett in our February issue, to electrons.

But, since the whole atomic theory is constantly undergoing change via new methods and tools of nuclear research, your example in logics may well be no more than a syllogism, a la Lewis Carroll's Snark and Boojum. Because, if all material is composed of something other than atoms (or any least particles of same) then your universe may be neither material nor infinite.

It is all reminiscent of that ancient wheeze about Aristotle saying that all Greeks are liars—disproved instantly because Aristotle was a Greek and therefore a liar himself—which in turn makes all Greeks not liars.

The same goes for geometry. Applied to a certain set of conditions, geometry is a highly useful stunt if not a science. But, applied to other conditions, it fails to make sense at all. Ask any nuclear physicist how much geometry has helped him.

But what the heck—it's fun trying to figure it and so was Mr. Barrett's yarn. Those who attack fiction with fact are making Don Quixote look like a supreme logician when he assailed the windmills.

LITTLE TIN DEKER
by Charles O. Simms ETMS

Dear Ed.: My silence is broken at last (not that anybody cares), the last few issues of T.W.S. have been so good that I just have to add my two cents. Take the February ish, for example.

First of all, the cover. Gad, no bems for how many months now? At least the kind that only a stf artist can dream up. The giant fly "Deker" is battling looks exactly like—a giant fly. And most amazing of all, the front cover pic illustrates a part of the story too!!

The lead story takes the number one spot this month. "The Sleeper Is A Rebel" is one of the best yet on the post atomic world and beyond.

It is interesting to note the gradual changes in the theme of stf stories in the past few years. "T.S.I.A.R." may be taken as an example. Here it seems that action takes a supplementary position in deference to characterization and the question of "what", instead of "how"?

No one think of the "how" to do anything in stf anymore, but the "what" would happen if "I" were in Deker's position. Thus it becomes easy to move with the story and it is not a tin-type Deker parading across the pages, but you, yourself, who is facing the dangers of a future world, fighting the giant flies, fearing the deadly radiation and loving the beautiful Peri.

And it depends upon the ability of the story itself for one to become absorbed this way and I, for one, think that this would be a good definition for a classic, is where one lives the story instead of merely reading it. Anyway, I hope that this starts some discussion on it.

Now for a turnabout. I thought that the old "blood and thunder" stories were just about extinct, until came "The Long Way Back". Not that I don't like a good slam-bang space adventure, but this!! To quote: "Evidently there's some sort of a mass dissipater connected with this, I don't know how it works" and I could add, "but we press this button and all of our troubles are over". Also, "We'll disintegrate into a quantum of energy—or somethin'??

And I can just see myself after we have just got through torpedoing six deadly sea serpents and knowing that we have to make a run through a fifty-mile mine field immediately running down to take a scented soap shower in my beautiful black-and-white tile showerroom, and sitting down to a good ole home cooked meal served by my own special dancing girl—ugh!! (It is nice to think about, ain't it though?) Nuff said.

"Transuranic" did not seem up to par for old "World Breaker" Hamilton. As for Astarita, though he has had a couple of goodies, after that pic on page 72 you can send him back to the comic books.

The rest of the stories were average, though Bradbury's "The Shape of Things" came out with a plot that hasn't been worked over too much.

The illustrations by Lawrence for "The Sleeper Is A Rebel" were really out of this world. For my money, he's got the post-war Virgil Finlay beat a mile. More and more of him, and what ever happened to Schomburg and Wesso? And Anton York (Arthur Leo Zagat) and Capn. Future and Gene Hunter and his plea for clipped edges and I'm breathless!! (But I'll be back).—*C-Division U.S.S. Eversole DD-789, c/o Fleet Post Office, San Diego, California.*

Okay, so Deker wasn't a tinsmith's product after all—thanks. We go for those black-and-white tiles and the dancing gal, however. Thanks for the generally favorable comment in spite of mention of that —!!%c fly on the cover.

Schomburg is currently engaged in other types of art work he seems to be fonder of doing than stf. Wesso has dropped out of sight as far as our art department knows. Arthur Leo Zagat had the April lead novel in TWS, as well as a novelet in the May SS and is currently turning out stf and detective stories with his prewar prolificity. He did a terrific job for the O.W.I. during the war, which probably accounts for your not seeing his name around for some time.

Captain Future has been suspended since 1943 and the last of the novels, RED SUN OF DANGER, about Curt Newton and the Futuremen, ran, we believe, in the December, 1946, SS or thereabouts. Gene Hunter hasn't been penning many letters of late. Guess he gave up on his clipped edges, say we in clipped accents.

BEE-YOOTIFUL!
by Ed Farnham

Dear Ed.: Thrilling Wonder Stories has scored again with another BEE-YOOtiful issue.

Have just finished the February number and thoroly enjoyed every word, including the shorts. I am going to rate them as follows:

1st Place. THE SLEEPER IS A REBEL—WALTON.

Walton has an excellent idea here for the whole world's troubles. It might be the answer as to what to do with the world's trouble makers and malcontents. Then, perhaps, we might have peace at last. We ought to administer Nirvana to every Commie and foreign spy caught. Some of our politicians have it.

TRANSURANIC—HAMILTON.

A forcast of what may face America in the future? That is to say, a forecast of a similar tough problem—if America doesn't keep alert? Could be. 2nd Place.

