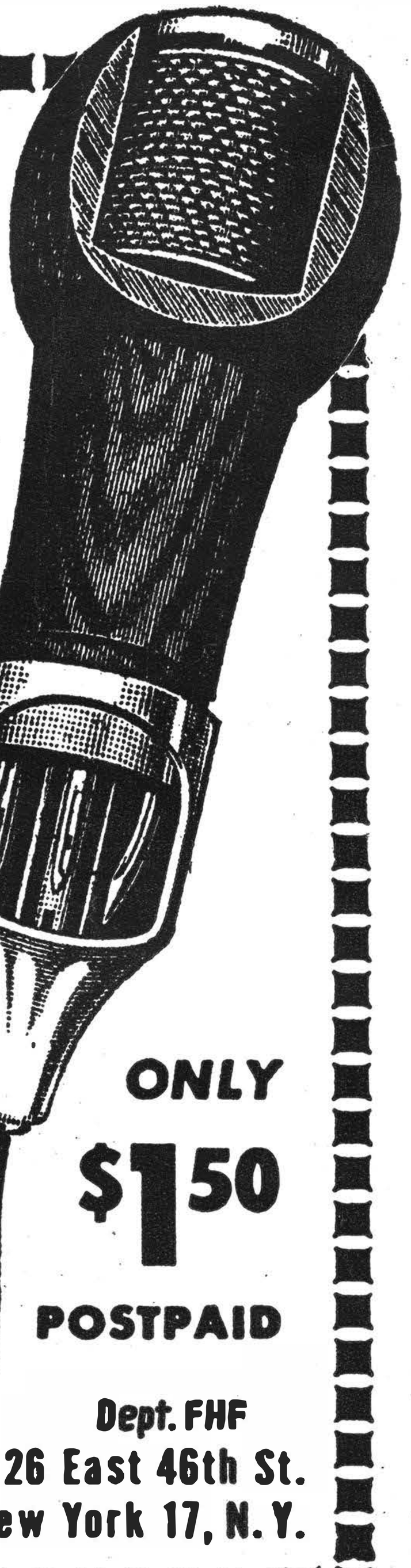

STRANGE ADVENTURES ON OTHER WORLDS—
PLANET
stories
A.N.C.
NOV.
25¢
FICTION HOUSE MAGAZINES
RAY BRADBURY'S sensational
THE GOLDEN APPLES OF THE SUN
The half-gods were dying
BEYOND the X ECLIPTIC
novelet
by FOX B. HOLDEN

SEW LEATHER LIKE AN EXPERT



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Four Star-Flung Novelets

Four Exciting Short Stories

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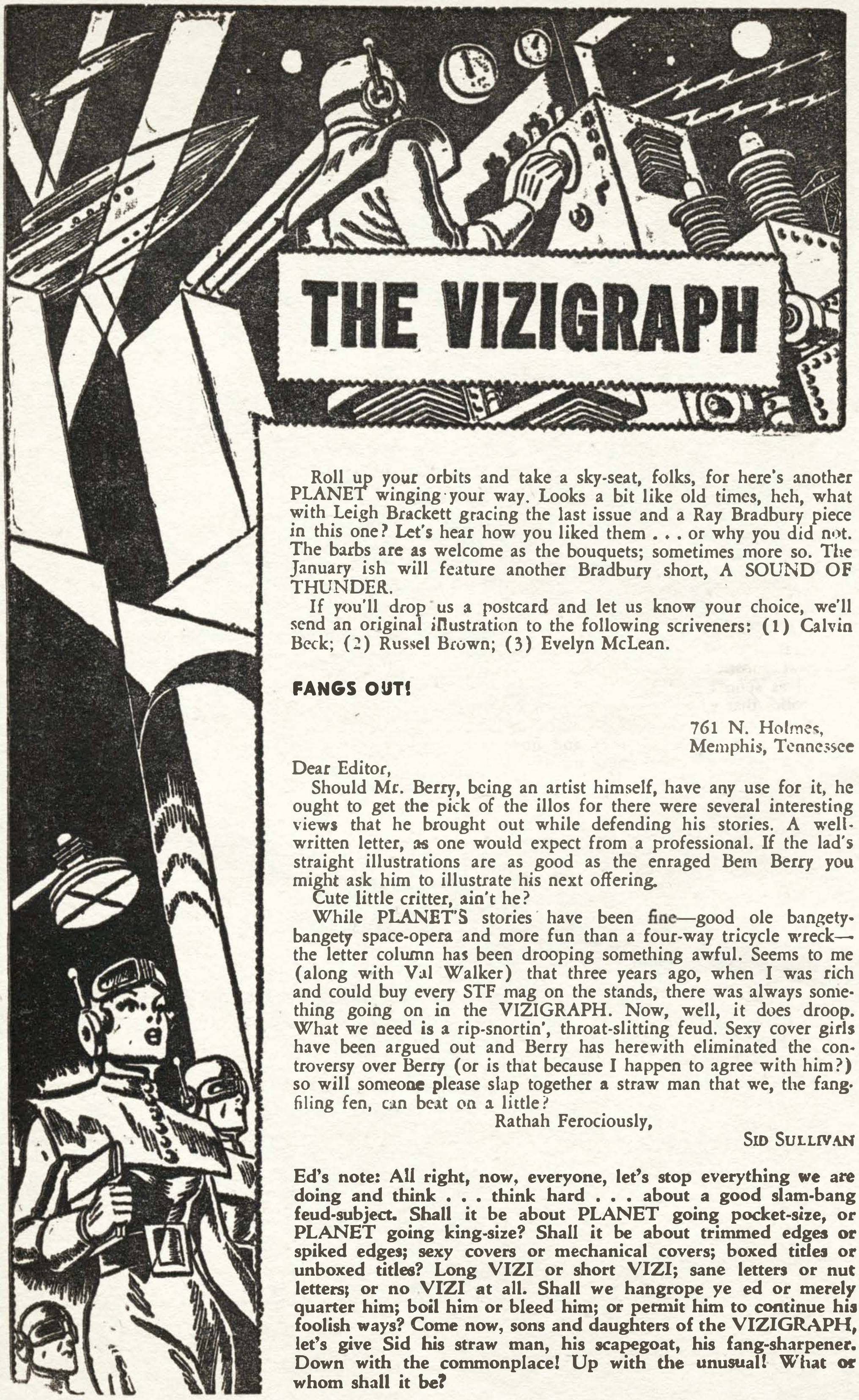


THE VIZIGRAPH

Roll up your orbits and take a sky-seat, folks, for here's another PLANET winging your way. Looks a bit like old times, heh, what with Leigh Brackett gracing the last issue and a Ray Bradbury piece in this one? Let's hear how you liked them . . . or why you did not. The barbs are as welcome as the bouquets; sometimes more so. The January ish will feature another Bradbury short, A SOUND OF THUNDER.

If you'll drop us a postcard and let us know your choice, we'll send an original illustration to the following scriveners: (1) Calvin Beck; (2) Russel Brown; (3) Evelyn McLean.

FANGS OUT!

761 N. Holmes,
Memphis, Tennessee

Dear Editor,

Should Mr. Berry, being an artist himself, have any use for it, he ought to get the pick of the illos for there were several interesting views that he brought out while defending his stories. A well-written letter, as one would expect from a professional. If the lad's straight illustrations are as good as the enraged Bem Berry you might ask him to illustrate his next offering.

Cute little critter, ain't he?

While PLANET'S stories have been fine—good ole bangety-bangety space-opera and more fun than a four-way tricycle wreck—the letter column has been drooping something awful. Seems to me (along with Val Walker) that three years ago, when I was rich and could buy every STF mag on the stands, there was always something going on in the VIZIGRAPH. Now, well, it does droop. What we need is a rip-snortin', throat-slitting feud. Sexy cover girls have been argued out and Berry has herewith eliminated the controversy over Berry (or is that because I happen to agree with him?) so will someone please slap together a straw man that we, the fang-filing fen, can beat on a little?

Rathah Ferociously,

SID SULLIVAN

Ed's note: All right, now, everyone, let's stop everything we are doing and think . . . think hard . . . about a good slam-bang feud-subject. Shall it be about PLANET going pocket-size, or PLANET going king-size? Shall it be about trimmed edges or spiked edges; sexy covers or mechanical covers; boxed titles or unboxed titles? Long VIZI or short VIZI; sane letters or nut letters; or no VIZI at all. Shall we hangrope ye ed or merely quarter him; boil him or bleed him; or permit him to continue his foolish ways? Come now, sons and daughters of the VIZIGRAPH, let's give Sid his straw man, his scapegoat, his fang-sharpener. Down with the commonplace! Up with the unusual! What or whom shall it be?

THE ARTFUL CHALLENGE

509 West Main Street
Jonesboro, Tennessee

Dear Mr. O'Sullivan,

A blunt command, appearing in the VIZIGRAPH of the July, 1953, PLANET STORIES, has momentarily aroused me from my usual lethargy.

"Who is this Kelly Freas?" a reader asks. "He isn't illustrating science-fiction at all. Kindly tell this fellow to wipe off his paint brush and leave."

I realize that a fundamental heritage of all thinking beings is the right to personal opinions; but, it seems to me, condemnation is a serious enough matter to require some bolstering by explanation. This order was almost as great a shock to me as was a letter which appeared in the VIZIGRAPH sometime back and crudely commented that an excellent illustration by Vestal "stunk."

I have no idea who Kelly Freas may be, other than that, in my estimation, he is, obviously, an artist who evidences a delightful individual technique, considerable talent, and much skill. I look forward to seeing more of his drawings.

The principal reason for my appreciation of the work of Vestal is that his style follows the time-tested principles of black and white illustration which had their roots in the creations of old masters such as Albrecht Durer, Paul van Rhyn Rembrandt, and Gustave Dore. There sometimes seems to be a current feeling that anything old is therefore inferior. There would even seem to be a widespread belief, in the general field of science fiction, that a jerry-built, mechanical substitute for homo sapiens should be contrived as soon as possible. A movement founded on the policy that while the characters in a story may be the usual bones, blood, and muscles, they should be illustrated by a few blotches and doodles, also seems to be gaining disheartening momentum.

Yours truly,
ROBERT E. GILBERT

Ed's note: Happy to see you swinging so lustily in behalf of Kelly Freas and Herman Vestal, two of the finest artists in the business. In addition to many black and white illustrations. Mr. Freas has rendered the covers for the July, September and November issues of PLANET, as well as the last three issues of TWO COMPLETE SCIENCE-ADVENTURE BOOKS. We do not maintain that the work of these artists is above criticism. No. Positively. But please, critic, do more than denounce. Be specific. Explain. Be constructive in your appraisal.

'ROUND THE RAINBOW

63 Glenridge Ave.,
St. Catharines, Ont.

Dear Editor,

I must say that the July number of PLANET looked a lot neater on the stands, ever since you enclosed the story titles on the format in that yellow rectangle. I think it would have looked better still if it had been done in a dark blue or green background with lighter letters, but it does improve that haphazard splashing of titles you have had for the past year.

To fit into the proverbial scheme of things, you don't want the boxed-in affair (if you are keeping it) to prove too sharp a contrast with the cover picture. It may stand out, but then it has the appearance of something "just added after"; I believe it should add to the picture, not detract from it. The logo would look better if that dazzling red in which it is perpetually encased was swapped for another color which better suited the front illo of that particular ish.

Curiously enough, it happened to be perfect for the July ish. The way of fate. But say the background was deep blue—in that case orange might be more apropos.

PLANET is showing an upswing in the philosophy type of story. ETHIC OF THE ASSASSIN was an admirable example of this. I doubt if anyone gave it too much thought . . . it wasn't written any too well, or with any exceptional plot . . . but in it, there was an entirely new concept of a society with only one man allowed to kill, one man virtually holding a monopoly on murder. Only it wasn't murder to that society. A worthwhile germ of an idea that, if it had been nurtured, could have produced an excellent novel.

The long stories were all good this issue, and I never would have guessed that surprise outcome to the Screece gem in WHERE THE GODS DECIDE. However, Mr. McKimmey, Jr., you got the order of your planets mixed up.

On page 79 you said: "They were looking for bigger game now. The Screece gem. And they had flown all the way from Earth to Mars, from Mars to Venus, to find it." Need I say no more.

Say, Jack, let's have more pithy editorial comments from that worthy editorial pen. (but I guess it's typewriter). Ope thy mouth, instead of letting even the juiciest go by with a sterile N.C. (Bryan Berry to the attack, eh? I also thought that Betsy was Bryan, but even the best of us, you know. She did say "kerb." But if I know Berry, and he wins first pic, he'll probably ask for his own cartoon. Ugh!)

JOE KEOGH

Ed's note: Fully agree, Joe, that story titles enclosed in box (whatever the color) look neater, are easier to read, and improve the cover. However, it seems that only one out of every four or five covers lends itself to the box pattern; in the majority of cases too much of the action or background would be obliterated by using the box.

SOUNDS OF FLIMSY THUNDER

232 Santa Ana
Long Beach 3, California

Dear JOAT:

Did you read THE LOVERS and/or MOTH AND RUST, Jack? If you did, then you understand that lousy pun with which I open my first letter to you. If you didn't, then you can die of curiosity, I don't give a darn.

Now, then. To be conventional, I start off my letter with a comment or two re Bryan Berry. Well, here it is: Somebody said that he is trying to imitate Bradbury. So what? How many other STF authors that you know are, and how many of them are doing it any good? Bradbury is in a class by himself, and has written so little STF recently as to make it look like he will flunk the course. The more new authors who want to pattern their styles after his great one, the better, I say. I didn't happen to read his three gems (if you don't believe me, then think this over: Thish (July, '53) is the first ish PS I have read since last year) but from his letter in the VIZ BB is an all right guy.

Now someone says that Anderson is the greatest cover pic artist yet. I disagree. Schomburg will hold

(*Continued on page* 110)


KELLY FREAS '53

HIGHWAY J

By CHARLES ERIC MAINE

He was Ingram of 1953, inventor of J-rotation . . . and—along with his lightweight bicycle—directly responsible for the most gigantic nuisance of the 25th Century.

INGRAM was carefully outlining the main functions of the equipment to Breen, but it was tough going. Even when you've associated with a person and worked alongside him for ten years or more, it isn't easy to make him understand new and complex ideas outside his own field. Breen was essentially a ballistics man. He had the hard practical outlook of a seasoned engineer who liked his science laid out before him on the workshop bench, or in the assembly sheds. The paper work and the higher maths he took for granted.

Ingram, on the other hand, was one of the basic research men of Neutronic Projects Inc., the backroom wizards with the shiny bald heads and the pale, bespectacled eyes. The equipment, which was nameless, stood

on one side of the small bare room, and comprised a number of rack and panel units fitted with meters, lamps, and various forms of instrumentation, together with a desk-like console crammed with electronic apparatus.

A transparent plastic cylinder, about seven feet tall, stood erect in one corner of the room.

It resembled a gigantic lamp chimney, but was sealed off at the top and bottom by metal discs, to which were connected a number of multi-cored cables originating in the panel racks.

"Here are the power controls, Breen. Four of them—one for each bank."

"Kinda critical, aren't they?"

"They have to be. The field force has to be exactly right for a perfect J-rotation. Otherwise you get a vector, and an enormous dissipation of power in three dimensions."

Breen winced. "There you go again, Ingram. I don't get this J-angle. It's one thing making up a protype machine to your specifications—I didn't have any trouble there—but when it comes to knowing how it works, or why—then I'm lost. I don't think it will work."

"Why?"

"Because I think time travel's a fallacy."

Ingram smiled a slow thin smile that ruled a horizontal line across his pallid triangular face. "Sure it is, Breen." His voice was quiet and pleasant. "I don't deny it. But the principle involved here is not time travel but ordinary space travel, of the kind everyone knows about."

"You said that before but it amounts to the same thing as time travel."

"Not at all. Only, as it were, by coincidence. Look at it this way. We are, according to the evidence of our senses, which provide all the data on which science is based—we are three-dimensional creatures in a three-dimensional environment. And we can move at will in any of the three dimensions of space."

"That's abvious enough."

"But we also know that the universe is, in fact, multi-dimensional. Our own world of reality takes up dimensions 1, 2 and 3 of the many-dimensioned whole. Dimension 4, which is at right-angles to the first three, is an extension of space which we normally interpret as time. Dimension 5 has been called the dimension of probability, or chance, where everything that might be and might-have-been exists, and is real. Dimension 6 and the rest—well, who can suggest an interpretation for them? They defy the imagination."

"In other words they are only mathematical abstractions."

"Perhaps, perhaps not. At present we have no way of finding out."

"Then where does it get us?"

"Quite a long way, Breen. Since all of the dimensions are an extension of space, there is no logical reason why a creature of three-dimensional perceptions could not be equally at home in any trio of adjacent dimensions. For instance we are aware of and bounded by—dimensions 1, 2 and 3. But why not 2, 3 and 4? Or 3, 4 and 5? It doesn't matter where you start in the series—three adjacent dimensions will give you a three-dimensional world."

"Sure, as an abstraction. That doesn't provide the answer to time travel."

"Agreed. But you will appreciate that if a man—a physical three-dimensional man—could be rotated through 90 degrees into hyperspace, he would then occupy dimensions 2, 3 and 4, and would be free to move in any of those dimensions, which to him would be merely directions of space."

"But what about time?"

"To him, time would then be dimension 5. He couldn't travel in that. But he could move about in dimension 4 which is time to us."

"Yeah, but not to him."

"Exactly. And that is the only way in which time travel can be accomplished—by making dimension 4 one of the ordinary physical directions of three-dimensional space. It means losing one of the other dimensions—1, 2 or 3, whichever you like—it makes no difference. In practice, by rotating the traveller through one dimension, he occupies 2, 3 and 4. In effect, he is multiplied by the factor J—the square root of minus one—a mathematical operation which produces a change of 90 degress in orientation."

Breen scratched his head in some perplexity. "Okay, Ingram. I'll assume you

know what you're talking about. The point is, what do I do?"

"I want you to memorize everything I am going to tell you about the machine." Ingram fingered the switches demonstratively. "Tonight I'm going to carry out the first live experiment—on myself. I'll need you to control the equipment in order to make sure that I get back safely. The theory doesn't matter. You can forget it if you like. But you must remember the practical details, the operation and adjustment."

"That should be easy. I built the thing, or most of it. I know the layout of the controls. All I need to know is when to do what."

Ingram smiled, a confident satisfied smile. "That's exactly what I intend to tell you," he stated calmly.

HALF-AN-HOUR later, his brain spinning with a mass of practical information about the J-rotation equipment, Breen left the room and went down a flight of stairs to the lounge immediately below. A young attractive woman sat in an easy chair reading a picture magazine, but when he entered the room she stood up and crossed over to him, smiling in a manner that implied more than just a greeting. He took her in his arms and kissed her.

"Charles is still in the lab, honey," he said. "He's going to be busy for a long time."

"Is it definitely tonight, darling?"

Breen nodded. "If you want my opinion he's as mad as a hatter."

"You don't think it will work?"

"How can it? He talks about multiplying himself by the square root of minus one. Does that make sense? And another thing—do you know what I saw in the lab—all folded-up and new-looking. . . ?"

"I can't imagine."

"A bicycle! One of those latest lightweight folding bikes that you can carry around, and erect whenever necessary. What do you suppose he wants it for?"

"I don't know. Didn't you ask him?"

"Yeah, I asked him. I said 'why the bike?' and he replied—'for time travelling.' He said, 'I'll be able to cover more time in less time'. Then he laughed."

The girl looked worried. She released herself from Breen's embrace and returned to the easy chair. He followed her, and sat on the arm, with his hand resting lightly on her shoulder. "I tell you, Verna, he's crazy," he added insistently. "You could go ahead and get a divorce on those grounds alone."

She shook her head thoughtfully. "It's not as easy as that, Raymond. You see, I couldn't hurt the guy. Not like that."

"But you've got to hurt him sometime, honey."

"Later. When this work of his is finished. Then we can tell him the truth about us, gently, so's it won't hurt too much."

Breen laughed sardonically. "It's going to hurt just the same whichever way you do it. Why don't you make a clean break, Verna? Come away with me now. Charles will get over it. He's too crazy to care much, anyway."

"He can't be so crazy. Neutronic Products rate him high among their research scientists, and. . . ."

"Yeah, but they don't know about this time travel stuff. Why, if P. J. Verringer even suspected that Charles was playing with that sort of thing in his spare time he'd fire him. A big company like that can't jeopardize its reputation by employing scientists with screwball ideas. Think of the damaging publicity there'd be if this got into the tabloids."

"Maybe you're right, Raymond." Verna's voice was tired, almost depressed. She lay back against the soft upholstery of the chair while Raymond's hand carressed her hair. He eyed her appreciatively, warmly.

"How did you ever come to marry a guy like Charles, honey? I—I just can't understand it."

She shrugged her shoulders. "Oh, I don't know. I used to be his personal assistant at Neutronics. We saw a lot of each other. I know he's not a handsome he-man but, I guess I must have felt sorry for him. He always seemed so lonely, and yet, for all that, so self-sufficient, and so alert mentally. Maybe I was crazy too."

"Sure you were. He's not the guy for you."

"Who is?"

"I am."

She turned her face up to be kissed again.

AT EIGHT o'clock that same evening Ingram entered the tall transparent cylinder in the lab through a narrow sliding panel in its side. He was dressed simply in a gray well-worn suit, with an off-white shirt, which, in combination with his untidy appearance and meek but keen face, gave him the appearance of an out-of-work clerk. The bicycle was already in the container, lying on the metal disc floor. There had been a certain amount of bantering cross-talk about this item between Ingram and Breen, but the older man had refused to go into detailed explanations. "I've already told you, Breen, I'm expecting to find myself in the kind of three-dimensional space we already know. If I'm to travel at all in the fourth dimension then I'll have to walk. Why walk when there are folding bicycles available?"

Breen didn't argue the point but simply raised a significant eyebrow at Verna who had come to see the departure of her husband. Ingram's final instructions, shouted from the cylinder were "Whatever you do, leave the equipment on until I return. The J-rotation needs continuous power."

He gave a pre-arranged signal—a nonchalant raising of the right hand—and Breen pulled the first switch on the console. There was a set procedure for activating the equipment, a circuit preamble determined by relays and flashing pilot lamps. Vacuum tubes glowed dull red, and a characteristic smell of warmth rose from the large vitreous resistors in one of the panel racks. There was the unmistakable odor of ozone in the air.

Verna, watching soberly, with eyes just a little wide, felt an increasing tension, an increasing sense of oppression. It wasn't anything physical—perhaps the heavy breathing of her lover at the console, the curious beetle-like appearance of Ingram inside the cylinder, like some zoological specimen inside a preserving jar, or the faint click-click of hidden relays marking the inevitable build-up of power and energy; but above all the sense of imminence, of some dramatic event that would alter the whole course of her life.

The actual moment of departure came suddenly, unexpectedly, with no blinding lights or crackle of power. One moment Ingram was there, in the cylinder, a feeble diminutive figure, supporting the bicycle in one hand—and then he was gone. Neither Verna nor Raymond actually saw him go. He simply wasn't there any longer.

For a moment or two they stared in astonishment at the vacant cylinder. Then Breen exclaimed: "Well, what do you know! Bicycle too!"

Verna eyed him anxiously, as though seeking some kind of reassurance. He walked over to her and took her in his arms.

"Do you suppose he's actually gone into time, Raymond?"

"Nothing that gink could do would surprise me. How do I know? He's disappeared all right. He's multiplied himself by the square root of minus one and vanished."

"What happens now?"

"Search me! I leave the equipment running and wait for him to come back."

"How long?"

"Your guess is as good as mine, honey. Five minutes—an hour—a week—a month . . . he didn't say. He didn't even know."

"I don't like it, darling. It's just a little sinister."

Breen smiled and kissed her. "Don't you worry, Verna. Either Charles is crazy or he isn't. If he's crazy, then my guess is he won't come back, and that will save us the trouble of divorce action. If he isn't crazy, then he's probably pedalling on his bike like fury into the far distant future. I only hope he gets a flat tire and has to walk back."