THE SEVEN TEMPORARY MOONS—FITZGERALD. Ties for 2nd Place.

Such a thing is quite possible, as witness the "flying discs." Did anyone ever find out what *they* were? I believe they were called Flying Pie-plates?

What's wrong with the Gregory series? *GIMMIE MORE!!!*

THE SHAPE OF THINGS—BRADBURY.

It smacks of fantasy, and rates 3rd Place. And dog-gone it, I liked it!!

How about more by Bradbury???

THE DOBRIDUST—ST. CLAIR.

4th Place. Wish I had a do-funny like it. Would save me a lot of work. Margaret is coming along fine. The DOBRIDUST was even better than her last. *GIMMIE MORE!!!*

5th Place. THE LONG WAY BACK—BARRETT.

Wish Barrett would explain how that shield worked in that story. I'd put a shield around the whole house and turn it on when I saw my mother-in-law coming for one of her "short visits" that usually last about 3 months. (Ah me!)

THE READER SQUEAKS—Editor. *WOW!!*

Best of the whole issue!! (It had my letter in it too!!) Enjoyed all the letters in it and there are many good points, too many to discuss, brought up in this issue. You didn't answer my question about Captain Futur!! You are probably quite right about my lack of imagination. Shall read a few fantasies and see if that's why I don't like 'em. Whar did ya find all them that Big Words, like supp-pose-zishnul an' pseudo? Whhie! Ed, you git me daown some times!!

Thanks for a *SWELL* issue, inc., the cover. Wot on earth (or off it) is that thing the Gal has on? Her nightgown?? Bergey-ainchoo got any heart a-tall? The poor gal looks *so cold!* How could U?—*1139 East 44th Street, Chicago 15, Illinois.*

We'll send you a dobridust just as soon as that marvelous gadget gets on the market. Mrs. St. Clair, of course, had an advance showing. But aren't you a little rough on malcontents and the like, not to mention your mother-in-law?

We hope she reads it.

WALL-EYED WEBER
by Wally Weber

Dear Editor: Congratulations on a swell February issue of TWS. I even liked the short by Margaret St. Clair, and believe me when I say she had to write to make me do that. That story had two strikes on it when it started just because she wrote it.

The best in the issue was "Transuranic." The writing and the idea behind it were both good. But then what else can you expect with Hamilton writing it?

One thing worried me a trifle in "The Long Way Back." If the space ship reduced itself in size until it was back at its original volume, the ship must have reached a point where it was as large as the universe. Where did they put the thing when it was that size? The atoms must have been the size of our galaxy. Wish I'd have been around to see it.

The cover was passeble. The main thing I have against it is the name of the magazine. Now I know why the covers used to be so lurid. They had to be in order to compete with those big, gooey letters. If you can't change the name, at least print it a little plainer. Yellow and red. Brrrrrrrr!

Incidently, by printing it plainer I don't mean clearer. I mean tone it down a bit. Make the title smaller in size, or else make the letters all black. Or how about all white? How about another drink? Thank you.

Let us make a toast. Here's to a bigger, better and more frequent TWS. Not that a toast will do anything toward that end, but it helps us hold out until the time comes.—*3253 18th Northeast, Seattle 5, Washington.*

Why don't you and Erich Zeger get together and have it out with slide rules at fifty paces over poor Barrett's story. You seem to have hit it from opposite ends of the cosmos. He wants to know how the ship got smaller than the smallest thing in the universe and you want to know how it got bigger than the universe. As for us, we read 'em as they come and like (or don't like) 'em the same way.

TAKING A BEATING
by Blaine R. Desmond

Dear Editor: The February 1948 issue wasn't up to your usual excellence. I hope this doesn't signify a bad year. It probably doesn't. Even so, however, the issue wasn't bad. Taking the stories as they are in the magazine, here are my opinions:

The Sleeper Is A Rebel was, unfortunately, the poorest story in the issue. This is regrettable, as it was the feature novel. The action seemed to drag all through and, although the dialogue and general writing were well-handled, I found myself on the verge of falling asleep several times. The whole story seemed rather dream-like, with all those freaks running around and the general impression at the end was one of satisfaction—whereas, throughout the yarn, one was given the feeling of depression . . . happiness was achieved with too much rapidity, it seems to me. On:

The Seven Temporary Moons was about average, slightly better than the other Gregory stories. Personally, I'm not too sorry to see the hill-billy genius go. None of the yarns struck me too favorably. I enjoyed this last one, however. It did seem a little preposterous, the ease with which the two intrepid heroes saved earth. And why didn't Fitzgerald tell what the "moons" were . . .?

Edmond Hamilton couldn't write a bad story if he tried. If he sat down and typed, with the intention of doing his worse, of writing the worse story ever, it would come out good. *Transuranic* was the best story in the issue. What an idea it had, of an element becoming a living entity, and how beautifully handled it was! Hamilton portrayed the feelings of a true scientist perfectly at the end, when Zarius cried at what they had done. This is truly one of the best stories you have carried.

The Dobridust, by Miss St. Clair was good enough for that type but seemed a little far-fetched. The dope-angle was introduced too late or something. Everything just seemed to happen for the best. There seemed to be a few loose ends incapable of being tied, which just tied themselves like that. But let it go . . .

I was disappointed in Ray Bradbury's *The Shape of Things*. The idea was nice, very nice. But as much as I like Ray, I feel I must say that it seemed a little unwonted. Out of the ordinary. Or rather, things ordinarily wouldn't come out that way.

I mean, judging by the fact that Polly was so neurotic waiting for her "pyramid" to be changed (not that she should be blamed, of course) it seemed unnatural that she should be so content existing in the fourth dimension, appearing to every one else as a cube.

Both of them seemed too happy about it. It seemed foolish to me, the way Horn talked about having people in, offering them drinks, and he, a cube, smoking a pipe, etc. Rather pointless, I thought. Slightly below average.

The Long Way Back was the second best story in the issue, following close at the heels of Hamilton's bit. A very neatly-handled short story? Is Barrett a Henry Kuttner pen name? I liked especially the ending, where Reese explained how they escaped their smallness.

It was a very logical explanation about space being curved and everything being finite and circular, even a path through sub-atomic particles. Ah indeed, this was a good story. Well-written, too. The little love that was in it was handled nicely. Congratulate "Barrett" for me.

Cover wasn't very good, but the interior art was very good. Especially Finlay's contributions. His illo for the Gregory novelet reminded me of the Finlay of days past. Wonderful!

Keep up the good work. Even tho this ish was lower than usual, it was still good work.—*428 Main Street, El Segundo, California.*

Oh, well, we can't fool all of you all of the time. But we're still in there trying.

REQUEST FROM A LADY
by Dorothy M. McCratic

Dear Editor: If you can excuse penmanship, spelling and whatnot, I have a request. Many years ago I read THE SHIP OF ISHTAR in serial form and have searched in vain for a copy in its entirety. I'd like it to go into my own personal library so I am writing TWS in the hope that someone may have an extra copy to sell. It's impossible for me to leave home to visit book stores in search of one, so I must use the mail.

TWS is one of my favorite magazines and I've read it faithfully for a long time. I realize too well my own faults, so will not endeavor to pick apart any of your stories, authors and artists—but I do believe the average READER SPEAKS is so full of infantile letters as to be ridiculous. The most *intelligent* letter I have read in any magazine, however, was that written by James C. Tibbetts in the February TWS.

Since I read your stories for pure entertainment I do not feel competent to advise or suggest any changes. TWS is always entertainment.—*1178 Main Street, Hanson, Massachusetts.*

We hope that the running of your letter in this column bears the awaited fruit, Dorothy. Odds are it will—for fandom, we have learned, is generous in answer to requests from honest lovers of stf and the fantastic. We reread Tibbetts' letter just now ourselves and found it almost as rereadable as Merritt himself—or Henry Kuttner.

SUGAR CONCENTRATE
by Franklin M. Dietz Jr.

Dear Editor: I want to congratulate you on the swell job you did in starting off the new year. The whole ish (February, 1948) was perfect. A knockout!!! I only hope you do as well in the issues to come.

As this is my first letter to you I want to say that 1947 was a grand year for both TWS and SS, considering that I haven't told you before. Just keep up the good work and everybody will be happy. I am. *Box No. A, Kings Park, Long Island, N. Y.*

It looks like a good year from where we're sitting too, Franklin. We'll do our unamalgamated best to keep you happy.

GOOD LUCK FROM JOBURG
by Louis Kruger

Dear Sir: I have just become a reader of your magazine (TWS) and am finding it most interesting, certainly something different from the usual run of books one reads today. So far I have especially liked one story by Henry Kuttner and look forward to reading more of his stuff.

I would, however, like some of your readers to write to me from different parts of the world so as to talk over the different stories we like or dislike. Here is wishing your magazine all the luck in the world.—*29 Millbourne Road, Berrams, Johannesburg, South Africa.*

Hope we got the address right as your writing was none to clear, Louis. But if we didn't and you don't hear from other of our readers, write us again and we'll straighten it out. We have had a number of letters from your part of the world in recent issues, so here's hoping you connect as hoped.

MUCH-MALIGNED EARLE
by James E. Hamilton Jr.

Dear Editor: Have just finished reading the February issue of TWS. Here are my comments. As I am not an art critic I will let the pics past, except for a few words about Earle Bergey. I have said this before and I reiterate, Earle Bergey is a great, but much-maligned artist.

Now on to the stories.

First, THE SLEEPER IS A REBEL. Very good. Is Walton by any chance one of Kuttner's aliases? This story reminds me of some of his better works, such as SWORD OF TOMORROW and THE POWER AND THE GLORY.

THE SEVEN TEMPORARY MOONS, by Fitzgerald. It was bound to happen. At last Fitzgerald has written a good story. I didn't care for the first three stories of this series, but there was something about this one that got me. For the first time Bud Gregory seemed real to me, possibly because I wouldn't work, either, if someone would pay me ten dollars a day for doing nothing.

TRANSURANIC by Edmond Hamilton. Good but Edmond has done better, notably STAR OF LIFE. This one rather reminds me of George O. Smith's QUARANTINE in the last issue.

THE DOBRIDUST, by St. Clair. This girl gets better with every story. Keep them coming.

THE SHAPE OF THINGS by Bradbury. Ordinarily I don't care for Bradbury, because his plots are too deep for me, but this is one I can understand. Very good.

THE LONG WAY BACK by Barrett. Poorest story in the issue but still far above some things you've published in the past. Good.