Verna laughed. "You don't suppose he can see us or hear us now, do you, Raymond?"

"No—I guess not."

"Then kiss me and tell me you love me. I need something to cheer me up."

Breen was only too pleased to oblige.

II

DURING the next two weeks, the J-rotation equipment functioned day and night in the small laboratory. Breen was a frequent visitor, not only to carry out his routine inspection and adjustment of the apparatus, but also to see Verna Ingram, and discuss plans for the future. Ever present in his mind was the possibility that In-

gram might not return. Such a situation would be very convenient. He saw no great difficulty in having his death established as a legal fact—Verna had witnessed the disintegration—and then he could go ahead and marry the woman he loved.

As the days went by with no sign that Ingram was still alive or intended to come back, he grew more and more impatient, and became resentful that he should be committed to look after the machine that would, sooner or later, bring back the man he least wanted to see in the world.

It occurred to him, quite suddenly, that even if Ingram were still alive, and perhaps thriving in some future age, a failure of the equipment could prevent him from returning. A technical breakdown would leave him stranded in time, and there would be no possibility of repairs being effected, because Ingram himself was the only person who really understood the principles and circuitry of J-rotation.

From this startling realization, it was a short logical step to the thought that such a breakdown could be conveniently engineered.

With little effort the equipment could easily be destroyed beyond repair. Ingram would be permanently out of the way, and from that moment on things would run smoothly for himself and Verna.

The idea seized his imagination and obsessed him so that he became restless and uneasy whenever he was alone in the lab. With so little effort so much could be accomplished . . . yet he hesitated. Something was bothering his conscience, and it wasn't the thought of Ingram left high and dry in the future—or maybe the past. . . ? He decided he would feel much better about it if he were to talk it over first with Verna, and once he had made up his mind on this point, he hesitated no longer, but went to see her the same evening. He kissed her, then said, "I've been thinking, honey, supposing Charles never comes back?"

"But he may, Raymond. We can't be sure."

"Supposing we were sure. We knew he wasn't coming back."

She considered this for a moment. "I guess we could go and see a lawyer. Maybe they'd regard him as dead. In any case, I'd be able to get a divorce on grounds of desertion, maybe."

"Sure. Then we could get married."

"That would be just fine, darling."

"Is that what you want?"

"Of course, darling. Don't you?"

"Yes. Then listen to me, honey. I can fix it so that Charles won't come back."

She stepped backwards, regarding him in surprise. "What do you mean by that, Raymond?"

"Just what I say. I can put the equipment out of action, and close the door on Charles. He'll be stuck in the future forever."

There was consternation—almost horror—in her eyes, and it was the first time he had ever seen her look that way. He took her hand in his. "What's the matter, honey?"

"You can't do that, Raymond. It would be murder."

"Nonsense!" He laughed a loud confident laugh. "How can it be murder when you don't kill a guy? He'll still be alive, only in a different age. It's not a criminal offense to close the door on someone."

"It's wrong, darling. I don't care what you say, it's criminal. You can't do it, and I won't let you do it."

Breen became irritable. He pulled her towards him and held her firmly by the arms. "Now look here, Verna. You just said it would be fine if Charles never came back. We could get married and that's what we both want. All right, I can fix it that way. What's the objection?"

"If Charles doesn't come back—either because he's dead, or because he doesn't want to—then that's okay, Raymond. But if you deliberately prevent him from returning, then that's a criminal and dishonest act. I won't let you do it."

"You won't stop me," said Breen fiercely.

He released her and went straight up to the laboratory. There was no doubt or hesitation in his mind now; Verna's opposition to the scheme had simplified the situation so far as he was concerned. He knew exactly what he was going to do. First, throw the main power switch, then go to work on the vacuum tubes with a hand wrench, and finally—just to make sure—tear out bunches of the fine inter-stage wiring with a pair of wire clippers. It took him exactly three

minutes, and when he had finished, the J-rotation equipment was dead, and unlikely to function again.

He went downstairs to the lounge, to find Verna standing by the telephone, white-faced and wild-eyed. "All right, honey," he announced triumphantly. "Stop worrying. Charles won't come back ever."

"Raymond, forgive me," she said quietly. "I've called the police. They're sending a homicide squad."

Even before she had finished speaking, the wail of a police siren filtered up from the street below.

CHARLES INGRAM'S first experience of J-rotation was decidedly unpleasant. From the moment when Breen had pushed the switch that set the preamble relays in operation, the interior of the cylinder had seemed to close in on him. The transparent walls had become somehow scintillating and unreal, and there was an electric tension in the air that made his heart thump faster. There was no pain as the power surged through him, only a terrifying paralysis, then vertigo, then darkness. For a fractional moment he was a nonentity suspended in a cold formless void, but this was replaced, quite suddenly, by . . . at first he couldn't identify the scene before his eyes. It was familiar but fantastically different. Slowly recognition crystallized in his brain. It was the laboratory just as it had been before the equipment was switched on, but it was flat and dimensionless like a luminous projection on a vast movie screen. Except that there was no movement of any kind. Breen was over at the console, poised motionless, with one hand awkwardly raised in the air above a switch. Verna was there too, a flat cut-out Verna, with one hand raised to her mouth in a frozen gesture of alarm. The red second-hand of the large laboratory clock was not moving. There was no sound, no movement no reality. Everything was a plane, a still picture, spread out before him, yet he himself seemed to be part of it. The transparent wall of the cylinder was in the picture too, as unreal as the rest, yet he himself was solid and substantial and alive. He was a three-dimensional being in a two-dimensional environment—a human in Flatland.

Ingram's first reaction was one of blank stupefaction. For a moment he thought the experiment had failed, but his keen analytical brain soon recovered from the shock, and commenced to examine systematically the evidence of his eyes. The truth of the matter, he realized, was that he had never attempted to visualize how the world would appear to a J-rotated observer. He had steeped himself in the pure mathematics of the process, but had failed to consider the more mundane aspects.

Somewhere at the back of his mind had been a vague picture of worm-like life-lines meandering and undulating across a featureless gray plain or substratum, but that naive impression apparently bore no relation to the reality. The gray substratum was there, in a sense, for he felt himself standing on a firm smooth surface, like the floor of the laboratory. It seemed to stretch all around, beyond the two-dimensional image of Breen and Verna in the work room.

He stepped forward slowly towards the image but as he moved, it receded, and his eye caught a movement. Breen's hand had dropped about two inches towards the control console. The red second-hand of the clock had flicked forward a degree or two. Verna's expression was slightly different. A great truth in Ingram's mind—he had walked forward in time! While he remained still, the picture before him was static and motionless; but when he moved, then the picture changed, became animated, exhibited the phenomenon of time sequence.

His alert senses leapt to the obvious corollary: if moving forward caused time to advance in the two-dimensional world he was observing, then walking backward should cause time to be reversed—like a motion picture run through in reverse. He tried to take a step to the rear, but found he couldn't. There was an inflexible barrier pressing into his back that locked all his movements. He turned round and found himself facing the image of the rear wall of the laboratory, then stepped forward—successfully, but again could not step backwards. The barrier had moved round with him, and still blocked his movements to the rear. When he turned again to face the center of the room, the clock had advanced another two or three seconds.

Gradually it came to him that there was only one temporal direction in which he was free to move, and that was forward. The road to the future was a one-way road; he had come up against something fundamental in time travel—you can't go back. Time was irreversible—that was the law of entropy.

In a sudden panic he stooped down and groped for the bicycle, but it was still there, at his feet. He picked it up and unfolded it, pushing the supporting struts into place with an agitated motion, and began to walk forward, slowly and cautiously, observing the animation of the scene before his eyes. Breen, Verna and the laboratory clock started into motion, slowly at first, but speeding up into normal activity as he increased his walking pace, pushing the bicycle along by his side. At the same time sound became audible—the sound of their voices talking—wavering and varying curiously in pitch, because his speed was not perfectly constant. It was like watching a cine-film running through a faulty projector.

As he walked, he tried to figure out the exact significance of what he had seen, and soon the solution became clear. He had overlooked one important fact. Because of the J-rotation, he was now extended physically in dimensions 2, 3 and 4. The rest of the world he was observing had remained in dimensions 1, 2 and 3. The only dimensions they had in common were 2 and 3, and they were the only two he was capable of observing.

Dimension 1 no longer existed for him: dimension 4 was a formless gray expanse behind the picture plane into which he was advancing. The world he knew had effectively been reduced to a flat two dimensional world so far as his J-rotated senses were concerned. If he had carried the rotation a stage further, into dimensions 3, 4 and 5, his world would have become a one-dimensional thread suspended, presumably, in a gray void. And from the viewpoint of dimensions 4, 5 and 6 . . .? A point—a dimensionless atom of being in an eternity of . . . what? He couldn't even begin to guess, but he had a feeling that he had touched upon a profound aspect of metaphysics just beyond the eager grasp of his understanding.

HE WAS abruptly startled out of his reverie by what was happening in flatland. Breen was embracing and kissing his wife, and what was worse, she was responding in no uncertain manner. Ingram stopped and stared, and the picture became inanimate—a still color-photo of a lovers' embrace against the austere background of a laboratory—his laboratory.

An insane jealousy swept over him. He rushed forward, as though to thrust the two apart, and the picture jerked into sudden movement again, but receded as ever, so that he was unable to make any advance on it. He was confined to the relative position of the cylinder, observing the lab form behind its transparent walls, and couldn't break out. Any movement he made simply took him forward in time.

He saw Verna and Breen leave the laboratory arm in arm, and then the light went out, and he was left in almost complete darkness, with only the faint crimson glow from the vacuum tubes to cast a pale glow on the equipment.

Ingram mounted his bicycle, anxious to hurry on until someone came into the laboratory again. With his mind a confusion of bitter thoughts, he pedalled fiercely into the future, with no means of knowing his rate of progress. Verna was unfaithful. That was the salient fact that had assaulted his mind. Breen, friend throughout many years, had abused his hospitality by making love to her behind his back. He wondered how long it had been going on.

In a sense, he realized that it was partly his own fault. He had been intensely absorbed in his work for many years. He had no illusions about himself. He was as dull and prosaic a husband as you would find anywhere in the world. It had always been a mystery to him why the girl had ever been attracted to him in the first instance. It was one of the eternal enigmas of life. Sure, he had neglected her, and Breen had come along—a younger, more attractive, more virile man. It was only natural that this should have happened. He rode on along the time highway full of anger, jealousy, contrition and—strangely enough—understanding. He couldn't find it in him to blame anyone except himself.

The laboratory flashed into full brilliance,

then snapped into darkness again before he had time to squeeze the brakes. In the space of about one second Breen had entered the room, carried out a number of long and intricate adjustments to the equipment, and had left again—the whole operation being performed with such incredible rapidity that Ingram was unable to follow his movements. He stopped in the darkness to think it over. The speed of that transitory incident was much greater than he would have anticipated, even allowing for the velocity of the bicycle. Breen had rushed in and out at a tremendous rate. There had been no accompanying sounds, probably because the speeding-up process had pushed the frequency of the audio waves up into the supersonic spectrum.

It seemed to Ingram that as he traveled through time, at what he imagined to be a constant speed, so the rate of progress accelerated. It wasn't a linear progression, but apparently followed a square-law—like the increasing acceleration of a body falling through space under the influence of gravity. That was another factor he had overlooked, but it made sense in his mind. Acceleration denoted a fundamental curvature in the nature of multi-dimensional space, and that tied up conveniently with the relativists.

But there was a more important significance in this discovery—the fact that increasing acceleration through time placed the far distant future within his reach. Provided he kept pedalling long enough, there was virtually no limit to the distance he could travel in dimension 4.

Curiosity about Breen and Verna, however, prevented him from seizing this opportunity at first. He felt compelled to make frequent stops, dismounting and walking, in order to observe laboratory scenes at a normal rate of movement. It was in this way that he saw—about an hour after the J-rotation had taken place—the destruction of the delicate equipment by Breen, armed with a large steel wrench. Ingram's stomach turned over at the sight—not because of the vicious sabotage of ten years of intensive work, but because of the effect it would have on himself—when he eventually caught up with the time that he was now seeing in advance. He was witnessing a preview of his own predicament. There was no accurate way of estimating how long had elapsed in Breen's world between the moment of the original J-rotation, and the act of sabotage. Possibly ten days, or two weeks—or maybe more. He had seen it happen in an hour, because his time angle had shifted, but when those days had elapsed he would inevitably find himself in the time highway, cut off from a source of rotation power. He wasn't quite sure what would happen, but he didn't like the prospects.

Breen's motive was fairly clear to him. It was a simple case of the eternal triangle—the solution being, as always, the elimination of one of the sides. He was the unwanted side on this occasion—and it didn't feel good.

There seemed to be only one thing to do, and that was press on at full speed into the future, until he was able to make contact with an age of great scientific advancement. He wanted to put everything right in his life—even if it meant going back several years, and treating Verna with less indifference. Above all, he wanted to make sure that Breen would never have the opportunity to steal his wife in the way he was witnessing. He couldn't see how it would be possible—but perhaps scientists of a future period would have solved the problem of traveling backward in time. With their help he might be able to put the clock back and make a fresh start, treating Verna in the way a young and vivacious woman wants to be treated, and at the same time maintaining his interest in J-rotation.

In such a mood, his thoughts jumbled and incoherent, lacking their usual precision and logic, Ingram mounted his bicycle again, and set off at full speed down the time highway.

III

DURING the next few hours Ingram was able to observe the future history of the laboratory. At first he stopped and dismounted at frequent intervals, in order to study the scene at his leisure, but each time he re-started, the acceleration he had achieved was gone, and it became necessary to build it up again from zero. The labora-

tory flickered into illumination and darkness in a manner that tired the eyes. Once, early in the journey, he thought he caught a glimpse of uniformed police examining and photographing the equipment. Then later, the room was in darkness for a long time, denoting the passage of weeks or possibly months.

When the light finally came on again the equipment had gone, and the room was furnished in the conventional way with a table and chairs, and a man and a woman moving around. But they were strangers to him. He tried to interpret the meaning of what he saw as he went along. It looked as though Verna had moved out of the house; there was certainly no further image of her, or for that matter, Breen. And he saw nothing to indicate that he himself ever returned to his own era.

On and on he went, observing with a more practiced eye the swift intermittent images as they came and went on the two dimensional screen before him. Through the decades—slowly at first—then more and more swiftly. He saw the man and the woman grow older. Children appeared, grew up, and vanished from the scene. Then the man, now stooped and white haired, was gone too, and only the old woman remained. But soon she was no longer there.

A new generation of strangers took over the house, and the furnishings changed in appearance becoming more futuristic in style. A large stereo-television cabinet came into view, on which, in brief glimpses, he saw newsreels that astonished him—giant flying-wing airliners, passenger-carrying rockets ascending into space, jet-powered hover-cars, and the official opening of a tunnel beneath the Atlantic for traffic and freight. Science was playing an increasingly greater part in the life of mankind. In fact, it was rapidly becoming the cornerstone on which civilization depended.

As though to contradict his thoughts the scene dissolved in a blinding white flash that rendered him momentarily blind. He kept moving instinctively, rubbing his aching eyes with one hand. When he was able to see again, the room had disappeared, and in its place there was smoking rubble. He seemed to be at the edge of a vast crater, the center of which had a shiny fused appearance. All around, as far as the eye could see, was desolation. The sky was stained and darkened by a gigantic mushroom of dense smoke rising up for miles.

Nothing further happened for a long time. He was effectively in the open now, though the scene was still two-dimensional. The alternate flicker of night and day blended into a continuous soft gray luminescence. He was traveling too quickly to observe individual motions of men, but as green vegetation began to appear among the ruins, so new structures raised themselves up in the distance—larger and more magnificent buildings towering up into the sky. In no time at all, it seemed, every trace of the atomic explosion had been eradicated, and the crater became the foundations of a tremendous skyscraper in shining metal.

Until the next atomic explosion . . . and the next . . . and the next. Ingram marveled at the resilience of man, his inherent stubbornness, that enabled him to rebuild in order to destroy, then rebuild again. Always the architecture was finer and greater, as though war and devastation raised his creative powers to higher and higher levels.

There was a long interval of peace, during which he was looking out and down on an ultra-modern city from a point apparently located in space some thirty feet above street level. Aerial highways spanned the chasms between skyscrapers. Airborne traffic streamed by at pre-determined levels, from the ground high up into the skies. He caught a glimpse of metallic saucer-like objects suspended in space, like miniature moons, and saw rockets moving towards and away from them. Then the view brightened. There was no more night, only perpetual day produced by a ring of artificial suns encircling the earth like an enormous fiery girdle suspended in space.

A new building arose and encompassed him. In the space of a few seconds he found himself in a room, a gleaming box of a room, fitted with equipment of unimaginable purpose and incomprehensible design. People flashed here and there, but they were only a formless blur at the rate he was traveling.

He remained in the room for a long time, observing no change in content, and pedalled harder and harder in order to break

through to a new environment. This was an age of great scientific advancement. There was no doubt about that. But how much did they know about time travel? Could they provide the information and the facilities he required? And—an even bigger problem—would he be able to make contact with them from his extra-dimensional plane, and if so, would they understand him?

And then it happened. Quite unexpectedly he ran full tilt into an obstruction across the time highway—something hard and unyielding located obliquely across his path. The bicycle struck—crashed—and he was flung violently off. At the same instant he experienced a sickening electric shock that made every nerve in his body scream out in anguish. Blackness closed in, but as consciousness was dragged from his brain he heard a voice, a human voice, saying "Grab him tight. He's the guy who started all the trouble!"

INGRAM recovered from his black-out a few seconds later to find himself securely held by two tall steel-muscled men. They were simply attired in white loose-fitting tunics and kilt-like shorts, with flat cross-strap sandals. A black belt around their waists held holsters from which protruded the butts of sinister looking pistols. But the thing that impressed Ingram most of all was the fact that the objective world was three-dimensional once again, and he was part of it. He had been forcibly dragged from the time highway for a reason he didn't know, but would undoubtedly soon find out.

"Take it easy, old timer. We're not going to hurt you—yet." The guard laughed sardonically.

"We've been waiting quite some time for you."

Although they spoke in the language and idiom that he knew, there was a quality about their voices—a subtle accent and inflection—which fell strangely on his ears.

"Come on you. The Provost Marshal's got something to say."

Ingram was conducted through a sliding door and down a cool wide corridor into another room. He had a fleeting impression of thick crimson carpet, curious cubist chairs, and a battery of video screens set in a large panel on one wall. Then his eyes focused on the desk at the far end of the room, and the lean melancholy man behind it. The guards hustled him forward until he was standing before the Provost Marshal.

"Time immigrant, sir. Just pulled him in off Highway J."

"Hm. Mode of travel?" The Marshal's voice sounded bored.

"Archaic two-wheeled pedal-vehicle."

"Hm. A bicycle. Original, at any rate. Most immigrants seem to favor jet cars."

The Marshal stood up and scrutinized Ingram as one would inspect a biological specimen.

"Not very rugged. But intelligent—yes intelligent. What's your name?"

"Charles Ingram."

"He's the guy that started the trouble," one of the guards pointed out.

"I'm aware of that. Ingram of 1953. The inventor of J-rotation. Do you realize, Ingram, that you are directly responsible for the biggest nuisance of the 25th century?"

"Who me?" asked Ingram in perplexity.

"Yes you, in spite of your innocent manner. Ever since you started this J-rotation business, people have been time traveling for the past five hundred years. Yes, thousands upon thousands of them. We've had several centuries of war, during which the population of this planet has been reduced to less than half a million. Finally we have attained a new zenith of progress and culture, a tightly organized self-sufficient world with a very high standard of living. Naturally all the time travelers by-pass the atomic wars, and decide to settle in on us—here and now."

"Thousands you say?" Ingram queried.

"Tens of thousands. You are the last of them, I think. The others all got here before you, because they didn't have so far to travel, and they used a faster means of locomotion."

"Amazing!"

"Most of them tried to go on a little further into the future—to a period of still greater stability and achievement. The government of Terra a hundred and fifty years from now got tired of this endless stream of immigrants—people from the decadent ages with atavistic traits and no knowledge

of modern techniques. We received orders to erect a fifth-dimensional barrier across the time road—Highway J. We have equipment to rotate immigrants back into the three dimensions of space. In other words, we are a security check point to stop illegal immigration."

"Tens of thousands!" breathed Ingram. "Then my discovery must have attained general recognition?"

"It sure did. That's why you're in trouble."

Ingram ignored this last statement. "You say you received orders from the future to stop immigrants. That means you have time travel too. Both ways."

"Yes. We have. Ironically enough, we use your system—J-rotation."

"That's what I came into the future to find out—how to travel backwards in time."

The Marshal smiled sardonically. "Forget it, Ingram. You'll be lucky if you live long enough to travel anywhere. I'm going to read Section 64a of the Terran Security Regulations of 2416. That is the particular regulation under which you are being arrested and charged." He selected a pink docket from a file on his desk. "Here we are—Section 64a—relating to the threat to social and economic stability caused by excessive time immigration from the belligerent centuries. Immigration by time, whether by Highway J, sub-dimensional transit, pathological hibernation, or whatever method, is an offence under the Stability of the Social Order Act of 2416, for which the maximum penalty is compulsory euthanasia. That means death, of course."

"But I don't want to stay. I only want to go back."

"There is no going back, Ingram. Every time-immigrant knows the secret of time travel. If he is allowed to go back, he will inevitably spread that knowledge to others. He must stay here, either dead, or alive on a penal satellite."

Ingram was seized with a kind of unreasoning panic. "You can't do that to me," he shouted, thumping the desk with his fist. "I demand justice. You can't kill a man or imprison him without a trial."

"We could, but we won't," said the Marshal calmly. "You'll get your trial. Meanwhile you must be held in custody. You'll find it quite pleasant, once you get used to free fall. You'll be with other time immigrants, too."

The interview was at an end. Ingram found himself being forcibly conducted out of the room and into an elevator, which ascended suddenly and silently, causing his knees to sag with fierce acceleration.

"Where are you taking me?" he demanded indignantly.

"We ask the questions around here, old timer."

They came out on a flat roof under a clear blue sky. The ring of miniature suns he had seen from the time highway shone fiercely down with almost tropical heat. Glancing up he saw a myriad flying machines in the sky, flying in well-defined lanes. The air up here was thin and attenuated, and gazing downwards as they neared the parapet at the edge of the roof, he nearly collapsed at the tremendous height of the building—indeed, height was hardly an adequate word—altitude was more accurate. He guessed they were about three miles above the ground.

The guard whisked him into a small cigar-shaped vehicle standing on the roof, and strapped him into a springy bucket seat, then they moved into the fore compartment and slammed the cabin door. There was a sudden throbbing of booster pumps, followed by a roar that assailed his ears with an intolerable deluge of sound. He felt a giant hand pushing him backwards into the padding of the seat, sucking the air from his lungs, pressing violently into his stomach. And then, for the second time that day, he blacked out.

IV

PENAL SATELLITE No. 7 was a large metal saucer-like disc circling the earth in a fixed orbit at a radius of about 22,000 miles. It was, perhaps, two hundred yards in diameter, the whole structure being covered and sealed in with a transparent dome of extremely tough plastic material. Here Ingram found himself mingling with some twenty other prisoners in a circular arena at the center of the satellite. Around the edge of arena, behind a shiny metallic wall, were the administrative offices, the quarters

of the satellite staff, the small hospital ward, the thermo-pile generators and associated power equipment, and the radio and radar room. The whole structure was clean and tidy, with fresh circulating air and adequate warmth.

Ingram spent the first few hours of his stay on Satellite 7 by being sick in spite of the precautionary shots of trinamine they had given him in the arm. Free fall meant no gravity, and that meant instability of the semi-circular canals of balance in the ears. He found himself unable to move without experiencing violent dizziness. But eventually he grew accustomed to the sensation, and his body settled down to something like normal behavior.

His companions in crime were a curiously mixed bag—all presumably from periods of time future to his own—and wearing a wide variety of garments of differing design and texture. There were no women, which seemed to indicate that time-traveling was an essentially male pastime, but later he discovered that some thirty female time immigrants were imprisoned on Penal Satellite No. 3.

It wasn't long before he had made friends with a man named Katz, a short, thick-set individual wearing peculiar heavy spectacles whose birth-year was 2098. Katz spoke to him on the first occasion that he was sick.

"Don't let it worry you, friend. You'll get used to it."

Ingram made a non-commital reply that sounded more like a grunt.

"What's your name and where are you from?" asked Katz.

"I'm Ingram—from 1953."

The other man whistled in astonishment. "Not *the* Ingram—who discovered J-rotation?"

"Yes. That's me."

Katz suddenly became confidential in manner. "Better not tell the others. They they stay here on these penal satellites for for their predicament. Me—I don't care. I'm an easy type."

"What's in store for us?" asked Ingram.

Katz shrugged his shoulders. "Some immigrants are euthanased—the ones they consider most dangerous. Others—well. they stay here on these panel satellites for a long time—perhaps years—then a few are allowed to settle in as citizens. The brighter ones—those who seem likely to do useful work."

"And the remainder . . .?"

"They usually get sent to the ore workings on one of the inner planets. Mars is favorite. The bad types go to the moon, and believe me, that's grim. No one likes the moon."

"So they have achieved interplanetary travel?"

"Sure. They had already accomplished that in my day in a crude sort of way, with clumsy liquid fuel rockets. You ought to see the modern helio-drive clippers! Pioneer work on the outer planets is going on. An expedition returned from Jupiter a few days ago."

"And they have time travel too—both ways?"

"They sure have but there are so many restrictions and legal angles. It's very unpopular. The attitude of the government is that everyone should stay in his own period."

"Hm—time nationalism," Ingram observed. "In my day it used to be every man to his own country. Now it's periods that matter."

"Sure! Why not? Next thing there'll be time wars—with the people of one age fighting other people of another age, who are either unborn or long dead. Funny, isn't it!"

"I think it's profoundly depressing," said Ingram. "Human nature hasn't changed."

Katz chuckled. "It stopped changing when man began to adapt his environment to himself instead of vice versa. Civilization and evolution are bitter enemies."

Ingram considered this for a moment. "You mean that civilized man can't evolve?"

"That's the way it is. Brahne taught that principle in 2061. The moment man evolves sufficiently to mould his environment to his own needs and convenience, he ceases to develop. He just saturates the intellect that he has attained, and reaches stagnation."

"That doesn't sound too good for me," said Ingram. "If the men of today are no better than the men of my own age, then they are likely to kill me—just as the Provost Marshal said."

"Sure they are! Nothing more certain! You're Ingram, aren't you, the guy who started J-rotation? They'll kill you without a doubt."

"But isn't there anything I can do?"

"Such as what?"

"Go back, or even forward, to a more tolerant age."

Katz shook his head. "Not a chance! You'll spend about two weeks here on Satellite 7 and then you'll have your trial, and that will be that." He snapped his fingers expressively.

Ingram moved, felt his stomach turn over, and decided to be sick again.

KATZ had been right about the trial. It was exactly two weeks after Ingram's arrival on the penal satellite that he found himself being escorted by two uniformed guards to a small rocket moored to the outer rim. He waved forlornly to Katz, and to several others whom he had grown to regard as friends during his brief stay, then settled into the bucket seat, ready for whatever was to come. This time there was no heavy acceleration, only a barely audible throb as the space craft pushed itself out of the weak gravity field of the satellite.

The descent to Earth was accomplished by air braking, the vehicle sweeping in a vast arc around the planet before using jets to control flight. They settled upon the flat roof of a tall slender building in the center of the metropolis which he had left a fortnight earlier.

High in the sky, against the glare of the artificial suns, the minute saucers of the satellites glittered like stars. He regarded them pensively, thinking of the other immigrants, like himself, who were there, suspended in space, comfortable perhaps, but without hope. Then through a sliding door, between the guards, and into an elevator that fell noiselessly into the depths of the building. Increasing air pressure made his ears click uncomfortably. He swallowed to equalize the pressure but his mouth was dry and the effort was painful.

He was deposited in a circular room with a simple metallic chair and table, and told to wait. That was easy—there was nothing else he could do but wait, but as he sat there he experienced a vague unpleasant awareness of watching eyes. The walls were quite smooth and of unbroken surface, but he realized that they were no guarantee of privacy. He wondered how long he would be left to cool off in that tiny cell—minutes or hours?

Three days passed by, three uncomfortable days that nearly drove him insane. At intervals the door slid open and one of the guards deposited a bowl of thick syrupy gruel on the table; he found it unappetizing, but it kept hunger at bay. There was no bed or mattress on which he could sleep, but he managed to rest by laying on the hard floor, using his rolled up coat as a pillow.

He felt unclean and weary and impatient. Since the moment of the J-rotation he had not shaved, and his face was already covered with a substantial bristly beard. He decided that it was all part of the demoralizing procedure, calculated to wear down any stubbornness in the victim, and to produce an unfavorable impression on the jury, if such a body existed.

It all came to an end quite suddenly when he had just finished his tenth bowl of gruel, and was earnestly hoping that he would never have to start on the eleventh. The door opened with a smooth hiss, and two guards stood at the entrance, beckoning him. He staggered out thankfully, and found himself being supported under the arms. Back into the elevator they went, then down again, and finally out into a wide brightly illuminated corridor that terminated in a black door.

They went into a large gray room, and stopped in the center. Ingram looked around with curious interest. This apparently was the court room, where he was to be tried, but there were no seats, no judge, no jury—nothing at all, except a massive gleaming machine atop of which, half hidden by projecting control panels and instruments, sat a small wizened man. The guards saluted, then stepped smartly to the rear, leaving Ingram to face the unwavering gaze of the master of the machine.

"Charles Ingram," came a thin reedy voice—whether from the man or the machine he could not at first decide. Then the

thin lips opened slightly. "You are called before the adjudicator to make whatever statement you wish in your own defense. Allow me to explain. This apparatus is an electronic brain of strict impartiality which receives the evidence presented to it—both for and against the accused person—then, after a scrupulous computation based on facts, circumstance and motive, delivers its judgment, and specifies the punishment to be awarded in the event of a conviction.

"The charge against you has already been recorded—that of illegal time immigration. The State evidence for the prosecution has already been absorbed in the circuit. The fact that you are the originator of the process of J-rotation is a very important factor in your indictment and trial. You are now invited to speak in your own defense."

Ingram stood appalled. "Do you mean that I am to be condemned by a machine without even hearing the case against me?"

"It would be wrong for you to hear the State evidence," stated the man on the adjudicator. "Your judgment would be colored by what you heard, and you would be tempted to distort the truth in order to present your own case in a more favorable light."

"Then what am I to say?"

"You may say what you wish, bearing in mind that the charge is illegal time immigration."

"But I didn't know it was illegal."

"Ignorance is no excuse in law."

"I am a scientist of the twentieth century. What do I know of time immigration laws in an unborn future? I experimented with J-rotation in good faith."

"All time immigrants arrive in good faith. It does not alter the law."

"But somebody had to make the first time journey! There had to be an original J-rotation, otherwise time travel would never have been achieved."

"Obviously," observed the other tonelessly. "There is always a first of everything. That is neither a merit nor a demerit. The charge is illegal time immigration."

"But I ask for nothing other than the right to return to my own age. I have personal troubles of my own to attend to."

"You are not here to demand rights. You are here to be judged, and to state why you think the judgment should be in your favor."

Ingram shook his fist at the little man. "This is a travesty of justice," he shouted. "How can a machine decide the fate of any human being! It is barbarism of the worst kind!"

The man on the adjudicator regarded him patiently. "If you have nothing more to say . . . ?"

"I have nothing to say to a machine . . ."

"Take him away."

The guards stepped forward and pulled the struggling Ingram backwards out of the room. The trial was over.

IN THE circular cell once more he sat on the chair with his chin in his hands and resentfully reviewed the events of the past hour. Perhaps he had been a fool. If the adjudicator really based its verdict on logical computations, then he had done virtually nothing to save his own skin. He could have lied—manufactured some fantastic story to sway the impersonal verdict to his own side.

But somehow he knew that with his trained scientific mind facile lying wouldn't have come easily; accuracy—an almost pedantic accuracy—came naturally to him. If the adjudicator also recorded intonation and inflection, and could detect insincerity, then he would have achieved very little either way. He resigned himself to what he considered to be inevitable—it was only a matter of time to the execution.

The guards returned after two hours.

"Well?" asked Ingram. "What's the verdict?"

Their heavy features remained impassive and uninformative. "You'll find out soon enough, old timer."

He was conducted to a different level, and found himself in a familiar room, standing before a familiar desk facing the sad drooping features of the Provost Marshal.

"Charles Ingram," the Marshal announced, reading from a slip of paper, "you have been fairly tried by the electronic adjudicator, and the verdict recorded is 60—95—40."

"What does that mean?" Ingram asked.

"It means," said the Marshal slowly,

"that you have been found guilty, and are sentenced to immediate execution in the nuclear chamber."

Even though everything had happened as he had anticipated, Ingram could not avoid a distinct shock. The worst possible occurrence in imagination is never so bad as the stark reality. A wave of sickness swamped him; the room seemed to spin and waver like an unsynchronized video picture.

"You won't kill me," he shouted defiantly, taking a step towards the Provost Marshal.

"Hold him," ordered the latter. The guards closed in, and at the same moment Ingram felt the vertigo return, more insistently and violently. The room was dissolving before his eyes, breaking up into fragments of distorted light; the hard grip of the guards' hands became feathery—then disappeared. There was momentary blackness, then bright blinding sunlight, and a terrifying sensation of falling. A vast yellow surface was rushing at him—closer and closer—until it struck him brutally on the head and body, and brought impenetrable night.

V

INGRAM sat up slowly and painfully, rubbing his throbbing head, and peering through narrowed eyes into a glaring wilderness of sand and sky. Thoughts filtered into his brain with great difficulty—obscure interpretations of his new environment mixed with fleeting unreal memories of what had gone before. The Provost Marshal was gone—together with the guards, the room, the city—everything; and in its place was desert—looking baked and arrid, but wonderfully twentieth century. Far away, to the east of the sun, a number of white cubes wavered in the heat haze—arab dwellings, without a doubt. More and more it was forced upon his consciousness that he was no longer in the future—nor in America—but in a tropical land. He had a vague uncomfortable feeling that he was in Africa, and that this was the Sahara desert.

Cautiously he picked himself up, and stood tottering and perspiring under the stabbing fingers of the sun, then step by step made his way towards the distant village. In due course the explanation came to him—a cool and refreshing stream of logic in the heated torment of his body and brain.

He had finally caught up with the destruction of J-rotation equipment by Breen. Some seventeen days had elapsed since his departure, and the scene he had witnessed in two dimensions—Breen smashing tubes and clipping wires—had finally attained reality. The J-rotation had been effectively cancelled; the time field had collapsed; and there had been nothing to hold him in the future any longer. He had automatically returned to his own period.

But the displacement in distance—a displacement of thousands of miles from America to Africa? That was a more difficult problem to solve, but eventually he arrived at the answer. He had traveled physically—spatially—in the fourth dimension—along Highway J. At the collapse of the J-field the distance he had journeyed was converted from a fourth dimensional length into a third dimensional displacement; a curved period of time into a linear distance of familiar space. It was as simple as that. Merely the rotation of one length into another.

The squat white houses were nearer now, and he could see figures moving between them, and to the right—yes, unmistakably a camel. The scene swam before his eyes like an incandescent vapor, and the sun on his head was a consuming furnace. Before he realized it, he was on his knees in the burning sand, and sinking quickly into a sickening blankness.

And then, immediately, it seemed, he was staring at a smooth white wall, pierced by a long rectangular window having venetian shutters. He was laying in a bed, between cool white sheets, and there were other beds around him, arranged in rows on either side of the long room. Through a violent headache one word filtered into his mind—hospital.

During the next few hours things happened which failed to make coherent sense to him, because he was not yet fully conscious. A pretty uniformed nurse came and went several times, speaking softly in a strange tongue. A dark smooth doctor ma-

terialized and injected something into his arm. Later he felt better, and later still the doctor came back.

"Alors, mon ami. Et comment ca va?" He had clean regular teeth and a pleasant smile.

"I'm sorry," Ingram said quietly. "I don't understand."

"C'est un Anglais," came the liquid voice of the nurse.

"Non—non," said the doctor. "Un Americain, je crois."

Then, speaking quite good English, he continued: "You are an American, yes?"

Ingram nodded. "Where am I?"

"This is the Michelet Hospital at El Biar, close to Algiers. You were found in the desert, south of Biskra, by arabs. You have been very sick, but soon you will be well."

"How long have I been here?"

"A month. Perhaps a little less."

"A month!" Ingram repeated in astonishment. "Have I been unconscious a month?"

The doctor nodded. "Yes. You have a—what do you say—a fracture of the skull. There was also shock from the sun. You are not accustomed to the Algerian sun in summer."

"I guess not. How soon will I be well?"

"A few weeks, perhaps. It depends. Do not worry. We shall communicate with the United States consul."

"Yes—do that please," Ingram urged.

THREE weeks passed by in the French hospital—three idle pleasant weeks. An official from the consulate visited him, and listened to the story of his time journey with candid disbelief written in his eyes, but he promised to arrange routine details such as a passport, money, and a ticket to the U. S. as soon as Ingram was discharged. And he sent American papers and magazines for him to read.

It was in one of the New York dailies that he saw the bold italic headline: BREEN INDICTED FOR HOMICIDE. The name struck a familiar chord in his mind, but it was several seconds before he could place it. Alarm gathered within him as he read on—"Raymond Breen, 32-year old development engineer of New Jersey, today faced the jury in one of the year's most sensational murder cases. Accused of slaying colleague Charles Ingram in order to steal his wife, Breen is alleged . . ." "—and then further on—" . . . a fantastic tale of time travel, which if true, introduces the knottiest legal problem in history. Can a man be murdered if he is still alive in some future world? Verna Ingram, wife of the victim, turned State witness, and declared her intention to help convict Breen. She described her affair with him as 'midsummer madness'."

Hurriedly Ingram scanned through the other papers—some of more recent date—seeking the outcome of the trial. And there he saw it—in a banner headline—BREEN CONVICTED—and underneath—Chair for Time-Slayer.

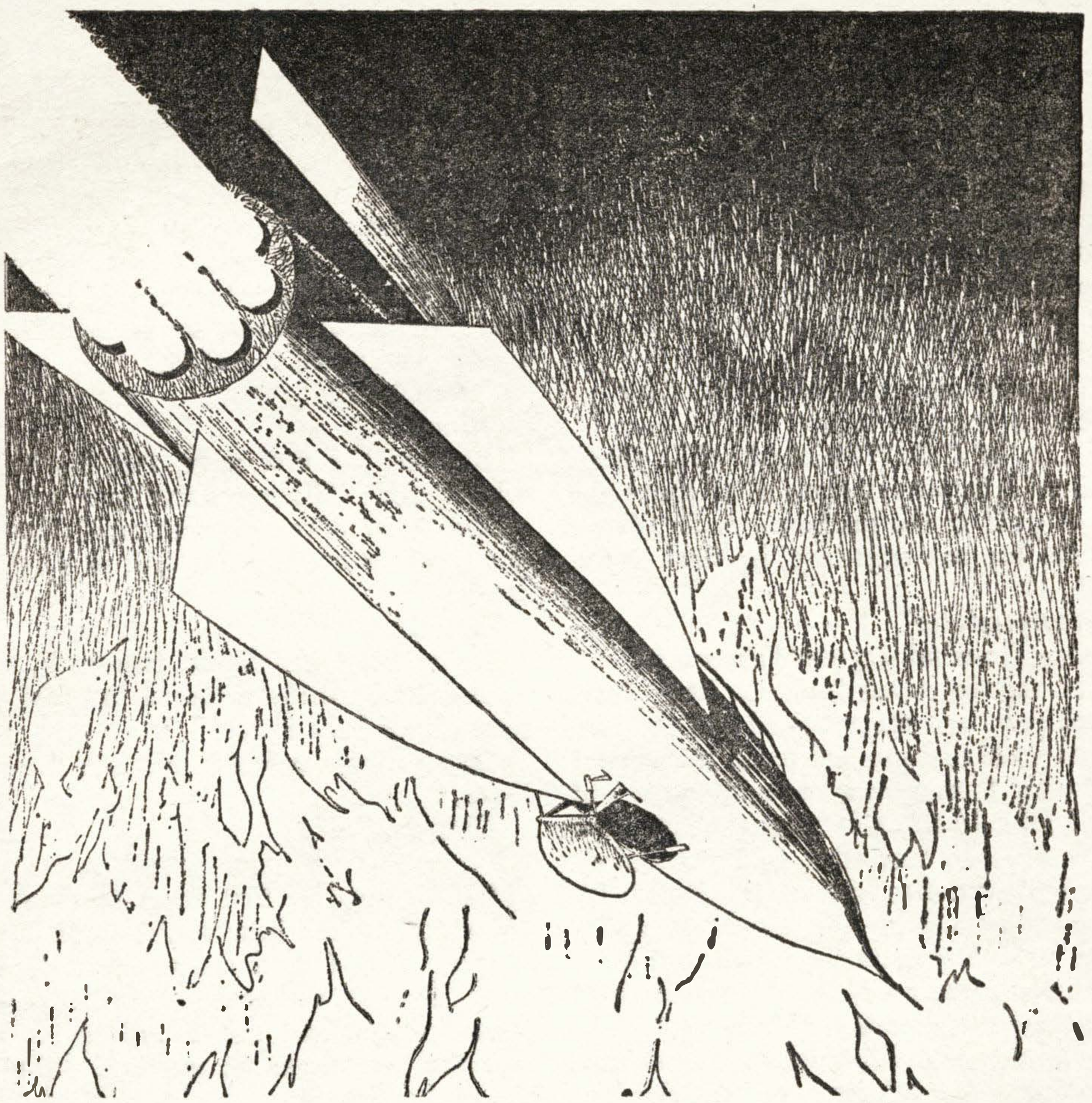
Ingram put the paper down and subsided on to the pillow. So Breen was to fry for a murder he had never committed. The intention had been there, no doubt, but the irony of it was that the very act of destruction that had been intended to leave him, Ingram, stranded in the future, had actually brought him back to the twentieth century. Breen had been convicted and he didn't even have the consolation of Verna's love. All the papers made it clear that she had undergone a complete reversal of affection once she had discovered the murderous intent of her lover.

He looked ahead into the near future. When he was fit, and back in New York once more, he would take up his life where he had left off, with Verna beside him once more. But this time he would ensure that she never had any cause for complaint, and was never driven by boredom into the arms of another man.

He called for the nurse, and she came smiling. "Consul—parler avec Consul," he demanded in halting French. She understood.

About twenty minutes later the official from the Consulate arrived at his bedside. "Well, Ingram, what's new?" he asked.

Ingram said: "I'd like you to send an urgent cable to New York for me. To the District Attorney, City Hall. Raymond Breen did not murder me. I am alive and well. . . ."



The Golden Apples of the Sun

By RAY BRADBURY

Toward the sun . . . south toward the vastest of all burning hearths soared the refrigerated, ice-sheathed rocket . . . run by proud and vain men hoping to sting the lion and escape the maw.

"SOUTH," said the captain.

"But," said his crew, "there simply *aren't* any directions out here in space."

"When you travel on down toward the sun," replied the captain, "and everything gets yellow and warm and lazy, then you're going in one direction only." He shut his eyes and thought about the smoldering, warm, faraway land, his breath moving gently in his mouth. "South." He nodded slowly to himself. "South."

Their rocket was the *Copa de Oro,* also named the *Prometheus* and the *Icarus,* and

their destination in all reality was the blazing noonday sun. In high good spirits they had packed along two thousand sour lemonades and a thousand white-capped beers for this journey to the wide Sahara. And now as the sun boiled up at them they remembered a score of verses and quotations:

" 'The golden apples of the sun'?"

"Yeats."

" 'Fear no more the heat of the sun'?"

"Shakespeare, of course!"

" 'Cup of Gold'? Steinbeck. 'The Crock of Gold'? Stephens. And what about the pot of gold at the rainbow's end? *There's* a name for our trajectory, by God. Rainbow!"

"Temperature?"

"One thousand degrees Fahrenheit!"

The captain stared from the huge dark-lensed port, and there indeed was the sun, and to go to that sun and touch it and steal part of it forever away was his quiet and single idea. In this ship were combined the coolly delicate and the coldly practical. Through corridors of ice and milk-frost, ammoniated winter and storming snowflakes blew. Any spark from that vast hearth burning out there beyond the callous hull of this ship, any small firebreath that might seep through would find winter, slumbering here like all the coldest hours of February.

The audio-thermometer murmured in the arctic silence: "Temperature: two thousand degrees!"

Falling, thought the captain, like a snowflake into the lap of June, warm July, and the sweltering dog-mad days of August.

"Three thousand degrees Fahrenheit!"

Under the snow fields engines raced, refrigerants pumped ten thousand miles per hour in rimed boa-constrictor coils.

"Four thousand degrees Fahrenheit."

Noon. Summer. July.

"Five thousand Fahrenheit!"

And at last the captain spoke with all the quietness of the journey in his voice:

"Now, we are touching the sun."

Their eyes, thinking it, were melted gold.

"Seven thousand degrees!"

Strange how a mechanical thermometer could sound excited, though it possessed only an emotionless steel voice.

"What time is it?" asked someone.

Everyone had to smile.

For now there was only the sun and the sun and the sun. It was every horizon, it was every direction. It burned the minutes, the seconds, the hourglasses, the clocks; it burned all time and eternity away. It burned the eyelids and the serum of the dark world behind the lids, the retina, the hidden brain; and it burned sleep and the sweet memories of sleep and cool nightfall.

"Watch it!"

" aptain!"

Bretton, the first mate, fell flat to the winter deck. His protective suit whistled where, burst open, his warmness, his oxygen, and his life bloomed out in a frosted steam.

"Quick!"

Inside Bretton's plastic face-mask, milk crystals had already gathered in blind patterns. They bent to see.

"A structural defect in his suit, Captain. Dead."

"Frozen."

THEY stared at that other thermometer which showed how winter lived in this snowing ship. One thousand degrees below zero. The captain gazed down upon the frosted statue and the twinkling crystals that iced over it as he watched. Irony of the coolest sort, he thought; a man afraid of fire and killed by frost.

The captain turned away. "No time. No time. Let him lie." He felt his tongue move. "Temperature?"

The dials jumped four thousand degrees.

"Look. Will you look? Look."

Their icicle was melting.

The captain jerked his head to look at the ceiling.

As if a motion-picture projector had jammed a single clear memory frame in his head, he found his mind focused ridiculously on a scene whipped out of childhood.

Spring mornings as a boy he had leaned from his bedroom window into the snow-smelling air to see the sun sparkle the last icicle of winter. A dripping of white wine, the blood of cool but warming April fell from that clear crystal blade. Minute by minute, December's weapon grew less dangerous. And then at last the icicle fell with the sound of a single chime to the graveled walk below.

"Auxiliary pump's broken, sir. Refrigeration. We're losing our ice!"

A shower of warm rain shivered down upon them. The captain jerked his head right and left. "Can you see the trouble? Hell, don't stand there, we haven't time!"

The men rushed; the captain bent in the warm rain, cursing, felt his hands run over the cold machine, felt them burrow and search, and while he worked he saw a future which was removed from them by the merest breath. He saw the skin peel from the rocket beehive, men, thus revealed, running, running, mouths shrieking, soundless. Space was a black mossed well where life drowned its roars and terrors. Scream a big scream, but space snuffed it out before it was half up your throat. Men scurried, ants in a flaming matchbox; the ship was dripping lava, gushing steam, nothing!

"Captain?"

The nightmare flicked away.

"Here." He worked in the soft warm rain that fell from the upper decks. He fumbled at the auxiliary pump. "Damn it!" He jerked the feed line. When it came, it'd be the quickest death in the history of dying. One moment, yelling; a warm flash later only the billion billion tons of space-fire would whisper, unheard, in space. Popped like strawberries in a furnace, while their thoughts lingered on the scorched air a long breath after their bodies were charred roast and fluorescent gas.