And that seems to cover the subject pretty thoroughly, I hope. Who is this Barrett person, anyway? And, if it is not too embarrassingly personal a subject, how does one go about crashing your magazines? —*Hartwick, New York.*

Okay, James. Bergey probably won't sleep a wink for a month after your unsolicited defense. No, Walton is an extremely well known stf writer in his own right and is in no way, shape nor form a pseudonym for Kuttner.

Well, at any rate you were with Bud Gregory at the finish. We liked his last story best too. Barrett is a new writer, that's all, at any rate new to us. So you want to get in too?

You won't suffer for trying. How? First you think up a good story (no comments from the balcony, please!). Then you type it on regular white typewriter paper, using double spacing and good wide margins, then you send it in to THE EDITOR, THRILLING WONDER STORIES, Suite No. 1400, 10 East 40th Street, New York 16, N.Y.

Then, if by any chance we don't send it whistling back to you by carrier pigeon express (always include a self-adressed envelope with sufficient postage) you may find that you've made a sale! Simple, isn't it? As long as you've got a good story, that is.

'RAY FOR RAY!
by D. R. Naugle

Dear Sir: *Re: Feb. issue TWS.*
A rabid science fiction fan for many years, and a

reader of TWS and SS for the past two, I am moved to congratulate you on the inclusion in your field of authors of Ray Bradbury, whom I regard as the greatest creative genius (in his sphere) yet discovered.

At any future time, should you include in either of your magazines a Bradbury tale, you might well charge one dollar per copy—and I would be first in line at the newsstand, money in hand.—*316—2nd and Cherry Building, Seattle 4, Washington.*

We don't dare, darn it! And this in spite of your hot little fist, complete with ready cash.

WHAT'S THIS?
by Roger Hawes

Dear Ed.: My comments on the Feb. ish. are as follows:

Rah! Rah! and double Rah! The Sleeper Is a Rebel: Transuranic and The Long Way Back.

Pew!! Urp!! and Phfffftt!!!! The Dobridust; The Shape of Things, and the Seven Temporary Moons.

I like Bryce Walton's idea of suspended animation very much. Need more stories like it. Edmond Hamiltons' Transuranic is sensationally new. In my opinion the Saint needs some of this "new life." The Long Way Back supports a well-pampered theory of mine. Bully for John Barrett!!!!!!!—*205 E. Merritt, Prescott, Arizona.*

Bully and cowy and steery for you, my brackish friend. Hereafter we're christening you "Old Middle Ground" Hawes. Get off that fence!

PIPE THE MIKE
by Michael Wigodsky

Dear Sir: You didn't publish my letter! I wrote you a nice long letter and praised the magazine all over the place! And you didn't print it! Go to Ploor! In the name of all three Smiths, go to Ploor!

Well, the Feb. issue. THE SLEEPER IS A REBEL is a good suspended-animation novel, with more of a pseudo-science atmosphere in the suspended-animation machine than most of the type, which rely on some mysterious ray. I object to the ending, which was rather foolishly optimistic. Deker would be a misfit under any circumstances.

Here's how I would have ended the story: Deker fights against the World City for years. Finally, when he is old, he succeeds in destroying the city. The people relapse into barbarians whom he hates even more than the smug norms they formerly were. He sits in the wilderness, waiting for his death. Of course, the happy ending acts as a sop to the morons.

TRANSURANIC is one of Hamilton's rare emotional classics. He should write more of this type, instead of things like THE STAR OF LIFE.

THE SEVEN DEADLY MOONS is a better idea than the other Bud Gregory stories, but not as well written. In short, I didn't like it. Too much science and not enough description.

THE DOBRIDUST isn't quite up to the standard of such classics as ALEPH PLUS ONE & SUPER WHOST. It's about as good as THE SOMA RACKS though.

THE SHAPE OF THINGS is about Bradbury's "average or better than average." More emotion, maestro, please.

THE LONG WAY BACK is ingenious but boring.

I'm putting in a plea for more stories based on emotional situations, for instance, a great many classics have been produced by the simple emotional device of a group of ill-assorted people on a space-ship for a long trip. This is just an example. For another, take Dicken's BLEAK HOUSE, one of the coldest and most unemotional books of fiction ever written.

What makes this book a classic is that majestically hysterical death-scene of Poor Jo. "Dead, milord. Dead, your highness. Dead, Right Reverends and Wrong Reverends of every degree . . . and dying thus around us every day!" Now I don't expect anything on that level. But a little more emotion certainly wouldn't harm the stories. *Note*—the illustrations:

Bergey's better, Stephens' serious, Napoli no, Morey monstrous, Vinlay venomous or Finlay frightening, as you may wish to say. No comment on TRS. *306 Evans Avenue, San Antonio, Texas.*

In regard to your suggested ending to Walton's novel, Mike, may we suggest, as have several of our writer-inners, that you put yourself in the hero's place—in *your* ending, that is. Crawl into that jungle under a nice small stone and stay there!

You may have started something with your plea for emotion—although Ye ED has what amounts to a violent phobia against death scenes emotionally projected. Those he has witnessed in life have been either straight repulsive or grotesquely and shamefully funny. Dying is about the most undignified thing a human being ever does.

But maybe we can add a jot or two more of emotion to certain rather dry tales without including a flock of fluttering Little Evas rising to meet the cardboard angels hung from the proscenium arch on wires. Let's have more talk on this point.