"Damn!" He stabbed the auxiliary pump with a screw driver. He shuddered. The complete annihilation of it. He clamped his eyes tight, teeth tight. God, he thought, we're used to more leisurely dyings, measured in minutes and hours. Even twenty seconds now would be a slow death compared to this hungry idiot thing waiting to eat us!

"Captain, do we pull out or stay?"

"Get the Cup ready. Take over, finish this. Now!"

He turned and put his hand to the working mechanism of the huge Cup; shoved his fingers into the robot Glove. A twitch of his hand here moved a gigantic hand, with gigantic metal fingers, from the bowels of the ship. Now, now, the great metal hand slid out holding the huge *Copa de Oro*, breathless, into the iron furnace, the bodiless body and the fleshless flesh of the sun.

A million years ago, thought the captain, quickly, quickly, as he moved the hand and the Cup, a million years ago a naked man on a lonely northern trail saw lightning strike a tree. And while his clan fled, with bare hands he plucked a limb of fire, broiling the flesh of his fingers, to carry it, running in triumph, shielding it from the rain with his body, to his cave, where he shrieked out a laugh and tossed it full on a mound of leaves and gave his people summer. And the tribe crept at last, trembling, near the fire, and they put out their flinching hands and felt the new season in their cave, this small yellow spot of changing weather, and they, too, at last, nervously, smiled. And the gift of fire was theirs.

"Captain!"

It took all of four seconds for the huge hand to push the empty Cup to the fire. So here we are again, today, on another trail, he thought, reaching for a cup of precious gas and vacuum, a handful of different fire with which to run back up cold space, lighting our way, and take to Earth a gift of fire that might burn forever. Why?

He knew the answer before the question.

Because the atoms we work with our hands, on Earth, are pitiful; the atomic bomb is pitiful and small and our knowledge is pitiful and small, and only the sun really knows what we want to know, and only the sun has the secret. And besides, it's fun, it's a chance, it's a great thing coming here, playing tag, hitting and running. There is no reason, really, except the pride and vanity of little insect men hoping to sting the lion and escape the maw. My God, we'll say, we *did* it! And here is our cup of energy, fire, vibration, call it what you will, that may well power our cities and sail our ships and light our libraries and tan our children and bake our daily breads and simmer the knowledge of our universe for us for a thousand years until it is well done. Here, from this cup, all good men of science and religion: drink! Warm yourselves against the night of ignorance, the long snows of superstition, the cold winds of disbelief, and from the great fear of darkness in each man. So: we stretch out our hand with the beggar's cup. . . .

"Ah."

The Cup dipped into the sun. It scooped up a bit of the flesh of God, the blood of the universe, the blazing thought, the blinding philosophy that set out and mothered a galaxy, that idled and swept planets in their fields and summoned or laid to rest lives and livelihoods.

"Now, *slow*," whispered the captain.

"What'll happen when we pull it inside? That extra heat now, at this time, Captain?"

"God knows."

"Auxiliary pump all repaired, sir."

"Start it!"

THE pump leaped on.

"Close the lid of the Cup and inside now, slow, slow."

The beautiful hand outside the ship trembled, a tremendous image of his own gesture, sank with oiled silence into the ship body. The Cup, lid shut, dripped yellow flowers and white stars, slid deep. The audio-thermometer screamed. The refrigerator system kicked; ammoniated fluids banged the walls like blood in the head of a shrieking idiot.

He shut the outer air-lock door.

"Now."

They waited. The ship's pulse ran. The heart of the ship rushed, beat, rushed, the Cup of gold in it. The cold blood raced around about down through, around about down through.

The captain exhaled slowly.

The ice stopped dripping from the ceiling. It froze again.

"Let's get out of here."

The ship turned and ran.

"Listen!"

The heart of the ship was slowing, slowing.

The dials spun on down through the thousands; the needles whirred, invisible. The thermometer voice chanted the change of seasons. They were all thinking now, together: Pull away and away from the fire and the flame, the heat and the melting, the yellow and the white. Go on out now to cool and dark. In twenty hours perhaps they might even dismantle some refrigerators, let winter die. Soon they would move in night so cold it might be necessary to use the ship's new furnace, draw heat from the shielded fire they carried now like an unborn child.

They were going home.

They were going home and there was some little time, even as he tended to the body of Bretton lying in a bank of white winter snow, for the captain to remember a poem he had written many years before:

Sometimes I see the sun a burning Tree,
Its golden fruit swung bright in airless air,
Its apples wormed with man and gravity
Their worship breathing from them everywhere
As man sees Sun as burning Tree . . .

The captain sat for a long while by the body, feeling many separate things. I feel sad, he thought, and I feel good, and I feel like a boy coming home from school with a handful of dandelions.

"Well," said the captain, sitting, eyes shut, sighing. "Well, where do we go now, eh, where are we going?" He felt his men sitting or standing all about him, the terror dead in them, their breathing quiet. "When you've gone a long, long way down to the sun and touched it and lingered and jumped around and streaked away from it, where are you going then? When you go away from the heat and the noonday light and the laziness, where do you go?"

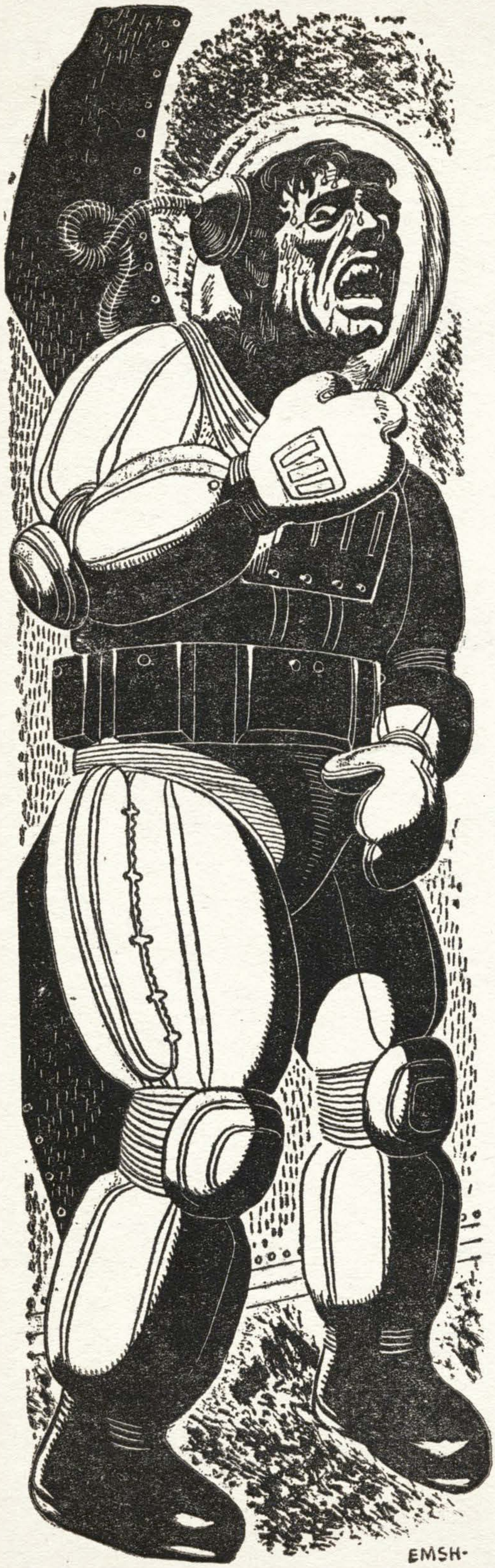
His men waited for him to say it out. They waited for him to gather all of the coolness and the whiteness and the welcome and refreshing climate of the word in his mind, and they saw him settle the word, like a bit of ice cream, in his mouth, rolling it gently.

"There's only one direction in space from here on out," he said at last.

They waited. They waited as the ship moved swiftly into cold darkness away from the light.

"North," murmured the captain. "North."

And they all smiled as if a wind had come up suddenly in the middle of a hot afternoon.



SLAY-RIDE

By WINSTON K. MARKS

Who ever thought that Frane Lewis —wholesale triggerman, spaceways pirate—would be the sweating victim of a simple, webbed, nylon garment known as spaceman's underwear?

FRANE LEWIS enjoyed another sadistic shiver as he moved up the narrow passageway to the captain's control room. To his flared nostrils the warm, moist air of the small space-freighter was still heavy with the smell of death. A psychiatrist could have told him that this was a neural confusion of olfactory sensation with the perverted emotional excitement of murder. But no physicians ever attended Frane's murders, except at inquests.

Three crewmen, still warm, lay at their posts with bloody splotches staining their tunic pockets. Two more chores aboard and his pay, fabulous pay, was earned.

For Frane simple plans worked best. He rapped on the gray magnesium panel. "Your lunch, sir," he called. Inside, a solenoid thumped. The port slid aside revealing the captain's square back outlined against the white-sprinkled velvet of space. As the executive turned away from the transparent nose dome Frane's weapon spoke its final invitation to eternity. The captain's eyes clamped shut, and in the reduced gravity he buckled to the deck in slow motion.

Then Frane swore as the dimly lighted astro-pit revealed another person. What was the navigator doing up here at this time of watch? The tall, uniformed second officer reacted even as unbelieving horror swept his face.

Shoving off from the bulkhead Frane dodged the officer's lunge with a quick sidestep, but the motion smashed the side of his curly head into a grip stanchion. His ears rang, and blood spurted from a forehead gash. In a cold rage he watched his opponent recover and crouch for another spring. "Sucker! you could have died nice and easy.

Now we shall see!"

With cruel deliberation he slipped his finger off the trigger and waited for the spaceman's desperate dive. Up whipped the heavy hand weapon in a short, vicious arc that splintered jawbone with an almost crisp, wood-snapping sound.

Swiftly Frane secured the cabin door. Then he went about binding the unconscious navigator with parts of his own uniform. When he was through he stood for a moment trying to orient himself in the hemispherical room. He compared it to a chart sketch provided him on earth before he had stowed away in his special supply crate.

"Piracy!" The word hissed into the silence with a quality of unbelieving. Frane swung and saw that his victim had regained his senses.

"Yeah, piracy. Didn't think it could happen, did you? They told you space piracy was impossible, didn't they?"

"You brutal, bestial, insane—" the navigator broke off as his smashed jaw moved in spite of his gritted teeth.

"Not insane, buddy, just irritated. You caused me some trouble, see? I'm saving you, buddy." His hand came away from his face palm out and smeared with red. "I'm saving you for later."

HE MOVED surely now, the details of location well in mind. A low placed locker when opened spilled out the gleaming metalized space suit which was prop number one in this stage play. A little nervously Frane fumbled with the unfamiliar garment.

The officer watched with dull eyes as the killer prepared to don it. "How—how many—men alive back there?"

"Subtract three. That leaves eighteen, doesn't it? And you can write them off as soon as I get these pajamas on."

"Don't spill the air! For the love of Jupiter, don't spill the air! You have the ship. Why murder us all?"

"Orders. I don't make them, I just carry them out. For money. Big money. That's why I'm here. I'm reliable. Besides, your men might break out and pester me. They're locked in their quarters."

"You mean you're alone?"

"I'm your man, space boy," Frane said with flat boastfulness. He caught up a strange webbed garment of nylon yarn. "What do you call this fish net? It was in the suit locker."

"You wouldn't know about that, you earthbound slug. We call it spaceman's underwear. Didn't your buddies tell you about it?"

Frane shrugged, started to discard it and changed his mind. "Better put it on me, I guess. I suppose it's pretty cold when the air goes out."

Through twisted, motionless lips, the navigator told him, "Very cold. Absolute cold. You won't live if you spill the air." Frane said nothing. The spaceman watched the killer strip off his clothes, slip into the net garment and redress himself. Wool slacks snugged in at the ankles and belted tightly to a felt jacket with a tight, soft collar. Now he proceeded with the space suit.

"With enough air a man can live for weeks in one of these," Frane lectured to dispel a depressed feeling of confinement, as he tugged the bulky space garment up and fastened it around his neck. "And I got plenty of air, see?" He uncoiled the length of silicon-plastic hose and plugged one end into the bubble helmet, the other into the wall valve of the control cabin.

"How do you intend to navigate this craft?" the officer asked with honest curiosity.

After a moment's reflection Frane could see no reason to conceal the procedure. He felt like talking. He had often talked to his victims before. Foolishly, perhaps, but his victims had never lived to repeat the conversations. Nor would this one.

"We'll be boarded in about twenty hours. They told me they couldn't trail too closely or your radar would have alerted you. They'll have their own crew to take over."

"Suppose they don't show up at all?" the officer needled.

"They will. Don't you worry your silly little head over that."

"But if they don't?" the prostrate man insisted. "You know, when you blow the main valves you can't close them again from the inside. You may have plenty of air for that suit, but how will you eat? Breathing is just one problem in a space suit."

"They'll be here inside of twenty hours, I told you."

"And you'll be dead."

"Why?"

"Because they double-crossed you good. Sure, they'll get the fattest cargo this can ever carried. But your share of it will be a shove outside. You'll be just as damned dead as I'll be."

"How did they cross me up?"

A ghost of a smile distorted the swollen face that had once been lean and handsome. "Find out," he said simply.

In spite of himself Frane checked back on his procedure. Purposely or otherwise, could they have left out some essential step in order to reduce the number of splits on the cargo? He ticked off the steps of his project and could find no reasonable omission. Carefully he fitted on the bubble, opened the oxygen valve and made the meter read what they had told him.

The hiss told him he was getting gas, but surprisingly, there was no perceptible motion of air in the helmet. Clever inlet baffles prevented the chilly drafts that had plagued pioneer spacemen with head colds and sneezes.

He was sweating already, but, he reflected, it wouldn't do any harm to store up a little body heat against the hours of this absolute zero they talked about.

HE CHECKED the chronometer which he'd strapped to the wrist of his suit. "Right on time," he shouted in order to be heard through the plastic bubble. His bulky hand paused clumsily on the master air outlet valve switch. He raised his other arm in a derisive farewell gesture.

"Quick-frozen space punks!" he shouted. "Get them cheap from Frane Lewis, wholesale triggerman." He laughed hoarsely as he jabbed the switch.

The sound of air rushing from vents never intended to be opened in space, screeched a shrill requiem even through the thick curved helmet. As the sound grew fainter his suit bulged out and threw him off balance. He toppled over and landed face down on the dying navigator. For one grisly second the swollen, contorted face with bulging eyes glared at him, then he rolled away in a convulsed panic that ripped his air hose from its connection.

The hiss stopped, and almost instantly his rapid respiration fouled the air of his tiny headspace. Frantic, mitted hands fought the slender hose back over the nipple, struggled with the safety clamp, and once again the sweet air dribbled into his lungs.

He realized now there must have been an automatic valve in the air inlet, which had held his pressure until the connection was remade. With a trace of new respect for the breed of spacemen, he wondered about the poor fools who had suffered and died to provide the improvements of this self-contained bit of earth environment. He was now the only living speck of life on the desolated craft he had betrayed to the frigid airlessness of space.

Frigid? The exertion had sweat running down his face so freely that his snug neckband was soaked already. His hand came up and rapped the bubble in an unconscious, futile motion intended to rub out the salty sweat from his stinging eyes and tortured head wound.

Strange. The cold was not penetrating at all. Even at the several points where his body and limbs made contact with the distended space suit, no sensation of coolness struck through. His feet were moist and hot on the heavy cork soles.

He stared briefly at the two bodies near his feet. They were beyond explaining anything. The smell of death came back to his nostrils. Right through his helmet? There was no smell out there. The smell was in here. With him. Power of suggestion? The navigator had said he would die. Sure. A safe statement. Nobody lived forever. But he'd live long enough to enjoy his cut of this little deal.

His cut. The officer had said it would be a shove out into space. The death smell. His own death, perhaps. He laughed softly, and the sound of his voice thudded back to his ears like the intimate murmurings of a stethoscope. It was intimate in here. Every little whisper of breath he took rustled loudly.

Deliberately he cleared his throat and coughed. The sound was almost metallic. It hurt his ears. Mingled with the tepid moisture of his own breath was the faint odor of the powerful dessicant that ringed the base of the helmet.

His eyes dropped to the row of tiny dials set just within eye-range under his chin. Suit pressure, O. K. Oxygen, O. K. Humidity—the needle lay right on the red line. Well, when he stopped sweating from his scare that should drop off. Body temperature, one hundred one.

One-oh-one? Ninety-eight plus, he remembered from upper school hygiene, was normal. Over a hundred was not so good.

Sit down, Frane. Relax. Get your breathing slowed down. Cool off.

He took the captain's comfortable chair before the low control panel. He stared out into the incredible blackness of space, out where not the tiniest diffusion from the starlight eased the utter darkness between constellations.

Somewhere in the ship's electric generation system a moving part, brittle with the cold and contracted within its bearing, vibrated briefly and shattered. The control-room twilight flared and died out into a shadowless night.

Frane had the sensation of being projected out among the stars. Loneliness pushed in on him. He realized cynically that even the two corpses had been better than this isolation.

AFTER a moment his pupils expanded so widely that the stars seemed to grow larger, rushing in to meet the plunging space ship. The luminous needles and dial faces of his helmet instruments became glaring little lanterns.

Everything normal except humidity, slightly over the red line, and temperature. Temperature: 102.5 F., he read. He wished fervently that he hadn't put on that last garment. Spaceman's underwear, it was called. Or maybe it would have been better to—

An uneasy thought crept into the back of his head, and he strained his smarting eyes down at the temperature gauge. In only a minute or two it had advanced one tenth degree to 102.6 F.

Now his breath rasped more rapidly as he gasped more oxygen. Pressure was down slightly. He moved to the valve and adjusted it. On an impulse he opened it wide for a second. The pressure needle pegged, his ears popped, but no coolness came from the baffled intake. He normalized the pressure again.

The hose must be double-walled, he thought. The air should at least have had the coolness of its own expansion. He wiggled inside his sweat-sopping clothes. Why didn't the perspiration dry off and cool him? The answer came with uncomfortable clarity. Where could the body moisture go? Where, for that matter, could the body heat go?

Temperature: 102.9 F.

Frane Lewis was no coward, but his hands began plucking nervously at the space suit. The previously tough folds of shiny, impermeable fabric were now distended into a rock-like rigidity.

He stood up suddenly, and his feet squished in his sandals. The sweat was a puddle up over his toes. He was getting weak and thirsty. Very thirsty. He felt he must have no more water in him. He stood in a trancelike state for minutes staring blindly into the heavens. His mind wouldn't work right. He hurt. He itched. He craved water, gallons of it.

Then he stopped sweating. He had been deliberately keeping his eyes off the temperature dial, forcing his mind away from a problem he didn't understand, when he felt his face go dry. The caked streaks of salt made his skin feel stiff and itchy.

Temperature: 104.3 F.

Frane now knew he was sick. At that rate of increase he couldn't last much longer. His head was buzzing, and the fantasies of fever were flashing lights across his bleared vision. He strove to fight off the hallucinations. He focussed his eyes on the dim-faced chronometer and realized with a start that he had endured over three hours of his vigil. Perhaps he could last out. Whatever the fever was, it must ease off sometime.

He staggered to the oxygen control, eased it open to full again and watched the temperature needle for minutes. He became dazed. Then his eyes came alive again, and he stared. Temperature: 104.5 F.

His hands drifted listlessly to the control again. This time he throttled it down, down, below normal pressure. Slowly, slower than the minute hand of a watch, the needle climbed on. Why? *Why?*

His swollen tongue licked at dry lips.

He couldn't swallow any more. Around his neck a salty puddle burned a ring of itching hell fire.

He choked down more on the air valve. It didn't make sense to him, but if more oxygen raised his temperature faster, then less should do the opposite. At 104.5 F a man doesn't always think straight.

AT FIRST his heart pounded loudly in protest. His breathing became quick and shallow. With staring, grateful eyes he watched the needle settle a tenth of a degree and stay there. The mental relief was almost overwhelming. Had there been moisture left in his tear ducts Frane would have cried. But now, with the strained concentration gone he became fuzzy. He slipped in and out of consciousness, and dead faces began drifting past his eyes.

This wouldn't do. He had one more job left. He looked at his chronometer. In another eight minutes he must throw the drive lever and kill all acceleration. The pirate ship's orbital prediction was based on this timed interruption of the freighter's drive. So much as two minutes off, he had been impressed, would make their search hours longer, since they were approaching from the rear at an angle.

He sagged into the pilot's chair again, but sitting down was no good. Instantly the ghost faces began their parade, and the death smell, mingled with the saturated dessicant's rank stink threatened to strangle him. The belly full of rations he had forcefed himself to sustain him the twenty hours of w aiting pressed heavily against his heaving diaphragm.

He gained his feet, stood with his hand on the fuel lever control and stared fixedly at his chronometer. Two minutes.

The navigator's swollen face, eyes bulging, stared into his helmet.

"Get out of my way. Got to see my watch. Get—"

He brushed at the phantom as if it were a cloud of gnats. He was confident now. The temperature gauge showed his body heat to be constant at 104.4 F. Thirty seconds now and he could give himself over to his fever dreams. Twenty seconds.

The broken jawed image persisted mistily. But now the face was repaired. It was the young tense face before he had crushed it with his blaster. It had that hard, determined look on it.

The fire in his body swept up into his brain. The bodyless image spoke softly, "You're going to die. You are going to move the fuel control the wrong way. You can't remember which way they said to move it. It isn't marked. You can't remember."

"Yes, I can!" The chronometer said twelve seconds.

"You made one mistake. You put on your clothes over the spaceman's underwear. Your body heat can't escape. Your brain is burning up. You can't remember about the lever. You will move it the wrong way."

"So what? Then I'll move it the other way," Frane screamed.

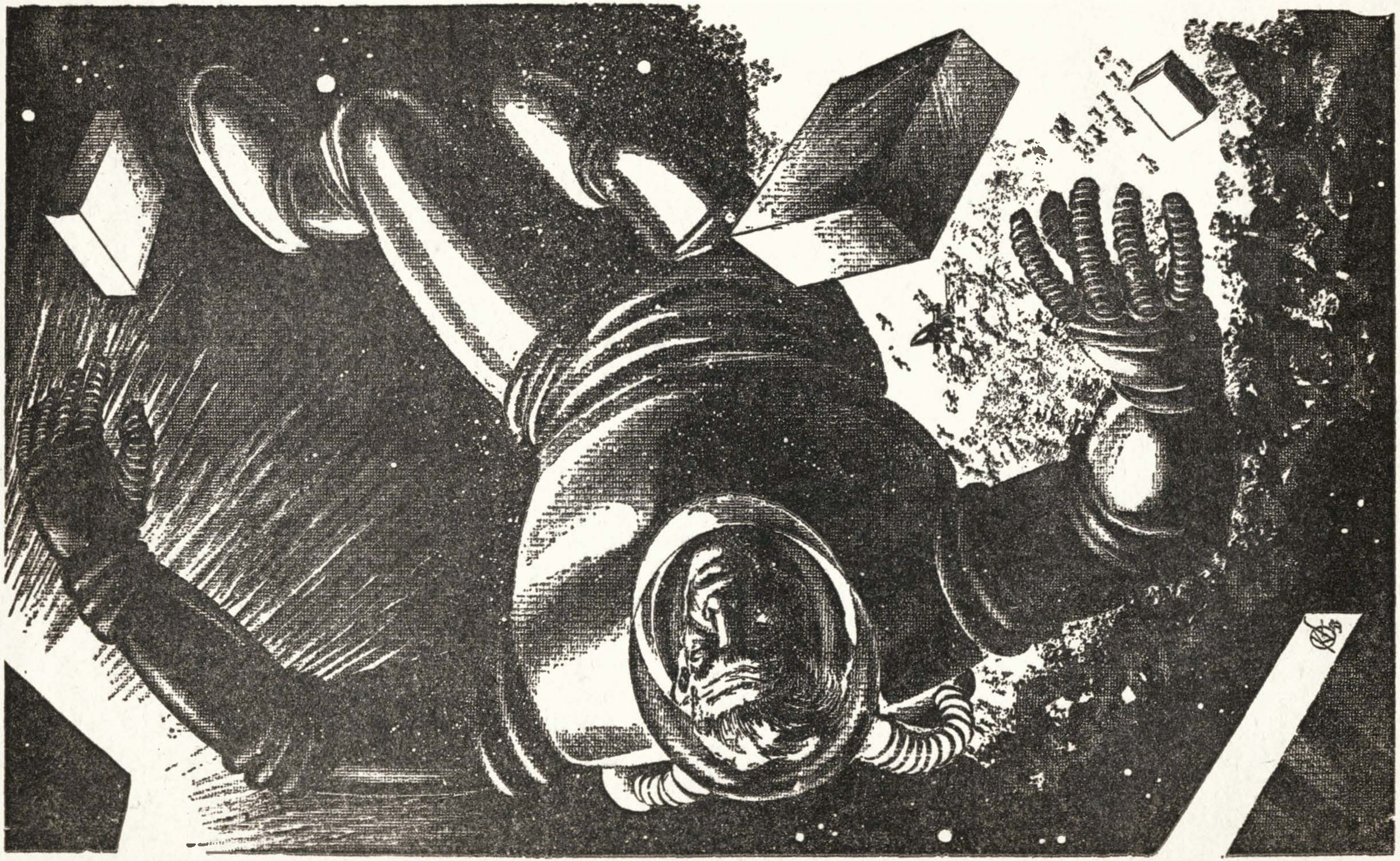
The tiny clock zeroed. Frane pressed the lever away from him. That was the way to stop any earth vehicle—pressure forward on the air brake pedal. He shoved hard.