ANOTHER MAD RANDOLPH
by Billy Lee Randolph

Dear Editor: You hear again from me. Whilst in the process of moving to this sunny clime, I had not the time to write. Now you may begin to duck, because I'm at it again.

First I want to compliment you on learning my new address so promptly. There was no delay at all in the arrival of my two mags.

The illos for this issue were all wonderful. Amazing, isn't it! But always there is one pic that nobody likes. I wonder which one it will be this time. Speaking for the little cliché of me, myself and I, there was no putrid illustration. (WE, of course, are excellent critics, having read the TRS before.)

BUT! Let us pause. Ah hah! I thought you were trying to put something over on us gullible readers. The cover! That is where the discord is. (Pardon whilst I look at it.) It has the eternal triangle again! I thought I left geometry in the class-room. Guy, gal, ghoul. Very well, I'll accept this time, but next time I'll get mad, and then won't the pages burn!

Now we see—hic, hic—Bud regory. He seems to be learning that when the perfesser comes asking for another invention, he needs it bad. Dr. Murfree didn't have to beg but three times and only threatened once. My, my!

Hamilton and Bradbury were good of course, but I look forward to an issue with all old timers like—I can't spell their names, so we'll just keep it. I mean, skip it.

The letters, as usual, were inane, silly and full of tontarias, as we say in Spanish class. But I loved them all. I had no idea that Marion Zimmer could be so poetic. It had me in ecstasies. I nearly died. And that goes for the other interesting people like Sneary, Ward, Oliver, and Jewett.

Jerri Bullock fusses at Sneary for taking up all the space, just because he says that most fem-fans aren't active. She should know that being active in fandom involves more than writing to a few mags. She should do many other things, like join clubs, write to other fans, collect mags, put out a fanzine or any other thing like that.

The book review was good but I liked Meet The Authors better. I always did like to know things about people. I am the most curious person you ever

did see. I'd better shut my mouth now, before you shut it for me.—*3524 Tilden Ave., Los Angeles 34, Calif.*

We wouldn't do a thing like that, honey. But perk up your spelling or you get the Sneary treatment next time.

HE DOESN'T BELIEVE THE DOBRIDUST

by Technical Sergeant John W. Patch
35038030

Dear Sir: Every story in the February issue of TWS was enjoyable. Even St. Clair's "Dobridust". However, I enjoyed "Dobridust" chiefly because it offers such a good chance to get in some good "digs".

Imagine a gadget, small enough to hold in your hand, incorporating all the qualities that St. Clair gave the Dobridust! It cleans the wall—well, maybe, but it also recognizes clean wall from dirty wall! Quite a trick. Let's see, that would require an analysis of some physical or chemical difference between the surface of a dirty wall and that of a clean one.

Not impossible, but the circuits are going to take up *some* space. Then the thing "bumped softly against the door and whining, like a dog wanting to go out, when it had finished with one room and wanted to go on to the next."! Oh, what a string of analyzing, orientating and controlling circuits that's going to take! NOT in a gadget that small!

And the plot—if any! Dopey heroine bumbles along doing all the wrong things, but everything comes out fine in the end. Yeah, I know, you're going to tell me I miss the whole point—it's satire! Oh Yeah? So satire consists of improbabilities? Improbable gadgets improbable people, improbable plot! Improbable Baloney!

I agree with those who contend that the "golden age" of science-fiction wasn't so golden. There's nothing so unusual about it, though. The stf that was written in those days made good reading—then. The Model "T" was a good car, too—in those days.

Then, since stf, or rather the science in stf, is an extrapolation of known science, and since that extrapolation cannot always be accurate, there are many incongruities in the science of the old stories. In direct connection with that, I would suggest a warning to the new and flourishing stf publishing companies. I believe that all real fans are delighted with the sudden increase in stf book publishing.

But, so far, nearly all the books published have been reprints of famous and well-liked magazine novels or anthologies of magazine shorts. That's fine for the fan that doesn't have those stories already in his collection of old magazines. But pretty soon the fans are going to get tired of paying out good money for stories they've read before. The book publishers had better start putting out previously *un*-published stuff!—*Sq. E, 611 AF BU, Eglin Field, Fla.*

There is only one hitch in that scheme, Sergeant Patch. Most of the better stf, like most other fiction aimed at popular markets, has seen magazine publication before it appeared between boards. Profits from a book are less certain and almost invariably smaller than those paid by magazine editors. So authors, being human, usually try to hit both fields.

However, there is still a vast backlog of pseudo-scientific and fantastic writing of worth which is not well known to current stf readers. So the peril is not quite as imminent as you think. Otherwise, thanks

[*Turn page*]

for an intelligent if somewhat vitriolic letter. If St. Clair said there was (or will be) a dobridust, we'd rather take her word for it than put ourselves through the self-torture that seems to have been your lot.

SAY IT IN SHORTHAND
by Andrew Gregg

Dear Ed.: Since I'm still feeling the Christmas spirit I'll go a little easy on the February issue.

All hail Bud Gregory? To hail with Bud Gregory! Sometimes I wish he'd stop saving the world from fates worse than death and just let it die! At this rate we'll have to elect him the next president. The best thing about that story was Finlay's illustration, which was rather poor for Finlay.

But when Finlay picks up his pen, there's no telling what will come out save that it will be GOOD! His illustration for "The Long Way Back" was wonderful! The cover was out of this world, but if I told you where, you'd probably stab me with a blue pencil. Here's a BEM that's recognisable as a fly! The dame is recognisable as a female, and the whole thing catches the eye, but that's all.

I'm taking to mind what Farnham said in his letter, though. I'm not comparing Bergey with me, I'm comparing him with himself. He can do better—he has before. Farnham's letter gave me the idea of stringing out my own pack of rejection slips. They stretched over seven feet, or over ¾ of the way from my typewriter to my last story, which the editor had ripped apart in anger. It's just a small collection, however, and I'll be adding to it soon.

Maybe I can get a friend of mine to show you a few sample pictures. Just the kind you like, consisting of a girl running around waving a ray gun and being chased by a BEM.

"The Sleeper Is a Rebel" was good. It was a little newer than most of your stories. There didn't seem to be anything there to cause a controversy. It was just good, that's all.

"Transuranic" was tolerable, but the idea of creating or finding new life is too old. At least, no one, as far as I know, has used new elements to start it.

"The Dobridust" obviously fit your set requirements by being rejected by every other science mag in the field.

"The Shape of Things" is good, but Bradbury can do better. Just so it isn't anything like "The Irritated People!"

"The Long Way Back" was one of the best stories I've ever read and by far the best in this issue! This may surprise these numerous characters that think the longest story must be the best.

Poetry in "The Reader Speaks" would be nice. Why don't you ever have any. I saw some stuff there that was separated into stanzas. I read it and rushed for the sink. Who's this Douglass? He's been reading Gertrude Stein too much. He got one of the important ideas in his poem, but he made a mistake in trying to put some sense in it. Not much, I'll admit, but a little.

Poems like that just sound nice in a primitive way and aren't supposed to make sense. The way I figure it, you like to write poetry yourself, so you urge the readers to write it just so you can comment in verse. Right? If that's what you want, I'll try some myself!

THE TEMPTATION OF ADAM

Adam was a poor man.
Adam had a brain.
Adam turned to sf.
Adam's now insane!

THE TWS SITUATION

The editor has got a mag.
Of pictures Finlay's got a lot.
The typesetters are all waiting,
But who the h— has got a plot?

Are you satisfied now? I guess I've forgotten all about that first sentence, but that's all right. I'm sorry. I'm sorry the magazine was so crummy! I'm done now, you can go back to reading a letter written by some yak that will be raving about your mag.—*221 Stanley Street, Chippewa Falls, Wisconsin.*

Oh, Andrew, with rejection slips
Strung out for tales returned you
Writer of prose that truly drips
Why bite the hand that spurned you?

If you must write you such a screed
In lieu of a report and
Tear us limb from limb then we'd
Suggest you use Cregg shorthand.

ON THE GRID
by Lynn Stanley Cheney

Dear Coach: Just thought that I would drop you a few lines about your last season, three victories and three defeats. The victories were paced by excellent running and passing but fumbling cost you three games. Now let's get on to the games:

"The Sleeper Is a Rebel" 10 touchdowns scored by fullback Walton, a smashing victory.

"The Seven Temporary Moons" 1 touchdown (for the opposition). A costly fumble in the last quarter cost you this one.

"Transuranic" Hooray! Another victory! Star Halfback Hamilton scored at will, 8 touchdowns to be sure.

"The Dobridust" Oh the crushing misery of it all! You must have let the B squad play this one. 25 touchdowns FOR THE OPPOSITION!

"The Shape of Things" All-American quarterback Bradbury gave a good account of himself in this one. 8 touchdowns for our side.

"The Long Way Back" Oh my aching back! (half back that is) 3 touchdowns for the opposition.

Well, that's all for now. Heres hoping you have an undefeated season next time.—*743 Orange Ave., Yuma, Arizona.*

Hmmm—let's see. Water boy Cheney gives us 10, 8 and 8 for a total of 26 touchdowns—while the opposition scores 1, 25 and 3 for 29 of same. Hey! Scummo, that leaves us three touchdowns to the bad. Ecod, how could you? Oh, well, anything can happen in these high-scoring contests.

We still think we'd have won if the referee hadn't slapped all those penalties on us when our backfield shift got off too quickly (the boys were just a bit eager-beaver, don't you know?) and gave them two deep pass completions on interference counts. But who are we to beef? It's all in the game.

SLIGHTLY BETTER SHOWING
by Dan Mulcahy

Dear Editor: Having succeeded (at last) in getting a letter published in one of your columns I am inspired to write another on the current issue of our pride and joy, Thrilling Wonder Stories.

On the whole the issue was well worth reading, though it contained nothing very outstanding. The ideas of the lead novel were all right, but the style of writing didn't keep me entranced to the last sentence.

I suppose "Transuranic" could be called an adventure story of the old type, but an adventure story by Hamilton is well worth your attention. His only peers in the field of adventure-fantasy are Henry Kuttner, Rog Phillips and, possibly, Murray Leinster. When are we going to get a novel by Ed (preferably in SS—the longer the better)?

"The Seven Temporary Moons" was as good as any Bud Gregory story—you can take that remark any way you want. I *would* like to see Fitzgerald do something besides BG, though.

"The Dobridust"—typical Margaret St. Clair story—but this time I mean that as a compliment, but def! The Oona & Jick opera (plural of "opus", just in case you couldn't get your high school Latin) are a welcome change from the usual weighty plots. Don't get me wrong—I have nothing whatever against these "weighty plots"—I just like a little variety once in a while.