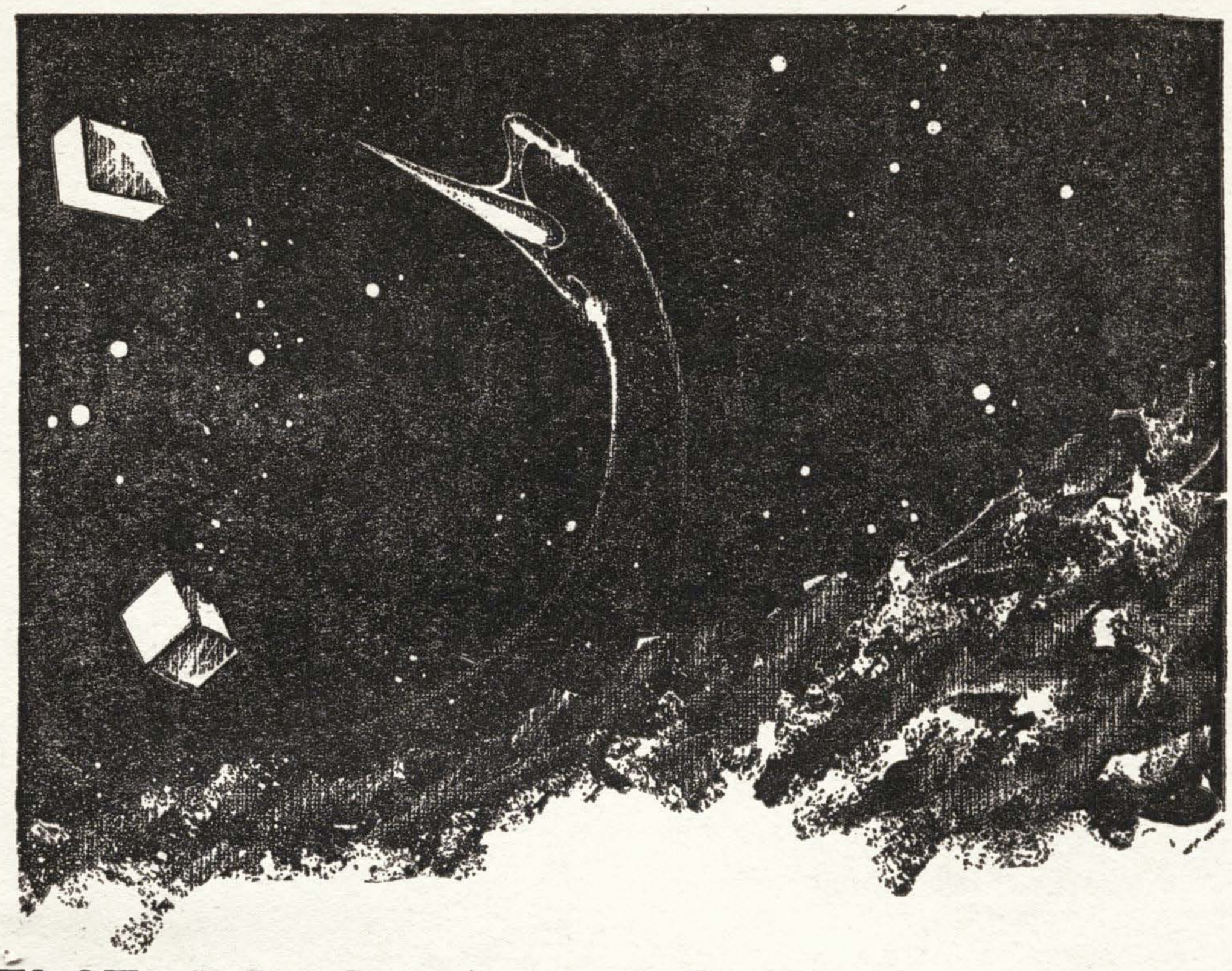
The rockets roared out full blast far behind him. The building acceleration caught him and flung him stumbling back against the bulkhead. Then the firing took on complete departure blast rate.

Pinned like a butterfly specimen, eight G's smashed Frane Lewis' space suit against the metal wall. Lewis, being free inside the suit, was pressed hard against the interior of its back side.

The cold he had been seeking struck through the wet, felt lining and his exterior clothes. The thickly corded spaceman's underwear delayed the frost momentarily, but then the sweat froze. The death smell seized his throat. Dimly he knew what was happening, but he felt only heat. The sear of an atomic furnace burning his shoulders, buttocks, leg calves, through into his spine.

The heat—the terrible sear of space cold.





THE PRISON OF THE STARS

By STANLEY MULLEN

To head out beyond Pluto a venturer needs more than a super-spaceship; he needs people as super-desperate and freedom-hungry as himself; people strange and daring. Wilding, the trespasser, found them on Alcatraz—the rogue asteroid . . . the prison of the stars.

HE WATCHED rocket jets flame and change color as the supply ship put on power and drew relentlessly away from him. He saw the ship accelerate swiftly and its mirror-polished torpedo shape diminish in distance until even its flares faded like dying stars.

Abandoned, utterly alone, a man in a spacesuit is on painfully real and intimate terms with infinity. Alone in space, a man

is more or less than a man. He could imagine himself the king of black space, but a king without lands, subjects or responsibilities is a poor monarch. He could pass the evil time ahead by reflecting upon his past life, although his present circumstances gave him little hope of profit from the knowledge of past mistakes and lost opportunities.

His name was Wilding, and legends about him on Venus and Mars indicate that the name suited him peculiarly. There is reason to believe that he was always more or less than a man. But when the supply ship had vanished completely, he was more alone than ever before in a lonely and anti-social life.

Around him whirled black, boundless vastness pinpointed with unfriendly stars. Even familiar constellations seemed alien and remote, luminous symbols detached from human values and emotions. Venus and Earth were invisible on the far side of the Sun, and Mars but the faintest of red lanterns hung upon the void. Great Saturn and Jupiter with their trains of inhabited moons must exist somewhere, but he took them on faith, not evidence.

Be patient, they had warned him contemptuously, dumping him from the supply ship like rubbish consigned to the human junk heap. Yes, be patient, and eventually someone might come out for him—but they had not told him how hard it would be to wait and watch the awful void of space and fire-flake star-patterns whirl about him. Patience, like his former life in the hive cities of the Solar system, had long ago ceased to exist. His senses reeled and he could only stare hypnotized at his immediate surroundings.

Wilding was as rich as Tantalus, and as tortured by the unattainable. Within sight, neatly packaged wealth circled with him about the giant radilume beacon. Many objects wrapped in reflector foil floated in and out of his ken as they found tiny orbits and worked out brief cycles of revolution about the giant atom flare which was the parent sun to the swarm of drifting particles. All the packages were rotating as rapidly as he, and light reflected from their metallic angularity made them resemble variable asteroids.

Loot like the splendors of a luxury spaceliner was in those packages. More food than had haunted the hunger-dreams of his youth on Venus. Other necessities like water, oxygen, clothing. Luxuries such as wines and liquors, entertainment tapes of canned music and visual diversions. Even supplies of drugs and medicines that could be perverted to forbidden joys. It was all his, for the moment, by right of existing in the middle of it, by the fact that no other claimant was on the spot. It dangled before his eyes —but beyond reach of anything but his imagination.

Wilding was circumscribed only by infinity. His sole problem was staying alive and sane.

Be patient, they had warned, with callousedindifference to his fate. But patience, if it still existed, was like the flickering witchlights of the supply packages, out of reach. Eventually, if it occurred to them, some convicts might come out from the prison asteroid and pick him up. They might come, if he lasted long enough and they had nothing better to do for entertainment.

For the first time in an otherwise grimly independent life, Wilding was completely dependent upon the whims of other people. He was helpless, unable to minister to his most elementary needs. His air might fail first, or he could starve to death in the midst of more food and drink than a man could debauch in a lifetime. His only hope was that the rich bait around him would attract other spoilers as desperate as himself.

He waited to be rescued.

BEYOND a limited air supply, he could not breathe. He had no food, no water. To sustain him, besides the spacesuit and the remaining energy of his body, there was only his anger and his plan. He was an unusual man, brave and tough, even resourceful, but this time his fate was out of his hands. Even his plan was worthless unless he could live long enough to implement it.

Wilding swore grimly and silently, and waited. Even as men in ordinary circumstances measure such things, it was a long time. The initial velocity of his spin had begun to slow from occasional collision with one item or another of his useless wealth. One by one, the stars around him seemed

to flicker and go out. For even the eternal stars exist only in the mind of man.

He waited so long that the darkness of deep space seemed to seep into his space-suit. With that darkness, part of it, came fear, which is in itself the lesser death. He was weightless and nauseated, almost too weak to fight the fear. Hunger and thirst had weakened him. He wanted to scream, but brain and muscles did not respond in the oxygen thin atmosphere of the suit. Limply, he retched, lungs churning for air.

He swore again, faintly, dubiously. If this were the end, there seemed no point to anything that had gone before. His mind veered back to Mars, to the strange girl, Elshar, and what he had done for her. He wondered again why he had interfered. She was nothing to him, could never be anything. Love was not the emotion she roused in him.

Not love, not even desire. Not anything he could name unless it was fear. He pushed the thought of her from his mind.

He had felt fear before. He should know that sensation. He was feeling it now. But he had always dealt with fear by using it to put an edge on his soul. One could not deal with this situation so easily. A man should not die like this. A poor man in sight of wealth, a starving man in sight of food, a suffocating man in the midst of sealed tanks of oxygen. Anger roared in him. He called out to the dark gods of space to have done with their torture. . . .

Following numerous orbits between Jupiter and Mars are the uncounted asteroids. Some of these fragments of a long-vanished planet are named, and even most of the lesser fry are catalogued by numbers. One of them, since the earliest days of space travel and interplanetary survey, has three official numbers, two names, and at least a dozen colorful nicknames.

It is on the IPS spacemaps, named and numbered, but by interplanetary treaty it is marked in red letters: *Restricted! Warning, Do Not Land!*

This asteroid, commonly known as the Pelican, is the Alcatraz Island of space. It is a prison for the most hardened and hopeless of convicts. Outside of official circles, few people have ever heard of it and fewer still dwell there. No spaceships ever set down, and none blast off from its scarred and pitted surface. The few inhabitants form a highly exclusive social group, their numbers limited by highly specialized requirements for membership.

The original Alcatraz was a small island in San Francisco Bay, on Earth, used as prison for only grade-A malefactors. In Spanish, the word means Pelican, and those curious birds formerly made the tiny bare rock their roosting ground. More curious birds roosted there since; but by now, with the very existence of the city of San Francisco a myth, the island has been returned to the pelicans and other fauna of the sea, sky and ground. Only some spiders and lowly insects inhabit the ruins of prison buildings, and birds and seals have the pinpoint of barren rock to themselves.

One knows by historical conjecture what happened to the prison and the nearby city. But even toward the close of the Twenty-First Century, the most optimistic would not claim that humankind has advanced beyond the need for prisons, and something drastic must still be done with the aristocrats of crime.

Expansion across space, with more worlds to conquer and loot, more races to exploit, and new frontiers of fabulous treasure to plunder, did nothing to improve the moral tone of humanity. A new and savage breed of criminals sprang into existence to meet these exciting conditions. It was raw, blind butchery at first, then racketeers of genius brought general looting into an organized and systematic bleeding of the body economic and generalized corruption of the body politic. After much bloodshed, the end result was the new Alcatraz, a prison preserve on Penguin Planetoid, familiarly known as The Rock.

The Rock is literally that. Bare rock, not even spherical, but large for an asteroid. It is a rogue asteroid, which means that its orbit is highly eccentric and comes nowhere near that of the other asteroids and rarely comes near that of any planet. It is a world to itself. It is not pushing licensed irony too far to state that its inhabitants are rogues whose orbits, from the standpoint of society, are also eccentric. Alcatraz Aster-

oid is a prison for the most incorrigible of lifers.

Only the rarest criminals qualify for such a sentence, but once sentenced, the trap closes on him for good. There is no reprieve, no parole, no pardon, and no escape. Few men ever enter the maze of caverns that honeycomb Alcatraz' forbidding interior, but those few stay. They live and die out of sight and out of touch with the worlds of reality. The Rock is the end of the line.

OUTRAGED authority forgets a man sent to Alcatraz. His record, and everything concerning him is destroyed. Both offense and existence are blotted out, which makes an unintentionally sporting offer, for if a convict should ever escape there is no previous count against him. Such a man could consider himself returned from the dead, or reborn. No escape from the Rock had been legally anticipated, and none had actually occurred. Such escape is a practical impossibility, even with no warden and no guards —for none are needed.

Newcomers arrive in the supply ship, which never lands. Like the packaged supplies, condemned prisoners are dumped overboard through a freight airlock and left twirling in space about a giant radilume flare moving in an orbit closely paralleling that of the prison asteroid. Man and supplies may twirl indefinitely, and the man may even die unless his fellow exiles are in a good mood, or are curious enough to put out in the space-lighter provided with a severely limited store of fuel and seine in the take to the prison caverns of Alcatraz.

Men have died like that, sometimes because the old hands were too disinterested to investigate in time, or again because the old inhabitants were too involved at the moment with minor feuding and treacheries to care.

Wilding was tough, and took a long time dying. There was time enough to die innumerable deaths, and even to reconstruct the patterns of a lifetime in his asphyxiating brain. . . .

He was born on Venus, in the most slippery part of Skid Road in Old Castarona. His father was a renegade Earthman who married a mutant swamp-girl from the edge of the Tihar Forest. Childhood in such surroundings is a tonic to the adventurous spirit, and Wilding must have had spirit to survive at all. Of necessity, his mother taught him to steal. His father taught him to kill, by killing his mother in a drunken frenzy. From neighbors and rivals, he learned most of the anti-social trades, and he was an apt pupil.

His mind was uncluttered, free of the commonly accepted ideas of morality, without normal inhibitions. He killed and stole, but casually according to his needs and ambitions. Crime, except for profit, would have seemed immoral to him. Periodically he was caught and sentenced, which was according to the rules of the game; but no prison could ever hold him long. Even for frontier Venus, he acquired a potent reputation, both for crime-without violence, and as an escape artist. When he moved on to other planets and began piratical raids along the spaceways, he gave the security patrols some evil moments.

It was not inevitable that he be trapped and stopped dead by being sent to Alcatraz Asteroid. With luck, he might even have made his pot and retired to wealth and respectability. But his feet must have been slippery from Skid Road, for he slipped, stepped out of character and killed just once from a motive of, from his point of view, sheer stupidity. Protecting Elshar, a crippled slave-girl, from a cruel beating at the hands of a Martian slaver, he struck out in a passion against injustice. For this final murder, he was sentenced as an incorrigible. A man should hold to his pattern. . . .

WILDING waited, unconscious, slowly dying, and time passed. A lot of time. For the dwellers in The Rock did not share his impatience. It was off-season for the supply ship, and a far more interesting caper was in progress than the routine pick-up of a dying man in a spacesuit. A series of interesting brawls and murders was drawing to a suspenseful conclusion. Nobody wanted to miss anything or anybody, until the situation died out literally in a sprawl of charred and mutilated bodies.

So Wilding knew nothing about it when the lighter eventually came out. His body was blue, puffed and more dead than alive, the spark-blue eyes glazed and sightless. He

could not see the small craft circle and draw in the supplies with magnetic nets. He was unaware of the skyhooks that reached out to haul him through the airlock into the lighter, and was too far gone to care. For a man attempting death and rebirth, he had a good start on the first half of his project.

Pangs of returning sensation brought him sharply conscious and reminded him of his plan. If he were to be the first man ever to escape from Alcatraz Asteroid, he must start at once by establishing his place in a dangerous and hard-bitten society. He began his task by opening his eyes. Blistered and stiffened lids responded slowly.

The cubicle was dim and murky, air stale but cool. Grunting, he tried to sit up. Someone bent over him.

A woman's face blocked further view. The face was old and wise and ugly; the woman huge and muscular, a graying Amazon who might be a good foot taller than Wilding when she straightened up. Sound boomed from her as if from a cracked bell, and most of the cracks showed on her weathered skin. She was mildly drunk, her breath poisonous with mushroom beer.

"What's new in Venusport?" she asked.

"Who in Hell cares?" demanded Wilding.

Her laugh boomed again. "He knows where he is," she jeered. "So I win my bet."

"What bet?"

The big woman drew back and let Wilding have a look at her companions. Behind the woman stood a man and a girl. A spidery Mercurian straddled Wilding's legs and massaged numbed flesh with rough efficiency.

"My bet with Grouth," explained the Amazon, indicating the Mercurian. "Not decorative, is he? Mercurian twilight men never are. But he's what passes for my husband here."

Wilding stared at her, and past her at the others. "Now I know for sure where I am," he said. "I read in a book once that there's no marriage or giving in marriage in Heaven. Since I'm obviously dead, that leaves only—"

The Amazon slapped her ample thigh and vented some more loud rumbles of laughter.

"Proves my point," she bellowed. "Grouth figured your first words would be 'Where am I?' or something else trite. You loked to me like a man who always knows where he is and how he got there, so I bet on it. Alcatraz or Hell—it's all one. Do I win?"

"Near enough," Grouth snorted unhappily. "I'll concede—"

"What stakes?" Wilding asked.

For his plan, he must have the respect and co-operation of the veteran convicts. Such an attitude must be earned, so he carefully disciplined himself to register neither shock nor surprise whatever he encountered. Even so, his hair nearly stood on end as the noisy Amazon explained.

"Our own version of Russian roulette. We load the blaster clip with alternating charges and blanks, then stick the muzzle in each other's mouth and pull the trigger to find out which load is first. Now Grouth owes me one. Not that I'll collect just yet. I like to be sure I'm through with a man before I blow his head off."

Wilding shrugged. "It should simplify divorce." With some effort, Wilding sat up and shoved the Mercurian violently from his perch. "Get off my legs. . . ."

Grouth glared and gave an unpleasant whickering sound. "I was only trying to work enough life back into you so you could give us some news. Mortality is high among newcomers. You won't last long."

"I may surprise you," Wilding said casually. Deliberately, his eyes fixed upon each of the four, impressing their features into his memory, evaluating personalities to determine potential usefulness to his plan. Savages, as he had expected. Debased and degenerate, all of them, but intelligent. Dangerous tools, but he had sometimes worked miracles with worse.

THE other man was a bald giant, of curious complexion, obviously not of Earth stock, very tall but so heavily built that he looked squat. Grinning, apelike, he thrust out something between a hand and a paw. Wilding took it and did not wince under the pressure.

"I'm Concor," said the bullet-head. "Martian, though origin is not important here. Welcome to our pesthole."

Wilding nodded, turning his attention to

the fourth of the odd group. She was a girl, young, sullen and striking. Lips writhed in scorn as she returned his frank stare, and the play of expression on her features was light flickering from a moving swordblade. She was not beautiful, nor even pretty in any ordinary sense. Everything about her suggested metal—her skin was snow on copper, her hair curling shreds of brass, her body posture suggested the temper and resilience of steel, even the eyes quivered like heated mercury and did something as poisonous to a man's bones.

Half-caste Callistan, he thought, and not quite human.

Her voice was coldly sibilant as a needle sliding in metallic groove. "Better enjoy us while you can, Halfling. If we seem so distasteful to you, brace yourself. We're the nice people here."

"My niece, Amyth," said the Amazon, touching the girl's shoulder fondly. "I should warn you about her. She's killed three men in a year for less than you're thinking."

Wilding gave a grim chuckle. "I'll remember that. If I ever start thinking about her, I'll break both her arms first."

"We're not too formal about such things here. You take whatever you're strong and clever enough to hold. The man who wants Amyth is likely to have his hands full. Even for me, there were some other suitors, but Grouth was man enough to hold me against all comers. So don't sell him short, for all his runt-size and odd complexion."

Wilding nodded, understanding. Women would be scarce, and men exiles would fight over them like male rats over scarce females. He had expected strange and difficult social organization in Alcatraz, even chaos, and the presence of women would be an additional cause of dissension. It might be used to his advantage.

"Who's the bull of this scrub herd?" he asked. "None of you?"

Amyth's laugh was a jangling of steel-shards. Taming her could be an interesting project, but held jagged possibilities.

"Most of us take orders from Tichron," the girl replied. "A few fellow Credus, an Earthman. If you have ideas about me, you'll have to fight Tichron for the privilege."

Wilding grunted. "Small privilege. But I'd fight him anyhow. While I'm here, I rule. I lead, not follow."

"Big talk for a newcomer," she said. "When you're here a while—"

"I'm not staying. I'm Wilding. No prison can hold me."

"Alcatraz can," Concor said wearily. "We all feel like that at first. Nobody escapes. But if you want to try, count me in."

The Amazon belched beer fumes volcanically. "Me, too. And Grouth. It will be something to do. I'm Tiny. If I had another name it's down the drain years ago."

Amyth's wicked glance slashed at Wilding.

"I'll decide . . . after you've fought Tichron. If you have a plan, tell us. Maybe we can use it after Tichron wrings the blood from your body and throws the husk to the Pit Men for fodder. He'll be happy to learn there's a new challenger. His blood lust is growing—"

"There are those who fan his other lusts," Grouth broke in angrily. "It's unfair to taunt a newcomer into unequal combat. Give Wilding time to find his way around—"

Warm, unfamiliar emotion writhed in Wilding. It had been so long since the occasion for it that he could scarcely recognize gratitude. He could not remember anyone's championing his rights and interests. Also, he realized, if the sullen and monstrous Mercurian stood up for him, it was a sign he was accepted. Such as they were, he had allies.

"The girl is right, Grouth," he said quietly. "Now is the time. I must fight Tichron." His eyes lashed the girl. "I have a plan—but it is not for the ears of Tichron's sluts. When I have use for your obvious talents, I'll give orders."

Amyth's eyes blazed, her face whitened beyond its odd pallor.

From the doorway came a brazen bellow of delight, drowning what she might have said.

A burly shape glided into the room. A giant Venusian, broad face as savage as that of a swamp-slug, oily body glistening like the image of a squat godling. He looked like a professional wrestler.

"I heard that," he said. "I'm Tichron." The game had started.

II

ALCATRAZ ASTEROID was a separate world, an island of rock, wedge-shaped, eighteen miles long, and roughly the same in the circumference of its larger end. The interior was not hollow, but was honeycombed with habitable caverns like large bubbles, connected by a maze of passages. Outer levels had all been converted into a prison without guards and without bars. Life was easy, the social structure simple, idyllic or primitive depending upon the point of view.

Though not completely self-sufficient—since enlightened penology provided lavish supplies—the convict community would have gone on much the same if the rest of the Solar System had suddenly ceased to exist.

Elementary machinery for the basic trades had been provided; its use or neglect was left up to the prisoners. By artificial illumination, food could be grown in subsurface hydroponic gardens, and limited animal husbandry was encouraged. But lack of usable fuels and raw materials limited manufacturing to safely low levels, which prevented even gifted technicians from getting ideas. Potentially fissionable ores were present in the deep interior, and under pressure someone might have found ingenuity to process it. Air and water were hermetically sealed-in, automatically purified and reclaimed at need.

Convicts were self-governed, which meant a rule of claw and fang since weapons were crude and hand-made. Dwelling in caves, the prisoners returned to an archaic way of life and became cave men. Life was brutal, direct, and usually brief. Cowards rarely got there, and the weak and unfit were quickly weeded out by living conditions intolerable to endure. Survivors were a tough, rangy breed who would survive anywhere. The few women were rank weeds, not delicate flowers; if they did not thrive, they persisted. Some children were born, and those who lived grew up as sinewy, strong and poisonous as desert snakes.

At the time the asteroid had been converted to a prison, it was assumed that it was uninhabited. But laired deep within the poisonously radioactive caverns was a small colony of the legendary lost race of Pit Men.

Underworld legends told in whispers that these eery creatures sometimes came from their lairs and mingled with the human convicts of Alcatraz. Actually, prisoners rarely encountered them, for the Pit Men were shy, nervous beings, harmless unless provoked, and did not issue from their caverns except by stealth for provisions. The aboriginal dwellers were neither man nor bird, though they resembled both superficially. They were non-human, non-animal, being plants, mobile and intelligent, a variety of animated fungus so alien that contact on any but the simplest levels was impossible. Even so, they were the one fly in the ointment—

Outside of rumors, Wilding knew little of the Pit Men. But he had given them much thought, and wondered if he might find a use even for them in his escape plans. For the moment, though, he must confine himself to building up an organization. Breaking out of Alcatraz was no simple matter, and the escape he had in mind was definitely not a solo effort. He would need good technicians and a host of willing workers. For now—

There was Tichron and the challenge.

Word had gone out, and the convicts were assembling to enjoy the sport. A newcomer had challenged Tichron.

Wilding let his new-found friends lead him through an involved series of caverns. Accustomed as he was to varied atmospheres and gravities on many worlds, Wilding had difficulty in adjusting here. Air pressure was kept high, and artificial gravity set low, which made breathing and balance precarious. With a little additional effort, he felt that he could shove himself free of the rock floor and swim in the dense air. He must remember that in his encounter with Tichron, who would be accustomed to conditions in Alcatraz.

So interested was Wilding in his surroundings that the arena was reached almost before he realized it.

Dimensions of an immense hollow sphere lost themselves in murky light. Tiers of stone seats climbed the concave, curving walls, and a noisy crowd swarmed into the spectators' sections. Wilding's companions

led him down an arched ramp to the low-walled pit at the bottom center. Tichron had not yet arrived, and in the interval of waiting, Concor the Martian and Grouth the spidery Mercurian worked over Wilding feverishly to massage the stiffness from his limbs. Amyth retreated into sullen silence, but Tiny leaned close to Wilding's ear and whispered.

"I like your guts, young man. But why so soon? You should've waited to get back your strength, and choose a time when you have studied Tichron's style."

Wilding wished profanely that the woman would stop calling him "young man." She was old enough, though life on Alcatraz might have aged her prematurely, but no older, surely, than a Martian Pzintar idol, which by atomic timetable is something less than two million years. At times, Wilding felt older, less human, more fouled by life.

WILDING braced himself for Homeric struggle and turned to smile cooly at his strange cohorts.

"Waiting would be fatal," he told them grimly. "I need quick authority, and the unquestioned compliance of workers. In about two Earth-weeks the supply ship will be back. By that time I want the lighter ready for space. I want it supplied and powered for a longer run than picking up a miserable cargo of supplies."

Grouth sneered. "Without fuel?"

Wilding answered coldly. "Leave that problem to me."

Concor shrugged. "Since you are new here I should explain that there are no rules in the fight. If Tichron wins he can break your back with impunity. Probably he will. He has cruel whims. That is also your problem, and I leave it to you, willingly. However, just as advice, stay clear and do not grapple with him. Keep away and strike out hard with your fists. Some blows may get through all the blubber and muscles. If you give him a good enough fight, he may even respect you enough to let you live. Crippled, of course. . . ."

A ragged crowd-shout ordered the start of the fight. The hyenas were impatient for the carnivores.

Tichron was advancing, slowly and confidently. Wilding stood up and moved slowly into the circle of combat. The cleared space was small, the ground surface uneven.

Wilding feigned nervous indecision. He appeared to hesitate, as if contemplating flight.

Laughter and jeers flicked him like whips.

Lowering his head, he moved wih lightning swiftness. His move was totally unexpected. Rushing across the arena, he flung himself at Tichron like a living battering ram. His head connected solidly with Tichron's midriff. Breath gushed from the giant like air forced from a trodden balloon. Doubling up, Tichron reeled backward. His fists flying, Wilding hammered the exposed face. Tichron straightened long enough to receive a knee in the place most painful to him. The shock almost lost him the fight at once, but he recovered and hurled Wilding across the arena.

Wilding caught up a stone bench and flung it, but the light gravity betrayed his effort. It went wild. Nearly weightless, it still had mass, and part of the entranced onlookers avoided being brained only by undignified scramblings.

Now Wilding and Tichron circled each other warily. Tichron stopped circling and slid forward in liquid rhythm of movement. He caught Wilding flat-footed, jerked the lighter man off his feet and raised him high overhead. Wilding crashed to the floor with stunning force. Tichron leaped to come down on his prone opponent with both feet. But Wilding was already rolling. He caught one of Tichron's feet, twisted and jerked. The giant sat down violently.

As Tichron rose, Wilding launched himself in a suicidal dive at the giant's stomach. Again he connected like a battering ram. The sound of expelled breath was explosive. This time, as Tichron bent double, Wilding brought up his knee against the exposed jaw. There was a loud crack. Pawing frantically, Tichron went down in a heap. Wilding jumped, brought both feet down on the quivering hulk. It was like leaping on a rock. But Tichron was through fighting. He lay peacefully unconscious.

The fight was over before it had well started.

Jeers changed suddenly to cheers. As winner and new champion, Wilding was king

of Alcatraz. But not undisputed king—

A tall, cadaverous man stepped from the crowd.

"My name is Credus. I challenge you now?"

Wilding turned to Concor. "Is that in the rules—to fight one after another like this?"

"There are no rules," said the wily Martian.

"In that case—"

Wilding snatched a blaster pistol from the spring clip on Tiny's belt. He jammed the muzzle hard into Credus' side, but not before Credus had drawn his own gun and thrust it at Wilding.

Neither could miss, but it was deadlock.

"I'll bargain with you, Credus," suggested Wilding. "Unless you want to chance pulling that trigger."

"What bargain?" asked Credus sourly.

"Meet me here again in two Earth-weeks. I will fight you then without a gun, or turn the asteroid over to you."

Credus shrugged. "I am not a fool, halfling. But be here, or I will find you and kill you."

Credus stalked darkly from the arena, followed in silence by a full third of the assembled prisoners. With his departure, the cheers for Wilding were less enthusiastic, as if the throng disapproved of Wilding's trickery.

Tiny, the Amazon, was kneeling beside Tichron, who was conscious now, but breathing heavily.

"She was a nurse on Earth," explained Concor. "Before she got the habit of strangling her fretful patients."

The woman looked up and smiled brightly. "That gun of mine is loaded with alternating blanks," she observed. "I kept wondering if Credus would call your bluff."

Wilding met her glance. "So did I," he admitted. "And I remembered about those blanks. Can you do anything for Tichron?"

"Better kill him," advised Grouth impatiently. "It is your right."

"Let him live," said Wilding, frowning. "I may have some use for him."

The girl Amyth sneered unpleasantly. "The man has a mania for utility. Have you some use for me, halfling?"

"Halfling, yourself!" replied Wilding, with anger rising in him. "Perhaps, I have —when I have less important things to manage. But I'll let you know. Don't rush your luck."

A slow flush crept into her cheek, but she swallowed a corrosive retort. After all, Wilding was boss, and her arms were brittle.

Wilding turned to Grouth. "Who are the technicians? I'll want all kinds to get that lighter in shape for space."

Grouth laughed bitterly. "Time enough. Concor can help you select the technicians. He's one of them, and a spaceship wrecker has to know many technical trades. But you'll need more than men, you'll need miracles."

Concor broke in. "He's right, Wilding. We have skilled labor to work with, but no materials. Metal is scarce here, but we can junk some machine tools for part of what we'll need. The real lack is fuel. You can't process metal without heat, and you can't power a space-lighter with non-existent chemicals. They leave only enough chemical fuel each time to power the lighter for the next pickup. I will back your play, but I'm no good at working miracles. I've even forgotten how to pray, and I doubt if any known or unknown gods would heed a prayer from me."

"I don't pray for miracles. I arrange them. Can't the lighter be converted to use atomic power?"

Concor waved empty hands. "Not easily. It could be, probably, but what is the use? Where would we get activated fuels?"

"No fuel," repeated Grout, his voice like a dirge.

"There are radioactive elements in this asteroid," argued Wilding. "Can't they be used?"

Concor shook his head grimly. "They are here, true. But they are useless to power an atomic converter for the lighter. For two good reasons. We can't lay hands on them, literally. Without any shielding, we would be burned like moths in a flame, and the danger of the Pit Men is too great even if we dared invade their caverns. The Pit Men used to be harmless and friendly, but they aren't now. Some of the convicts found out they were good eating, organized hunts and stuffed themselves on Pit Men. Nowadays, we rarely see a Pit Man. They slink about in the caverns like shadows. And they wage

a relentless guerilla warfare. Any convict they catch alone is a dead convict. They rush him and overwhelm him. Probably they eat him or use him to fertilize their nursery beds."

"I could talk to them and make a deal," said Wilding.

EVERY convict in hearing laughed harshly.

"Try it," suggested Amyth acidly. "Their arms are less brittle than mine."

"And while you're at it," went on Concor, "ask them to mine and process it for us. They're immune to radiation burns. In fact, they seem to thrive on rays that are deadly to us. We've never dared invade the lower caverns because of the radiation, which makes their homes an impregnable fortress for the Pit Men."

Wilding nodded quickly, understanding.

"Could I go there and talk with them?" he demanded.

Concor shrugged in futility. "You could if you were foolish enough. There would be some exposure, but not necessarily a fatal dose if you made your stay short. The Pit Men will kill you before the radiation does."

Tichron was stirring. He blinked painfully and sat up, nursing some cracked ribs. He stared at Wilding with frank admiration.

"It was a mistake to let me live," he said. "Someday I'll challenge you for another try. But not right away. You fought me fairly and defeated me. You give orders and I'll see that they're carried out. Also, a word of warning. Credus is next in line, he thinks. Watch him. A stealthy knife in the dark or a sudden shot from behind is his style. Sooner or later, if that doesn't work out for him, he'll challenge you. But never if you have a chance."

Wilding laughed sharply. "He already challenged, but we've postponed the occasion. I'm going to try to make a deal with the Pit Men. Have you any advice?"

Tichron's face worked curiously. He heaved his bulk erect and grimaced with pain.

"Yes, some advice. Don't go. Certainly, not alone. If you insist, I'll go along and show you the way."

"Thanks," said Wilding. "But you're in no shape for it. Rest up, and I'll find work for you. Who else will go along and show me the way to the Pits?"

He glanced round the circle of faces. Several of them paled and disappeared with suspicious haste.

"I'll go," offered Tiny. "But I won't want to come back alone. Will you come along, Amyth? The Pit Men have never offered to harm a woman. Probably not from chivalry, but none of us have ever had the stomach to try eating the filthy things."

"I'll come," agreed the girl quickly. "Perhaps we can watch while the Pit Men work over our hero. I wouldn't want to miss that."

Wilding smiled savagely. "Perhaps I will let one of them break your arms as part of the deal."

Before leaving with the women, Wilding gave orders to Grouth and Concor. All the machine tools were to be put in running order. All technicians assembled and ready to work on the space-lighter. Tichron was ordered to bed to rest and recover from his beating.

Authority seemed to come naturally to Wilding.

He enjoyed the curious sensation of responsibility and power. His previous life had given him no taste of organizing mass-effort. At first, he had been a lonely, hunted fugitive, then later a solitary beast of prey.

For a brief term, he had lived among the space plunderers, and he had headed a piratical crew. But the role then had been that of wolf-leader, one of the pack, with little authority and no great responsibility to his fellows.

Here, partly by accident, he had achieved perilous command. The people, such as they were, looked to him for decisions. They looked at him with respect. Grudgingly, they yielded leadership, but only to him as a better man. He felt a strange, new emotion.

He was contented, and oddly stimulated.

With Tiny and Amyth leading, he headed toward the deep caverns and his dangerous business with the Pit Men who dwelt there. . . .

III

THERE was darkness and furtive movement ahead. There was the nervous oppression one feels in deep caverns. There was silence and shadowy impressions of movements as soundless and nerve-wracking as the silence.

Tiny pressed a hand radilume into Wilding's fingers.

"From here on, nobody knows the way," she said, an odd gentleness in her voice. "I wish I dared go all the way with you. Shall I wait here?"

"No," Wilding answered uneasily. "Take the girl back safely. I will find my way, or perhaps the Pit Men will show me . . ."

Tiny's laugh was gruesome. It echoed among the silent rocks and came back magnified. While the sound still clattered back and forth from the confining rock walls, Wilding left the women and went on.

He went through darkness and more silence. Flickering ghosts of movement paced his progress. He knew the Pit Men were all around him, watching, curious, waiting to spring and overwhelm him. His handlight made a narrow rent in the solid curtain of blackness. He could see the path and the vague outlines of the passage for a few paces ahead. He went on for a long time.

Finally, he stood still and waited. Movement ceased around him. He shut off the radilume and shifted his position slightly. Again he waited. He stood still, scarcely breathing. Movement began again, and oddly, it seemed to move away from him. But one fragment of the movement drew closer. It edged toward him and stopped. It came on, slowly, softly, warily. Wilding could see nothing, scarcely hear the cautious breathing. But his instincts sensed the creature and placed it exactly. It was curious.

Suddenly Wilding leaped. There was quick, huddled violence in the darkness. The thing seemed all body. Wilding could find no arms or legs for leverage. But its strength was no match for his. Wilding overpowered the creature, felt it fall under him. In a flash, he was down on top of it, holding it against the rock floor, straddling a furry bulk, pinioning its struggles. The thing writhed feebly, then subsided and lay still. Wilding hoped he had not killed or seriously injured the Pit Man. He eased the pressure, and felt the soft body stir slightly. Relieved, he eased the strain a little more, but held his advantage.

His fingers clicked the radilume switch. Light was momentarily blinding after the darkness. Wilding ventured a quick glance at the captured Pit Man and turned away in revulsion. How could people eat such things!

Wilding sat on the prostrate Pit Man and felt very unhappy about the capture. The Pit Man goggled out of excited eyes and geysered an insane gibberish of sound. There were no recognizable words, and not even an indication that the sounds were words. It was like the notes of a curious, chittering birdsong, chromatic, waveringly melodic and set to vague rhythms, but it resembled no speech Wilding had ever heard.

Easy enough to carry out his plan to speak to the Pit Men, but what language did one use? Wilding tried slum Venusian, two Earth languages, a smattering of canal Martian dialects. He got nowhere. The Pit Man stayed put and bird-sounds sprayed from him. Wilding straddled the creature and spoke words in every language he knew. That was all.

A similar difficulty had baffled trained semantics men. Even the cipher experts, though admitting that the birdsong sounds seemed to have a musical or mathematical basis, could go no further. No dictionaries or word-books exist, and the language, if it were even a language, seemed not phonetic. No actual words had ever been distinguished, let alone their meanings.

Nor was the language the only mystery about the Pit Men. No anthropologist ever studied the race, catalogued its social patterns, recorded its history. The Pit Men were non-human, their origins lost in darkness beyond the dawn of time. In the chronicles of the early (Martian) spacemen, there is mention of a fungus-people inhabiting some of the larger asteroids, particularly the rogue asteroids and those with a high content of radioactive ores. First explorations by solar survey ships from Earth found the fungus life-forms existing much as they still do, inhabiting deep caves in the honeycombed interiors of some asteroids.

Practically nothing definite was ever

learned about them. These mobile, intelligent fungus-growths clung to their impregnable isolation and lived among deposits of low grade radioactive ores, worthless to mine and difficult to transport. In murky, dim-lit caverns, they lived out their strange lives, eating if they eat, sleeping if they sleep, and worshipping gods as ancient and strange as themselves. At first contacts Pit Men proved friendly and harmless, if not molested—but deadly dangerous if aroused or mistreated.

But communication always stopped dead beyond a few meager words the more intelligent Pit Men deigned to learn and use.

Wilding got up, releasing the Pit Man. With a shudder, he helped the creature to the horny pads which passed for its feet. The thing retreated to the edge of the light cone and stood, half in shadows, trembling. Wilding took a long look at the goggling alien, then wished he had not.

IT WAS a stubby, waddling horror of gray-green and fishbelly white, oddly manlike, even birdlike as legend specified, but with no resemblance to any particular bird life of the known worlds. The head was huge in proportion, round and smooth as a polished plastic ball. A long slender trunk or tentacle extended from the almost featureless face. Limbs were not arms, but something between wings and flippers. Folded membranes, like the gliding surfaces of flying squirrels connected the flipper-wings to the plump, obscene body. In texture, the skin was not slick, furry or feathered, but dusty, like the wings of a moth-miller.

The Pit Man trembled and waited, while Wilding's nerves shrank from remembrance of its foul contact.

Impatiently, with a recognition of futility, Wilding gestured for it to go. Without language, communication was impossible, and there was no hope of making a deal with the Pit Men. Birdmen or animals, plants or parasites, the things were too alien.

He would have to manage his plan somehow without their help.

By signs, Wilding tried helplessly to convey a minimum of apology for the outrage of capture and attempted kidnapping. He might as well have waved his hand against the wind.

The fungus-thing goggled and trembled and waited, making no move to leave, none toward Wilding. Treble sounds spilled from the orifice of its waving trunk, almost made words, hinted at resemblances, at possible meanings. Wilding thought he made out a corrupt and garbled enunciation of a red Martian word.

"Tza-tchagalok," which means either priest or temple, depending upon the tone in which it is spoken.

The Pit Man slid away. He came back. He retreated to the dark areas, returned again. His flippers gyrated excitedly. He reminded Wilding of a dog dumbly trying to lead a man to a discovery. The parallel was obvious. He wanted Wilding to follow.

Wilding shrugged and went along. There was nothing to lose. If it were a trap, he was already in it.

The darkness grew lighter, but oddly misty, as if some radiant vapor swirled and flowed in the caves. He could now see surroundings but as if through a veil of dancing dust motes. Light increased as they moved forward, ever deeper into the rock heart of the asteroid. Wilding felt his skin tingling as if he bathed in a thick liquid full of sparks. Fatalistically, he wondered how much exposure to this a man's body could stand.

The cavern opened out, became an immense chamber. Walls fell back and the floor sloped into an abyss swimming with blinding mist. The ceiling lifted and lost itself in vaulted brightness overhead. Pit Men swarmed in the great cavern like bees crowding a giant hive. They paid no attention to Wilding or his companion.

There was music, or at least unholy sound. It swelled and flowed in monstrous organ notes, lingering on chords, measured by an alien off-beat rhythm. The Pit Men wavered like shoals of fish caught in powerful undertows. Their bodies swayed and bobbed in response to the movements of sound. Even the light flared and faded like a visual echo of the music.

Wilding's late captive, now his guide, paused indecisively and made abortive motions with his flippers. Again the bird-sounds chimed and whickered. Again, Wil-

ding snatched at the Martian word for priest or temple.

"Tza-tchagalok. . . . Tza-tchagalok . . ."

The Pit Man pointed a flipper upward. Suspended in mid-air, without visible support except for the streaming pillars of light, was an elaborate structure. Wilding studied it. There were bars studded with prisms which shattered the streaming light to rainbow effects. It was like an immense jewelled cage.

Wilding sensed movement within the cage. He was curious how the creatures reached the staging, since there was no ladder, no ramp, no stairs.

He learned quickly. The Pit Man took flight, lurching clumsily into the air and floundering about on his flippers and the stretched membrane. It was a combinaion of swimming and gliding. The thing poised, as if waiting for the man to follow. Wilding did actually make the attempt. With the light gravity and the heavily pressured air, such swimming flight seemed almost possible. Wilding's attempt ended in ludicrous failure. He sprawled in flailing trajectory and fell awkwardly into web-like nets of glittering metal.

Pit Men gathered about and helped extricate him. Their birdlike vocals chittered in ear-splitting showers.

His guide and two others whisked him off his feet and soared upward through the mists. Once aloft, his low-gravity weight seemed no burden to them. In flight, their awkwardness vanished quickly, and they swam about with ease and grace. The approach to their temple may have been ritual; it was certainly not direct.

Wilding's senses spun. He felt nauseated and alarmed.

The Pit Man trio swooped down and deposited Wilding solidly on a platform built into the cage.

On the platform, paddling about mysterious ceremonies, was a very old, very gray, and very dusty Pit Man. He looked more like an owl than anything else. He goggled and waddled ponderously. He made a bobbing obeisance to a gigantic image, and to Wilding the ritual posturing was both solemn and impressive.

So was the idol. It was towering, of some burnished red metal, and represented a being completely non-anthropomorphic, like those strange and morbid Pzintar images Wilding had seen on Mars. Ancient Mars had worshipped beings neither birds nor serpents, but blending qualities and appearances of both. This idol was like those, though not an exact duplication. It represented something utterly alien to man, infinitely wise, infinitely benevolent, infinitely sad. There was no suggestion of good or evil; there was only calm acceptance and understanding of things as they are, and a serene certainty in things as they should be. . . .

Wilding stared upward at the gigantic symbol, and felt a stir of religious awe.

The owl-like priest spoke then. He spoke in good, cultured Martian, though his vocal apparatus massacred word sounds.

"Even the gods die," he said in whistling accents. "Or they grow bored and tired and go away. The gods are beyond understanding, and sometimes we are beyond their understanding as well."

Wilding shivered as if a blast from icy eternities blew over him.

"My time is short," he said quickly. "I came to ask help from you, but a man's bones and flesh can stand only brief exposure to this radiation. If I stay here too long, I will die."

"Perhaps you will be reborn as a Pit Man," suggested the old priest philosophically.

The possibility was no consolation to Wilding.

He talked quickly, outlining his project, stating his needs, and the possible gain to the Pit Men in co-operating with him.

"I plan to escape with the bulk of the prisoners," he said. "If you will help, you can have your asteroid to yourselves again."

"How could we help you?"

"The Pit Folk are immune to radiation that is deadly to us. We have no shielding, so we cannot handle or process the radioactive ores. We can provide equipment, if you will supply the labor. All we want is enough to power heavy machines for two weeks, and sufficient purified atomic fuel to power the space-lighter on a short voyage. It will not require much knowledge or labor for that."

The gray priest was thoughtful. "If you

escape in that small lighter, not many of the prisoners can go with you."

"Not many," agreed Wilding. "Not in the lighter. I intend to seize the supply ship and take along all who wish to go."

"There will still not be space enough for all," said the priest gravely. "What of those who will remain behind?"

WILDING grunted. "That is not my problem. Perhaps the guards will send out and pick them up. Certainly there will be an investigation and no more prisoners will be sent here. I will leave you the means to dispose of the remaining prisoners. If they try to harm you, I leave the decision in your hands. You can destroy all of them."

"You are a more ruthless people than my race," commented the old Pit Man.

"Circumstances sometimes require me to be ruthless," Wilding replied, without apology. "It is like surgery, needed to remove cancerous tissue. Will you help?"