"The Shape of Things" was another of the very good yarns Bradbury has been sending you of late—though "The Irritated People" remains my favorite. Keep printing 'em as long as he sends this kind of novel story. He seems to have more fresh plot ideas than any other author I can think of.

"The Long Way Back" started out like a standard adventure story but got quite interesting later on. More from this author, please.

Y'know, I've read every story in TWS & SS for over six months now—you've really come a long way since the dark days of '45 & '46. Let's hope you can maintain the standard you've set for yourself.

And now—The Reader Speaks. Good this time. And full of surprises. Gad! I never thought I'd live to see the day when the Editor would feel remorse over his unkind statements concerning HPL. In fact, I never thought I'd live to see an editor confess he was wrong about anything. But let's hope your Lovecraft-baiting days are gone forever—he really is more deserving of praise than condemnation.

That about takes care of the February issue. Oh yes—one other thing: Please go monthly soon!—*4170 Utah St., St. Louis, Mo.*

You get your Hamilton lead, THE VALLEY OF CREATION, in the July SS, Danny boy. And more St. Clair, Fitzgerald (non-

[*Turn page*]

Gregorian) and Bradbury, though we can't at the moment speak for Barrett. As for your next-to-last paragraph—when have we ever been afraid to admit a mistake?

WHO'S A JERK?
by Tom Pace

Dear Ed: Delightful, delightful! One of my favorite tasks is writing to you. I can always enjoy an issue of TWS or SS more if I pick it apart this way. So here we go.

First . . . one of the more interesting letters in TRS was Tibbetts' praise of Merritt. I heartily agree with every word. I am delighted to find that Tibbetts' favorite passage of Merritt is the same as mine . . . that is the Meeting between Kenton of Emakhtila in Ship Of Ishtar.

But I still maintain that Henry Kuttner at his best is even better than Merritt at his best! I have, as you, Ed, received protests from fans for saying this. I respect their opinions and certainly no one other than Kuttner has earned a statement like that. But I think it is true. I think Sword Of Tomorrow is perhaps the best single piece HK has yet written,

Next Issue's Headliners

MR. ZYTZTZ Goes to Mars

A Novel by NOEL LOOMIS

•

CLIMATE, INCORPORATED

A Novelet by WESLEY LONG

•

THE IONIAN CYCLE

A Novelet by WILLIAM TENN

•

MEMORY

A Novelet by THEODORE STURGEON

—and other stories!

though I have not read all of them, of course. With the incredible number of pen-names the man has, how can he write so much so well?

Charles Douglass' "Archie (pardon me—"archie") letter takes the prize. It was the third reading before I could stop belly-laffing at the Ed's reply. bibbledy bibbledy bibbledy yourself, you jerk. Remember "archie interviews a pharoh?"

Beer beer beer. . .

An excellent suggestion.

More yet, but the last on the letters—I, for one, appreciated Mrs. Eddy's letter about Lovecraft. I don't happen to like much of Lovecraft's stuff, though the tales in which he aimed more for fantasy and less for sheer horror are excellent. But I can appreciate the genius of the man.

Walton's novel is good, the best by this author yet, I venture. A neat pattern of colors . . . that's what a fantasy is to me. I think, really, in colors, color visualization . . . hey, maybe I'm an artist! *The Sleeper Is a Rebel* leaves a nice pattern in the memory. Bright color, the black of . . . choas? that is inherent in Civilization's end, the strange swirling tints and moods of the futures. . . .

Poor old Pace, the guys are saying. Cracking. Too much gook juice, you know. But seriously, I do think in colors and pictures. Even songs I visualize this way. Moods, tempers, and emotions, story plots, memory-associations. . .

Maybe that's why the pix so often set the mood for me, why a Finley pic can "make" a story in my liking. Which isn't quite fair, but there it is.

I again like Fitzgerald's Gregory. I love gadgets. And I still think Fitzgerald is—aw, what's the use? I must be right, or you'd say something.

Transuranic is a good picture of human reaction to alien life, but not outstandingly good as a picture of alienity . . . thought that wasn't the intention.

The Dobridust dropped below one or two previous St. Clair tales, and Barrett's story had better writing than fantasy-interest. Not bad.

And Bradbury does it again. The Shape Of Things

[*Turn page*]

goes up there. His best, for writing, idea, development, visualization.

The inlepix were good. Stephens', Finlays'.

It must be nice to get letters from madmen, Ed., but it has compensations. And besides, who wants to be sane? Not Thomas Crittenden Pace.

By the way, I am not overly fond of Poe, but I do like Annabel Lee.—*Brewster, Florida.*

Your letter, Tom, is more than somewhat reminiscent of one of those rambling old houses drawn by Charles Addams—and your mind, if you'll pardon the expression, like an uncleaned artist's palette. Better scrounge some linseed oil and a palette knife.

WOT—NO STORIES?
by Louis Lawrence Litwin

Dear Ed; The mag was fine this ish, except for the stories. They are rated as follows:

The Sleeper Is A Rebel.....4 roses

The Seven Temporary Moons.....1½ roses
Transuranic.....a lily of the valley
The Long Way Back.....1 doz. petunias
The rest.....dandylions

The Reader Speaks was excellent. The best letter was by Rex E. Ward. Orchids to Jerri Bullock for having enough gumption to tell Sneary a few things. If I were her I would say it this way—"Why don't you accentuate the positive, eliminate the negative or you will turn out to be a limulus."