"I do not know," said the priest. He moved to the edge of the platform, and suddenly was surrounded by swarming hordes of the Pit Men. There was no audible consultation, no words, no waving of the flipper limbs. Music died away into silence.

Finally the gathering broke up and the Pit Men swooped away in all directions.

"What was that—a council talk?" asked Wilding.

The gray old priest goggled at him. "Not in words. Not talk in the sense you mean. My people are a symbiotic group, all parts of one personality. Each colony is group-brain, a group nervous system, the individuals are its limbs and organs. We have no speech, and communicate with each other by what you would call telepathy—though it is not that. We are not individuals at all, but parts of a great organism. Vocal sound with us is not communication, but an expression of mood-music."

Wilding looked upward at the gigantic image. "If you are still undecided, why not ask your gods?" he inquired cynically.

The priest whistled words in an eery tone. "One does not disturb the gods with questions unless he wants disturbing answers. We have already reached our decision. We will help you escape."

Wilding gave swift instructions and the priest agreed upon terms and methods of carrying them out.

Without visible or audible summons, Wilding's Pit Man guide reappeared suddenly, swooping down from the brilliance hear the roof of the cavern. He settled with a flutter of membranes and a flurry of flippers.

"This one will return you to your own kind," said the priest. "You will not come here again, for this cavern is sacred to us. And there must be no more seizing and eating of Pit Men."

"There will be none," Wilding promised savagely. "Not after I warn the convicts that if any incidents occur, I will turn the human offenders over to you for punishment."

The priest shook his head. "No, we don't want that."

"I don't understand," protested Wilding.

"You must take responsibility for your own kind. That is our law. In your dealings with us, it must be yours."

Wilding shrugged, then agreed soberly. It seemed that his authority carried accumulating responsibility with it.

Return to the prison colonies of the outer caverns was without incident. Though surprised to see him alive, his fellow convicts received his news boisterously. Wilding cut short their enthusiasm and rapidly assigned tasks.

Time was short, and there was much to be done. For reasons concerned with the relative proximity to a new-type spaceship that he had previously cached in the asteroid belt, everything must be accomplished before the next scheduled arrival of the supply ship, or even sooner if an unscheduled prisoner delivery should occur. With atomic power, anything was possible. Prisoners turned to with a will as soon as radioactive ores, already processed, began to pour into the caverns, proving the Pit Men as good as their word. Grouth and Wilding oversaw the tooling of weapons and stockpiling of vital supplies. Concor supervised technical jobs.

Work went on. In any subsurface world, time is arbitrary, an artificial thing of clockwork and labor expended. It passed rapidly

IV

A FULL day before the two weeks were up, Wilding was rushing conversion of the lighter to completion. Everything else was in readiness. Food, weapons and a store of ammunition were stacked on the landing stages for loading. Some would go into the lighter, the rest would be at hand awaiting the capture of the supply ship.

Aboard the lighter, technicians made final adjustments and tests. Among them, making herself both useful and ornamental, was Amyth.

Tiny had parked herself at Wilding's elbow. She reeked of poisonous mushroom beer. She was drunk and talking.

"Your eyes follow her," Tiny observed shrewdly.

"They do," Wilding admitted. "I'm curious about her. What could she have done to be sent here?"

"Amyth was born here. She's never had a chance to do anything. Can you imagine what such a life means to a girl like that?"

Wilding shuddered. "I don't have to imagine."

"She's tough," went on Tiny. "Only the tough ones survive. The authorities don't recognize their existence. They send men and women here, with all the fences down, then close their eyes. Maybe nobody told them about the birds and bees. Amyth is my sister's child. She grew up here, knows nothing but this prison life."

"She grew up all over," commented Wilding.

Tiny's eyes bubbled, like sunlight dancing in a glass of beer. "She's vicious as a blaster discharge, but as clean. Don't get any wrong ideas. I taught her to take care of herself. But she's still woman enough to think and feel. She likes you, made that dress specially for you to see her in it."

Wilding grunted unhappily. Even in Hell —complications.

"I can still see most of her in it. What's she trying to sell? I don't need a seamstress or dress designer, or a wife."

"You need something," rumbled Tiny. "Give her a break, man. Amyth's a flower growing in a trash heap. She deserves something better than this. Maybe you don't want her, and maybe you never will. But if you break out of here, take her along."

Wilding nodded. "If she wants to go along, I'll take her. I can't promise any more than that. Can I trust you, Tiny?"

The Amazon smiled grimly. "You can—now. Some of us can't go, I know that. Even if your plans work out, there won't be room for all. For me it doesn't matter too much. Sure, I'd like to get drunk once more on good stuff. I'd like to walk crowded streets and push people off the sidewalks. But that doesn't count, really."

Wilding smiled, then sobered. "None of us are going back to that kind of life, Tiny. Sure, we could mix for a while and get away with it. Some might disappear for good. But we haven't changed. We're the same people, and under the same conditions, we'd just go wrong again and end in the same pot. I want something else. I want conditions so different that we can't go on being the same warped and misfit people. We're heading out, away from the solar system. I want a brand new, uninhabited planet to colonize. A world so new and different that we'll all have to change to survive. My plan is to give all of us a fresh start."

"You have more faith in people than I do. They won't change."

"They'll have to . . . or die."

Tiny whistled and swallowed hard. "It sounds wonderful and a little crazy, too. Where do you expect to find such a planet?"

Wilding answered slowly. "I don't know. It's a calculated risk. I was a successful criminal, Tiny. I made a lot of money in plunder, and most of it I used to buy and equip a spaceship. It's the biggest and best ever made, and it has a new kind of drive not released yet. That ship can reach the nearer stars in weeks, rather than years. The ship is hidden among the asteroids. That's the reason I'm in such a nightmare hurry. Right now, the asteroids are within cruising range; later on, the supply ship would never reach that orbit."

"Do you know that the nearer stars have such planets? Even if they have planets at all?"

"Nobody knows. But I'm gambling on it. I needed a tough crew, and women used to hardships for colonists. There's a big gamble to start, then the rest is savage battle for

survival—even if we're lucky. I knew I'd be caught and sent here eventually, so I gambled on that, too. Now I'll have my crew, and—"

"Counting me, there are twenty-nine women. All but Amyth and five others like her who were born here are pretty hard cases. I'm too old for childbearing, Wilding, so you can say twenty-eight. If you're restricting your colonists to useful citizens . . ."

"There'll be other needs, Tiny. You're a nurse. If you'll go, there'll be place for you."

"I'll go," growled Tiny. "And so will any of us. But you'd better not tell anyone else where we'll be headed. Not till you're on your way. They might get other ideas . . ."

"Would that be fair?"

"Fair or not—don't tell them. You took over the authority here. Don't start trying to squirm out of the responsibility now. Voting and fancy principles are fine for soft people in a safe and comfortably idyllic civilization. You're dealing with scared and desperate rats. They need help and strong leadership. You can give it to them, but if you show the least weakness or indecision, they'll tear you to pieces."

"You may be right, Tiny. But I still don't agree with you. This is too big a decision for one man. And I don't want any along who come unwillingly. I'll think about it, but I'm sure I'll give them a choice when the time comes."

"What kind of choice?"

"Come with me to the stars, or stay in some prison and rot. Hobson's choice."

"Think and be damned, then," said Tiny. The Amazon started to maneuver a drink to her mouth, then thoughtfully and deliberately broke the last flask of her mushroom beer on a rock.

The lighter was ready.

WILDING led his picked crew of twenty cut-throats aboard. He was not especially surprised to find the control cabin occupied.

Tichron sat easily in the pilot's chair, his blaster gun aimed steadily at Amyth who curled up like a sullen cat in the navigator's seat.

"I go, or the girl doesn't," said Tichron.

Wilding laughed at him. "You're a little previous. This is just a dry run. We're seizing the supply ship and coming back for the rest."

"So I've heard. Well, I'm going with you to make sure that you do come back."

"Amyth is not going this trip. None of the women. So you might hold your gun on me and let the girl get outside. We're wasting time, and I want to be sure of intercepting the supply ship long before it sights the beacon."

Tichron obliged by shifting his aim to Wilding. Amyth slipped silently through the airlock and dropped to the ground.

"Shall I take him now?" Grouth asked, edging toward Tichron who seemed unembarrassed by two possible targets instead of one.

"Don't move," ordered Wilding. To Tichron he said, "You can put the gun down now, or go on holding it. But your arm will be pretty numb by the time we hit the supply ship."

"Do I go with you?" demanded Tichron.

"You're wasting melodrama, big boy. I wouldn't think of leaving you behind. Ask Concor, we were wondering what had happened to you."

"Concor could lie, and so could you," growled Tichron. But he carefully reclipped the gun to his belt. "Perhaps you'll be killed trying to take the supply ship."

"Perhaps you will. . . ."

Wilding barked orders. The lighter was closed up and sealed. Atom-converters purred with steady vibrations. With a grunt and heave, the lighter moved into the airlock shaft. Lights dimmed and the jarring increased in tempo. Movement steadied into a smooth glide. Automatic door-flaps opened ahead and closed behind. Blast-off ritual began.

Suddenly the tiny ship shot from the surface like a cork from a bottle. Acceleration pangs became nagging nausea.

Wilding licked his lips. "Perhaps we'll all be killed. It will save a lot of trouble . . ."

From the shadow-cone of the planetoid, the lighter moved out to anticipate the orbit of the expected supply ship. . . .

In space, frontal attack is impossible. Ships approach and pass each other at terrific relative velocities. Limited human

senses cannot function rapidly enough, and even the automatic mechanisms which control a ship in spaceflight can react only according to the impulses built into them.

Surprise is almost equally impossible, since combat requires that both ships be moving at approximately equal speeds on courses nearly parallel.

Though Wilding had planned carefully, he knew that there is a vast difference between plans and execution. Anything, or any number of things, could go wrong. For one thing, if it came to an actual running fight, his craft was practically unarmed. Aboard the supply ship would be robot brains for mass detection, target-course computation, and the automatic aiming and firing of atomic warhead torpedoes. There had been neither time nor material to build such complicated machines. Even the control of the lighter was accomplished manually.

Moving out from the asteroid, the lighter described a wide curve. It came upon the supply ship from behind, striking a speed only slightly greater than that of its quarry. Rapidly overhauling the larger spacecraft, it sent no recognition signal and was prepared to answer none.

Already the supply ship had begun tedious deceleration preparatory to sighting the flare beacon and dumping the stores for the prisoners on Asteroid 297. It was a dull, routine maneuver. In the control cabin, pilot-captain and astrogator crouched over chart-screens and fed order tapes into the electronic devices which ran the ship. Men may be careless and overconfident. Machines are not—

ALARMS whined and clamored. Red lights blinked on the control panels, reporting intrusion. Instruments went into automatic action to determine the sector and nature of possible menace. Data tapes spewed from the battery of electronic brains. Electric typewriters clattered like machine-guns.

The strange object was man-made, too regular in form to be of meteoric origin. Metallic, but not a meteor. Its mirror-polished skin was analyzed spectroscopically and classified as an industrial alloy. Details of structure were noted and filed. By its speed and the phantom glow in its wake, the stranger was obviously powered by some secondary use of atomics.

But the officers of the supply ship had scant time to digest this array of facts. With a burst of speed, the strange craft angled suddenly toward them. Distance closed rapidly, and collision seemed imminent.

Alarms screamed in mechanical panic. Robot piloting devices operated instantaneously, attempted ticklish maneuvering to avoid contact. It was too late.

The pilot-captain's brain was working almost as rapidly as the relays of his cybernetic helpers. But not as surely. For a desperate moment, he considered the possibility of piracy, but he rejected the thought at once. All known desperadoes had been hunted from the spaceways. And if communications were to be trusted, no other spaceship could be within many days run of his present position. Mentally, the officer reviewed Procedure Regulations, and wondered what space novelty he was encountering this time.

He had little time to wonder, and less for indecision. If he had acted at once, the ponderous meteor repellor tubes could have been shifted from the nose of the ship. Even the token armament of robot-aimed torpedo tubes could have been ordered into action.

In the confusion of the moment, he took no action at all.

There was shock. Although the strange ship had barely nudged the hull plates, brains writhed and circulatory systems labored to readjust to an abrupt change in direction of movement. Then the stranger was firmly alongside, secured by magnetic grapples, and the airlock doors were opening automatically as pressure on both sides equalized.

Men poured through the airlock. They were a desperate, savage crew from the prison lighter. Their weapons were crude but effective. The battle was brief, a momentary huddled violence, then officers and crew of the supply ship were overwhelmed. Oddly enough, casualties were few on either side.

It is easier to unleash wolves than to restrain them once they have tasted blood. Wilding hated senseless slaughter, and he

held back the vindictive impulses of his ugly horde with the hand of a master.

"Did any message get through?" he asked Concor.

The Martian shook his head unhappily. "Part of one. We tried to blanket their transmitter, but—"

"That shortens our time. Don't harm our prisoners. We may need them for hostages."

Convicts went through the ship and routed out everyone in hiding. The captives were lined up and Wilding went down the line inspecting his catch. The crewmen were both angry and frightened. The officers blustered.

One of the last captives, turned out of hiding in the crew's quarters, was a girl. She limped into the straggled line-up and faced the new masters of the ship.

Wilding stared at her in astonishment. "Elshar!" he gasped. "What are you doing here?"

The girl did not answer at once. She shrugged, smiling curiously. Racial strangeness was in the angles of her face-structure. Large, luminous eyes, of deep blue, rode high on tilted cheekbones. She looked very young, with her face still pale from shock. In her dark hair and fair skin were the curious blendings of mixed blood, which often produces rare beauty. But for the twisted leg, she was perfect as one of those incredibly delicate and minute figurines carved of Martian ivory, but more human. All too human.

"I brought my freedom with the money you left for me," she explained slowly. "There was enough left to bribe the guards of the supply ship."

Caught between confusion and anger, Wilding stormed at her.

"You must have lost your mind. What could you want—"

The girl stopped him with a gesture. "Perhaps. And perhaps more than my mind. I convinced them that all I wanted was to see the place you had been taken. I did not try to convince myself. All the time I hoped something would happen. Some miracle. I ask nothing from you. Just let me stay near you—"

Tichron's laugh was a knife-thrust in the heavy stillness of the ship.

"Friend," he said enviously. "You have one woman too many."

"One is sometimes too many," Wilding said irritably. He told Elshar, "I'll decide later what to do with you. Now I'm too busy."

THE girl studied him gravely. "Don't think about me. I'll be no trouble to you."

Wilding nodded and turned his attention to Concor, who already bent over the calculators.

"With a little trimming, this present orbit will take us fairly close to the asteroid," was the Martian's verdict.

"That's your department. Get us there, and don't waste any time you can help. The patrols will be converging if any message at all went through. Our margin is small enough at best."

Tichron's broad face showed astonishment. "You mean you're actually going back for the others?"

"I never had any other intention. I'll need all who want to go with me . . . where I'm going."

Tichron's eyes narrowed. "Where *are* you going?"

"You'll find out when I tell the others. In time to make up your mind about going."

Alcatraz Asteroid showed suddenly against the dark backdrop of space, reflected sunlight waxing as the planes of its surface turned toward the Sun.

Airlock valves set into the savage exterior opened to let the lighter and captive supply ship into a tube leading downward to the inhabited caverns. Barely had the ship settled into cradles when Wilding went through the double doors and stared about the vaulted dockroom.

Something was wrong. By now, the convicts would know that the venture was well started, that the conquerors had returned with a prize. Curious and excited crowds should be milling about, swarming around the captured ship, greeting the venturers.

But no one was in sight.

Signalling the others to remain aboard, Wilding moved away from the ship to begin exploration. Cautiously, gun in hand, he poked through the main cavern with its stockpiled supplies, then on, investigating the nearer passages. Already out of sight of

his cohorts aboard the supply ship, he halted suddenly at a hint of furtive movement among the jagged rocks.

Three men sprang up and faced him. All three were armed and ready. It was not difficult to recognize Credus and his two chief supporters.

"I'm taking over," said Credus.

"Not so easily," Wilding warned. "It's still a deadlock. I have a gun on you."

Credus shook his head slowly. "You're too good a gambler to play against such odds. You wouldn't dare shoot."

Wilding was aware of a faint sound behind him. For a moment he hoped that Grouth or Concor had disobeyed his orders and followed him. He even risked a quick glance over his shoulder to see.

Two yards behind him stood Tichron, aimed blaster in hand. On Tichron's face was an expression of unholy glee, his lips curled up to expose wolfish fangs. Tichron held the balance, and knew it.

"Start bargaining," he suggested.

"I'll deal with you," said Credus quickly. "I have the girl, Amyth. She's yours . . . if . . ."

Tichron licked dry lips. His cold eyes questioned Wilding.

Wilding groaned. "I've nothing to offer but a fair deal—"

Tichron's trigger finger tightened. A thin beam flicked from the blaster. Sound and light jarred the caverns. . . .

V

ECHOES of the blast died away in distance. For a fragment of time, the curious tableau held, then thought and perception began again. Wilding, his face bleak, was amazed that he still lived.

At such range, a miss was impossible. But where Credus had stood was an untidy heap of smoldering cloth and calcined rags of flesh.

Dazed by concussion, the survivors of Credus' party stared at the grinning Tichron.

"I'm playing along with Wilding," he told them. "The one thing nobody ever thought to offer me is a fair deal. I guess I'm just curious."

Still over aimed guns, the two groups faced each other as the strain mounted between them.

"Go on, shoot," urged Wilding. "The odds are even now. You can kill both of us, but we will take you with us. You have one second to drop your guns or start shooting."

Indecision tortured the pair briefly, but their nerve failed. Weapons clattered on the floor.

"What are you going to do with us?" one asked unhappily.

"Nothing, if you do as you're told. Where is everyone?"

The men talked willingly enough. As soon as the lighter had left, Credus took over. Weapons were confiscated, all the women were seized and taken to the lower caverns as hostages. Of the others, some had followed Credus willingly, the rest had been threatened into obedience. Except for his trusted cohorts, all convicts were ordered out of the way pending the return of the lighter. If Wilding's project succeeded, Credus wanted no one to interfere with his idea of snatching it away for his own use.

Wilding snapped commands. The women were to be brought to the main caverns at once. All others who wished to leave Alcatraz were to assemble there without delay. Alarm had gone out during the taking of the supply ship. Probably the patrol cruisers were already converging upon the asteroid, so time was short.

Half an hour later, Wilding stepped before the thronged convicts to address them. A hush fell as he looked grimly into the sea of faces, pale from their sunless quarters and from excitement.

"I can't promise you freedom," he warned. "What I have in mind may not be freedom at all to your way of thinking. All I offer is a hard, dangerous life, and possibly a short one. I'll need strong men and women for what I have in mind if we reach our destination. And competent technicians, first, to see that we get there. If we make it, you'll have a fighting chance at a new way of life. Life totally different from any you may have known before."

"How many can go?" Tiny asked soberly.

Wilding shrugged. "All who will want to, probably . . . when they've heard my

plan. It may be crowded, but for a short distance the lighter and supply ship can carry all of you. And at the moment, the trip to the asteroid belt is only a ferry run. Shorter than it will be for a long time again."

He told them, then, of his plan. He told them of the fabulous treasure he had stumbled upon in a derelict spaceship, and how he had invested his treasure trove in a new type spaceship bought and assembled secretly, and hidden among the asteroids.

Like many others, Wilding had dreamed of leaving the Solar System and plunging beyond the space barrier to find a new home among the stars. Unlike some, he had tried to implement his dream, turning the loot of his crime career to that purpose. But to head out beyond Pluto, a venturer needs more than a spaceship. He needs other people as desperate and as venturesome as himself to join his attempt. He needs a hardy crew to get to the nearer stars, and once there, a people strong and daring enough to seize a strange new world and colonize it.

Originally, Wilding had planned a raid on Alcatraz to pick up a likely complement of tough souls, but the authorities had short-circuited his scheme by sending him there. An opportunist and a realist, he had adjusted his plan to the circumstances.

"Just breaking out of here to go back to the familiar worlds would be useless. We need not freedom to go back to our old lives, but a new kind of freedom. None of us can ever fit into the neatly standardized social structures in the planets and moons we call our homes. We need new settings where the adventurous man is not an anachronism. We must start fresh and make a world over to our specifications. It will not be a safe world, but it will never be as dull as those into which we cannot fit.

"Who will go with me?"

Dead silence fell as Wilding finished. Even the most hardened convicts exchanged dubious glances as if Wilding's words had given them new perspectives on themselves and each other. Discussion started as a murmurous trickle, increasing quickly to a flood of confused sound.

"What about those who don't go?" someone asked.

"I don't know," admitted Wilding. "Probably the authorities will abandon the asteroid as a prison. They may remove all who stay behind to some safer preserve. The stay-behinds are no concern of mine. Make up your minds. As soon as the stores are aboard, we are leaving. Any delay will be fatal, since the lighter and supply ship must get away before the patrol ships can mine the likely orbits and establish a spaceblock. There are no formalities, nothing to sign. Just be aboard if you are going along . . ."

TO THE casual eye, the asteroid belt seemed as empty as the rest of space. True, some suspiciously feeble stars altered the familiar patterns of constellations, and several larger asteroids were clearly visible by their own reflection of sunlight. But for the most part the debris of a long-ago shattered planet was so widely distributed in its orbital ring around the sun that only a trained astrogator could realize the near approach to it.

Nearing the end of their long deceleration, the two ships seemed to hang, unmoving, in blank space. Mass-detectors and proximity alarms warned frequently of meteoric fragments, but the pair of fugitive ships had so far encountered nothing of formidable or even interesting size. Matter in the asteroid belt is so scattered, and most units so small, that the odds are heavily against even accidental collision. Finding one particle in a shower of dust motes is a matter of instruments and mathematical calculators, not luck.

Pursuit was inevitable, but still invisible. Patrol ships were certainly converging to hunt down the fugitives, but they were still beyond range of the instruments. Wilding was satisfied by the progress of his venture, though still under strain. There had been trouble getting away from Alcatraz. Many convicts, though willing enough to attempt escape, objected to joining his further plans. A determined few had rioted and tried to seize the escape vessels for a mad dash back to the familiar moons and planets of men. The riots had been brief and bloody, though abortive.

Wilding avoided contact with his fellow fugitives. Grouth and Concor had taken over technical management of the ships.

Tiny and Tichron were organizing the personnel. Amyth and Elshar, discovering a mutual curiosity, were inseparable, and Wilding had seen neither of them during the voyage. He felt, uneasily, that their long discussions might be concerned with settling something in regard to him. And now that the machinery of his great dream was actually in operation, he found himself oddly depressed. When there is no immediate occupation for hands or brain, the way of a leader is hard and lonely.

Brooding in his synthetic solitude, he wrestled with his greatest opponent—himself. Black doubts crept into his soul. He longed for crisis and the need for action.

It would come soon enough, he realized. Reaching the hidden spaceship with his cargoes of human raw material was only the first step in an endless obstacle course. Before personnel and materials could be transferred to the starship and the ship itself made ready for deep space, time would pass. Already the facts of the break-out from Alcatraz must be known. A network of fast patrol cruisers was slowly but surely closing in upon him. A getaway in the face of such opposition would be touch and go at best. At worst, it would mean a quick, inglorious end to his venture.

Troubled, he sought out Concor in the control room.

The Martian grinned at him, gestured toward the view-screen showing space ahead. "Any moment now. The charts of this part of the Belt are not too reliable. We're shaping our orbit now, and if the figures are right, we'll overhaul your asteroid—"

Mass-detector alarms set up a demoniac clangor.

Grouth came into the control room. "Right on the nose," he said.

A point of light swam into visibility on the view-screen. It grew swiftly, steadily, first in intensity, then in size, until it bulked large, filling up the field of the screen.

Weak with relief, Wilding ordered the ship set down.

Hours later, in a spacesuit, he was overseeing removal of the camouflaging which had turned the hidden ship into an irregular rock protuberance. Gangs of workmen swarmed over the savage surface of the asteroid, clearing away staging, loading supplies, and putting the ship in readiness for take-off.