The cover was awful, but the inside pics were fine. That's all.—*10640 Ayres Ave., Los Angeles, California.*

And that's enough—but confidentially, what's a limulus?

HALY AND HEARTY
by H. H. Haly

Dear Ed: TRS says that EB's Oct. cover was a great improvement. I think so too, but whatever happened to our dear artist (?) this month. His speedboat for Oct. was snazzy, his girl was even snazzyer (even if she didn't look where she was going, re: Mr. Alvin R. Brown's observation).

Why, oh why, can't we have more of those luscious ills like on p 15? Who is this ARTIST? Can't find his name. Also why not more letters like that from Mr. Charles Douglass? Also why don't we take up a collection to purchase poor Sneary a dictionary (is Miss Bullock happy now?).

Off to the terribly teriffic torture—tales (fanfare!). The Sleeper is a Rebel, by Walton. An excellent ending, considering the rest of the story. Poor Deker was in a rut or was Walton listening to a record of Gloomy Sunday when he wrote it? Seven Temporary Moons by Fitzgerald. The best Bud Gregory story yet. (I don't like Bud & it seems to be the shortest). Transuranic by Hamilton. Good but didn't we read almost the same story in the Dec. issue? (it had exactly the same plot, radio-active metal that was contagious and must be destroyed etc). The Dobrodust by St. Clair, comment: "Cute." The Shape of Things by Bradbury. Very good, mabyso because it was unusual. The Long Way Back by Barrett, hackneyed.

Don't get me wrong, your mag is much better than a year ago but the past few months you've spoiled us. We're expecting too much. However cometh April, cometh joy, cometh a new cover.

See you in SS.

PS: TRS is still the best part of your, or any mag.—*Box No. 403, Fairfax, Calif.*

Good old H.H.—right in there with every pitch. The illustrator for the pic on page 15 was Verne Stevens, natch. You should know his style by now. Well, on the whole thanks for the missive—especially the near-unique punctuation. We haven't heard from Douglass either, blast it.

And we're wrapped up and ready to roll once more. This, it seems to us, was a pretty interesting session—with some good ideas, some criticism both sweet and sour a la Chinese spare ribs, even a dash or two of philosophy. Only the doggerel was in E-flat quantity. How about that, you-all? So long for awhile.

– THE EDITOR.

SCIENCE FICTION BOOK REVIEW

THE BOOK OF PTATH by A. E. van Vogt
(Fantasy Press, P. O. Box No. 159, Reading, Pa.)

THE science and fantasy book publishers seem to have been lagging for the past two months, for Mr. van Vogt's novel is the only title received here. But Fantasy Press has come in with one of the most interesting yarns yet to

appear between boards in the recent revival.

The story, which jumps from the very recent past, apparently into ancient days, ultimately turns out to be written about a future so distant that Earth might, to all intents and purposes, be an alien planet. Even the outlines of ocean and continent, currently familiar, have pulled a complete switch upon themselves.

Science, as we know it, has all but vanished. Strange winged birds are used for aerial transportation and animals vaguely reminiscent of the Dinny ridden by Ally Oop in the comic strip of that name are used for land transport. A matriarchal hierachy of priestesses, closely recalling the ancient Mediterranean matriarchy of which Robert Graves wrote so tellingly in Hercules My Shipmate, rules a country in some aspects much like Ancient Egypt, rules with cruelty, treachery and tremendous mental powers of werewolfian capacity.

Into this world is cast Captain Peter Holroyd, AUS, victim of a direct Nazi bomb hit in the final days of World War II. Baffled by his sur-

edented
ne fact that
e worthy captain
e that he is actually
wonlane, and that Peter
merely another incarnation of his
, result of his defeat by the Goddess-
ess Ineznia, usurper of his powers.

In spite of certain entirely explicable schizophrenic tendencies with which his dual entity plagues him, he ultimately, with the aid of L'onee, a sort of Goddess of Virtue and Unprofane Love, discovers that he, as Ptath, has arranged a series of safeguards against Ineznia which she has not been able to overcome to attain the complete rule she yearns for.

The big hitch is that while, as Ptath, he was a sucker for Ineznia, as Holroyd he is anything but. So the contest becomes one in which Ineznia tries to get him to unwrap his traps before Holroyd gains control of all of Ptath's great power and uses it irremediably against her. Needless to say each of them gives the other a run for the money.

A typically complex van Vogt thesis, it carries the reader along well up to a climax of such wholesale slaughter that the conflict becomes meaningless in its own Gargantuanism. Impersonations, directed illusions, and double, triple and quadruple crosses pop up in almost every chapter.

From what we have read of Mr. van Vogt's work—and we have read a great deal—it seems to us that this fondness for weaving a tapestry of story tricks is the one item that holds him back from greatness. If he would hew to a single, or at most a double, story line with greater simplicity, allowing his undoubted magic with words to operate under fewer plot restrictions, he might well produce something closely akin to literature.

As it is, he has written a fine, engrossing fantasy which is packed with the magic such stories all must have and so few do. THE BOOK OF PTATH is a good job all around, well printed and bound and illustrated by A. J. Donnell in highly decorative fashion—his jacket cover being close to superb.

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