Doubts forgotten, Wilding threw himself into the work. He was in his glory. Everything was working smoothly. Too smoothly. The work of trans-shipping was approaching completion when disaster struck.

Tiny came out to him with word that Grouth and Concor wanted him in the control room of the giant spacer christened *Starship I*. Her face was very grave.

"It was a good try," she whispered as they entered the control room.

Wilding did not need to ask the trouble. Grouth's and Concor's faces told him everything.

"The patrol cruisers?"

Grouth nodded. "I've made contact with them."

Wilding whistled. "As close as that!"

"Closer. Evidently, they've been there some time. Waiting for more ships to tighten up their blockade. They've mined all major orbits and are just completing the network of ships. You couldn't sneak a mouse through."

"Any chance to run the blockade?"

Grouth shook his head glumly. "Too late for that."

"Shall we tell the others?" asked Tiny. "No use of their wasting their labor now—"

"Not just yet," said Wilding. "Finish the loading. We may be able to bluff our way out."

"They'll be coming in after us soon," warned Concor. "Then it'll be a choice of surrender or being blasted out with atomic torpedoes."

Wilding sighed unhappily. We'll surrender . . . if it comes to that. But they won't try anything like that until they've tried to bargain with us for the hostages. Stall them along. When the ship is loaded, seal it up and take off. We'll meet them in space and try to run a bluff with the hostages . . ."

"It won't work," prophesied Grouth gloomily. "You can't make a deal with the Security Patrol."

Privately Wilding agreed. But he said, "We can try."

The final processes of loading and stowing seemed to drag endlessly. At last it was

accomplished and word given to close up the ship.

IT WAS a grim and silent company in the control awaiting the blast-off. Grouth, Concor and Tiny were morose, already disheartened by the knowledge of defeat. Amyth and Elshar stood close to Wilding, both smiling enigmatically. He found their presence irritating, but said nothing. Only Tichron seemed untouched by the atmosphere of failure. He studied Wilding curiously, and even attempted to joke.

"Not that it matters now," he said. "But I've wondered why you were willing to include me on your expedition. Don't you know that I'm a chronic trouble-maker?"

Wilding smiled thinly. "Of course I knew that. But I wanted someone like you in my new world. Every healthy society needs some kind of trouble-maker. It stimulates growth."

Atomic motors roared into life, and the ship rose steadily up and out from the asteroid. As it moved toward the patrol cruisers, Wilding ordered the speed held to low levels, lest its seeming flight provoke action from trigger-nervous gunners aboard the patrol ships.

Tension grew as the range shortened.

A spreading, soundless flash of light flowered against the vaulted darkness of space. An atomic shell fired by the nearest cruiser. Just a warning, this time.

"Make contact," Wilding commanded. "We'll have to talk to them now."

The view-screen swirled with color as Grouth worked at the keyboard. Squirming colors cleared and a three dimensional image appeared. A man in the silver gray uniform of Security Police. It was like speaking with him face to face.

"The first shot was a warning," he said gravely. "Just hold your present course and do not attempt to change your speed."

"Warning of what?" Wilding demanded wryly. "Aren't you out of bounds? What right have you to interfere with our course or speed?"

The officer went white. "My orders are to stop you at all costs," he said. "If you surrender, and the hostages are unharmed, you will all be returned to prison without further punishment."

Wilding stared at the policemen insolently. "Not so fast," he protested. "Since when are people sent off to prison without even a trial? And for a trial, you must prefer some kind of charge. What is the charge against us?"

The officer's face went from white to red. "Jailbreak will do for the first charge," he stormed angrily. "After that, we'll see. You're all known criminals, or you'd never have been in Alcatraz."

Wilding laughed suddenly. "You're not making sense. You can charge us with jailbreak, even arrest us. But you can't make your charge stick in court. If we were in Alcatraz, you know there are no records in existence of criminal charges against us, so you have no right to say that we're known criminals. We can sue you for saying so publicly. As for the jailbreak charge, you may have a few witnesses among the convicts still on Alcatraz. But you know how unreliable such witnesses are in court. Any good lawyer can break down an eyewitness identification—"

The patrol officer licked his lips, his eyes took on a hard, metallic sheen. "We'll let the lawyers argue about it. Over your corpses if you try to evade arrest. I have my orders to stop you and take you back, alive if possible, dead if necessary. You have taken hostages, so a kidnapping charge will hold. If they are killed, the charge will be murder. Suit yourself about details."

One after another, armed patrol cruisers moved in to take up positions in the formation ringed about the doomed *Starship I.* On every side, batteries of atomic cannon covered every possible route of escape.

"What are you going to do?" asked Tiny, her voice hopeless.

An expression of sour triumph crossed the face of the man on the screen.

"You have five minutes to decide," he told them. "By then, if you haven't surrendered and let a prize crew come aboard, we have orders to blow you out of space." He stopped talking and his image vanished back into the writhing colors.

"Show them the hostages," suggested Tichron viciously. "Then tell them to keep their distance or you'll blow up our atomic fuel. They're bluffing."

"I don't think so," Grouth contented.

"We could find out by threatening to kill the hostages, one by one."

Wilding glanced round the circle of faces. All were pale, set into lines of strain and bitterness.

"No," said Wilding. "The decision is mine, and I've made it. We won't have unnecessary killing. You can't found a new world on other people's corpses. If it were to cost even one innocent life, I wouldn't want that responsibility. We'll have to surrender and start planning all over again . . ."

"Shall I set the surrender signal?" Grouth asked.

Wilding nodded. For some reason, his eyes sought Elshar's face. She was smiling. It startled Wilding that her approval meant so much to him. He was not in love with her, and never had been. The sight of Amyth close beside Elshar was enough to prove that to him. Any world, new or old, without Amyth would have been dust and ashes to him. His feeling about Elshar was completely different, almost as if she were a child for whom and to whom he was responsible. But her face now was that of a judge, benign and sad and incredibly worldwise. And her smile was almost a benediction.

The girl moved forward suddenly. Her voice was clear and oddly confident.

"Don't signal anything," she ordered. "There is another way out. Wilding has won the right to it for all of you."

Elshar turned fondly to Wilding and put her hand on his arm.

"You don't understand, of course. Because of me you lost your freedom. You thought all along that you were my guardian angel. In your own way, you tried to be kind and good and understanding. The truth is that I am your guardian angel, one of them."

PUZZLEMENT in his face seemed to amuse her. She went on very quickly. "I know you have wondered about me, about my race. You always sensed some strangeness in me, but not even you dreamed how much there was of strangeness. I come of an alien race, not even of your Solar System. There are many such races inhabiting planets of various stars in your galaxy. Most of them have developed far beyond your people in science, in culture, in social organization.

"For centuries these peoples have watched you and wondered. Many factors in your culture disturbed us, but these matters were unimportant as long as you were restricted to your own system. We dreaded the time when you would conquer the atom and attempt space travel. By the time that happened, we were prepared. A cordon of ships established a barrier just beyond your outermost planet, and it was deemed advisable to isolate you until your culture was found fit to expand to other stars.

"Certain ones among us were chosen to venture into your worlds as judges and observers. I was one of these, and mine was a special mission. As bait, I was to select one man to be a test case. That man must be one who typified all of the qualities most disturbing to us. I chose Wilding, or perhaps by interfering in my behalf, he chose me. Our problem was to see how one of the worst human products of your culture would respond to increasing responsibility. In the final analysis, Civilization is merely the response to expanding responsibilities.

"Wilding was a good choice. Environment and heredity made him a criminal, but he had a good mind and the primal virtue of courage. He was ambitious, a practical dreamer. Like your whole civilization, he attempted to reach worthy ends by evil means. From desperate need and because of a mystical anger, he is in revolt against his own kind, and against their culture. There was almost fatal weakness in his disregard of the precious gift of life, even of his own. He became an ideal test case.

"By his decision to give up his hopes and plans, and surrender rather than endanger a single life he has proved himself. He has won, for himself and for his race, another chance.

"There is a place where you can go. An Earth-type planet on which you can still play out your dream of building a world to your own needs and desires. It is in a parallel space-time continuum, not your familiar universe, and the way there is strange and terrible. There, you will be no menace to my people and the others, and by the time you have learned your way back, you will be civilized . . . or will have de-

stroyed yourself in the process."

Wilding fixed his eyes on Elshar as the girl finished speaking. Doubt had died out in him slowly, for her manner carried an eery conviction.

"Is all this true?" he had to ask as his mind grappled with the strangeness of her. "Can you really get us away from the cruisers, and show us how to reach this . . . private world?"

"Quite true," she said softly. "I can't go with you, but I can make some . . . adjustments . . . in your course calculators. I can give your navigator instructions by post-hypnotic suggestion, which he will forget as soon as you reach your destination. Do you still wish to go?"

WILDING nodded quickly. He glanced upward at the view-screen where rioting colors had begun to flare and swirl. The timelimit of the patrol's ultimatum was up.

"Do whatever she tells you," he ordered Concor. Then to Grouth, "Make the connection. I'll talk to him."

Colors steadied and faded on the screen, built up an image. It was the same officer.

"You've made no surrender signals," the policeman stated.

"Hold your fire," Wilding told him savagely. "We're putting out spacecrafts with the hostages. They're alive and well. After that, I'll discuss terms."

Indecision struggled on the officer's face. But he shrugged and smiled coldly. If Wilding was willing to yield his only bargaining point, it was worth a brief concession of time. And there was nothing to lose by waiting, since the trap had already closed.

Grouth broke the connection rudely.

They waited while hostages were released, hustled into spacearmor, and put aboard the spacecrafts. Air hissed in the escape tubes.

Wilding shot an anxious glance at Elshar. She was smiling again, sadly, fondly.

"Time enough. Don't worry about the patrol ships. Everything is ready. I almost wish I could go with you. Your experiment should be . . . interesting."

Concor sat at the control console. He pressed buttons, and a view of space flashed on the screen. Electronic tapes fed swiftly into the calculators, and from them to the robot controls that actually operated the ship. Light faded in the cabin. In the dimness, Wilding's hand found Amyth's and drew strength from her nearness.

He heard Elshar's voice, clear and steady. "Try not to be afraid. It is terrible, but does not last long."

Something strange was happening on the view-screen. Space and the familiar stars shifted, changing relative positions, like images flowing around flaws in a mirror. There was a moment of kaleidoscopic horror as if all the senses slipped, then adjusted to new patterns.

"This is good-bye." The sound of Elshar's voice drew his eyes to her. The girl's form wavered in his vision. She was changing. For a fragment of perception, he glimpsed something that suggested the old priest of the Pit Men. Then, something as delicate, fearful and unhumanly wise as a Martian pzintar idol. But as his mind grasped at the reality, she faded and vanished like drifting smoke.

Long afterward, it seemed that the ship descended through dense, luminous vapor. Through rifts below could be seen a patchwork of brown and green, misted with blue. It was like an unrolling map in three dimensions. Richly verdant continents, studded with tumbled mountains. A broad ocean crimsoned by the setting of a double sun. Alien stars winked on one by one in the thickening twilight, and unknown constellations made fiery symbols against the dark vaults of another space.

Wilding stared down at the planet which was their new home.

Every man has his obstacle course, never to be completed. This was his next obstacle, and overcoming it was the joy of living. He was glad that it seemed a big one.

"Ready for landing," he said. He was smiling. . . .

PASSWORD

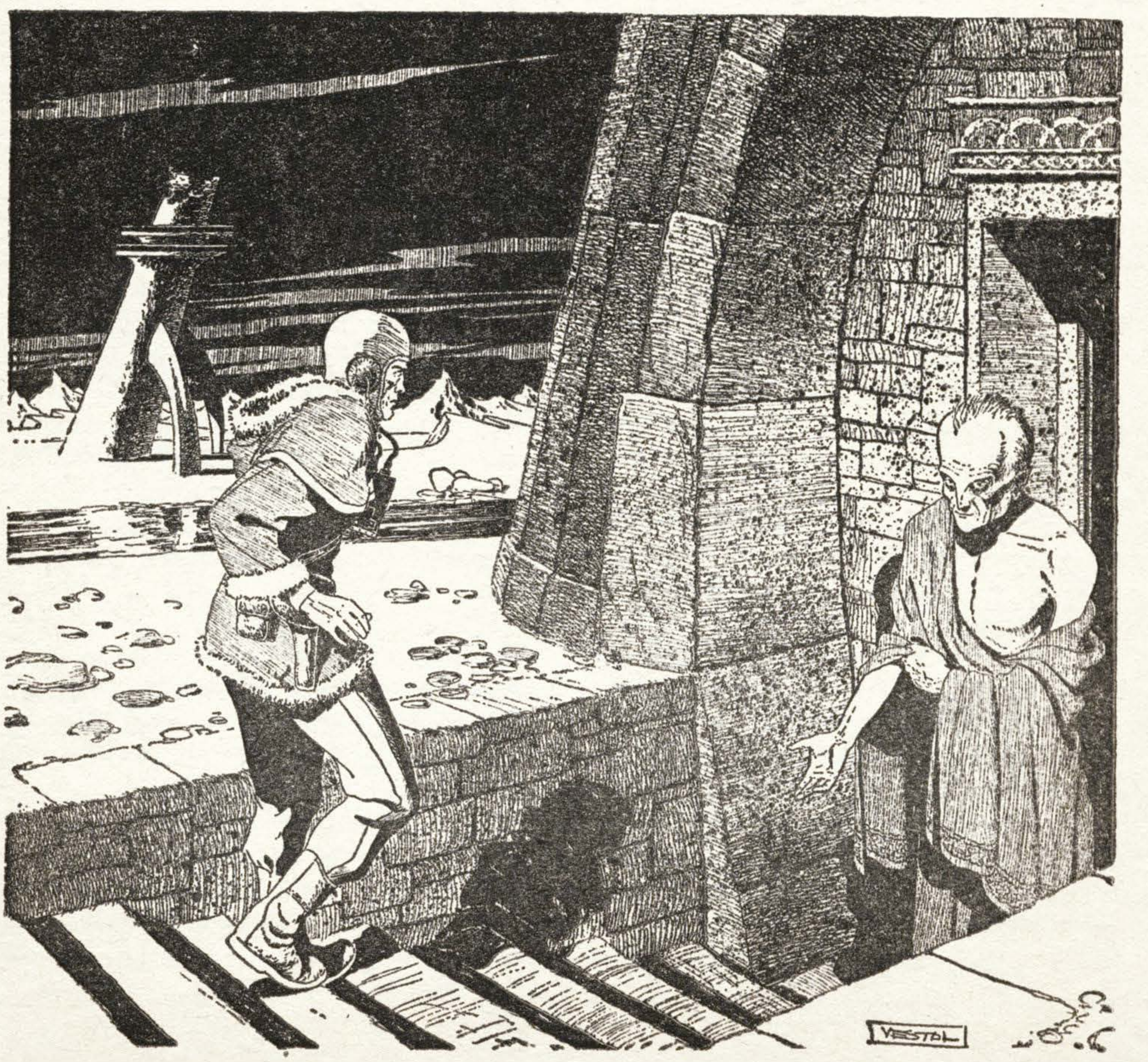
By J. W. GROVES

Only a fool would associate ideas of war and conquest with those grave, wise-eyed ungulates who arrived from outer space only a quarter century ago. Professor Medcalfe was the lone, honored fool.

The streets were tunnels of near-pitch darkness, where no light showed except for the faint glimmer of far-away stars and the purely subjective flashes and spots that danced before his eyes. The slap-slap of his feet upon the paving and the rasp of his breath in his throat echoed back at him from deserted buildings or lost itself, muffled, in the twinings of branched-off alleyways. And the stab of pain in his side was like a white-hot lance that jabbed and jabbed.

Fat and fifty, he thought grimly. No condition for a traitor to be in when he's running away from prison and an execution squad.

A stone turned beneath his foot and brought him to the ground with a thud that



jarred him close to unconsciousness. Sheer physical inability to rise kept him where he was, wasting long, precious seconds. The stronghold of the Lanyiah—the last on Earth—was still a dozen blocks away. It would need a miracle to get him there. And too many miracles had aided him this far for him to dare to hope for another.

Oh, my friends! he thought despairingly. My very dear friends! Why didn't you choose someone less of a fool to take your warning out to mankind?

MANKIND, Professor Medcalfe found, was rather a difficult creature to warn. He was apt to dismiss as crazy anyone who tried to draw attention to the existence of dangers not already self-evident.

Not that any of the minor government officials—all that the scientist could contact at first—actually used the word crazy to his face. They were too polite for that. But he could read it in the tilt of their eyebrows, in their chilly smiles, in the faint edge that came into their voices as they protested in varying words, "But Professor, the Lanyiah are our friends. They've never done anything but help us since they came here. We owe nearly the whole of our modern civilization to them."

In his heart the professor could not blame them for not believing him. To associate the ideas of war and conquest with those grave, wise-eyed ungulates who had come down out of space with friendly words and gestures a quarter of a century ago seemed almost to verge on blasphemy. But what had to be done had to be done. And so the scientist persisted.

"It was a trick," he said over and over again. "To lull our suspicions while they got a foothold on Earth."

It was as useless, though, as trying to make an impression on a rubber-foam mattress by pounding it with a feather. And after a whole day at it he wearily gave up, and used the information that he meant to keep for more important ears.

"All right," he said grimly to the last of the not-too-polite stallers; a balding gentleman with fluttery fingers and a squeaky voice who had demanded proof. "All right. If you want proof you shall have it. Mark this. Some time tomorrow the atomic power plant in Oklahoma will be blown up. It will be done with a type of radiation that will leave everything glowing with a greenish tinge; something not known to human science. Within an hour of the explosion there won't be a single one of the Lanyiah to be found outside of their settlements. And from then the war will be on."

Then he turned on his heel, and as he left the room added over his shoulder, "Now I'm going home to bed. If any of your superiors want me they will know where they can find me."

Early the next morning the noise of the Oklahoma explosion, a hundred miles away, aroused him temporarily. And an hour later the World Bureau of Investigation men arrived and made his awakening permanent.

THEY asked him no questions themselves. Just stood by while he dressed and breakfasted, then took him away to a building that was familiar to him only as a name and a facade. And inside, for the first time since he had tried to penetrate the rubber curtain of official indifference he met someone whom he knew.

"Mac!" he said. Then added with belated respect, "General Mackay. You're one of the men I've been trying to reach."

The general's answering smile was born partly of old-time friendship, partly of later acquired habits of public diplomacy. "Sure," he said soothingly "Well, you've done it now, haven't you? Come in and meet some more of the high brass." And he led the professor on into an inner room.

When the portly little scientist saw the men whom he was being taken to meet he was overcome by a devastating shyness, despite his high sense of mission. These were indeed some more of the high brass! Practically every distinguished military commander from every country on Earth was there—all retired, it was true, since the establishment of the World State twenty years ago, but still highly respected men. And mingled with them were statesmen whose name had penetrated even to a recluse, like himself, interested in little but the gathering of knowledge. While at the back, a worried look on his broad, handsome face,

was a figure familiar enough as a picture but somehow incredible as real flesh.

Yes! It was him, though. The World President himself.

For a second or so only his duty to the human race kept the professor from turning and running out of the door. Then the abrupt silence that had fallen at his entrance was broken as everybody surged forward and began to pound his ears with a babble of questions. And at that the professor's shyness left him. Whatever their positions in the world these were only shocked and badly frightened men, willing to turn anywhere for help in the face of the horror that loomed over them.

The booming voice of the president rose above the din. "Gentlemen! Please! We shall get nowhere like this."

The authority in his tone brought comparative silence. Pushing his way through the crowd he strode up to the scientist. "And now, Professor Medcalfe, if you would be kind enough to tell us what you know about this treacherous act of Lanyiah's—"

The professor nodded, happily master of himself and the situation again. "Of course," he said. "This is what happened.—"

And a nice, melledramatic story it was that I gave them, too, he thought with a touch of grim humor. A real thriller, full of spying, and stolen designs for weapons, and cleverly filched war plans. But they all swallowed it. Because they wanted to. Because they didn't dare do anything else."

A slight, unidentifiable noise jerked his awareness back to the present time. He struggled slowly to his feet, and stood swaying. The sound faded and was not renewed. But now his over-vivid imagination turned the thumping of his heart into the thud of approaching footsteps. Shivering, only slightly recovered despite his forced rest, he started forward at a staggering run.

What a fool I've been! he thought bitterly. I could so easily have stayed the darling of the mob and the confidante of the great right up to the successful conclusion of the war, if only I hadn't been so naive at this sort of thing that I almost forced the government to suspect me.

THE party of men who came to take him in for 'A little routine questioning' was accompanied by General Mackay himself. And that hurt as much as anything else about the whole business. Good old Mac. The professor had known that there would be a lot of credit to be gained in this war by whoever led humanity in the fight. and he had been more than glad when he heard that Mac was to be that leader. But now it wasn't so nice to see worry and suspicion in the man's eyes.

Mackay was apologetic at first. "You have been seen quite distinctly coming out of the west coast Lanyiah stronghold on several occasions. But—well, I'm sure you have some adequate explanation."

He hadn't, though. And the lie that he thought up in his moment of panic sounded silly even to himself. "I—I was trying to steal some more plans. They still trust me, you see—"

"After the publicity about your revelations concerning them?" Mackay shook his head sadly. "I'm afraid it won't do, Professor."

So they took him away and shot him full of truth drug. And it was Mackay who, ignoring all usual procedure, asked him the first, disastrous question. "Are you working with the Lanyiah?"

He almost screamed when he heard it. The Lanyiah had warned him that the counter-drug they had injected in him would take a second or two to operate. But he had been relying on the inquisition's being opened with the usual routine stuff. 'Can you hear me?' 'Are you able to answer?' Not this.

He struggled fiercely not to speak, but the "Yes" forced itself from between his lips.

Mackay did not look surprised. Only disgusted. Plainly he had expected that answer, although he had allowed himself to hope for a different one. "But why?" he ejaculated angrily. "Why in the name of sanity did you do such a thing?"

But the professor was in control of himself again now, and he simply shook his head. Guessing what had happened his captors tried another shot of the truth drug, and then a little rough handling that almost descended to torture. Through it all he re-

mained obstinately silent. Finally they took him away and threw him into a cell.

Mackay spoke to him once again, before they closed the door on him. "This means a death sentence. You know that, don't you? In fact I could have had you shot out of hand, if I'd chosen. The only reason I didn't is that I'm hoping that you'll open up and tell us a bit more."

Well, at least I didn't do that, he thought grimly. Though how long I could have lasted out against them if this hadn't happened I don't know. There were scores of tricks they could have tried on me. Hypnosis. Draining and replacing my blood to clear me of the counter drug. Or maybe even hanging me up by my thumbs and lighting a slow fire under me.

The street began to slope gently upwards now. And before long the extra strain, slight though it was, added an impossible burden to his already overtired heart and lungs. Though every instinct shrieked to him to keep going he was forced to drop to the paving for another rest.

As the tumult within him died away somewhat he listened once more for sounds of pursuit, but still there were none. He should have been glad, but actually he was the more uneasy. It was too unnatural. Uncanny, almost. As suspiciously uncanny as his escape from prison had been.

IT WAS nearly ten minutes after the guard had gone that the professor discovered the man had forgotten to lock the door behind him. And nearly another ten minutes after that before the scientist could make up his mind whether to do anything about it or not. The Lanyiah were the only friends that he had in the world now, and they seemed impossibly far away. Even if, miraculously, the open door did mean that he could get out of the prison, he would still have to take his chance on the mob's finding him before he reached the stronghold.

And the treatment that the mob would give him would make whatever awaited him here seem by comparison a desirable thing.

Finally he compromised. There was only an hour to go to darkness. If no one came to relock the door before then he would try to get away.

No one came. And, even more amazing, no one saw him in the corridor outside the cells, no one stopped him when he crept into the closet where the guards' spare uniforms were kept, and fitted himself out as best he could in clothes made for younger, bigger men.

After that it was easy. He simply walked out of the open door of the prison, through the small gate that broke the expanse of the tall, spike-topped wall, and out into the darkness. He was half-a-mile on his way to the Lanyiah stronghold when he heard the alarm siren sound.

Well, he thought as he dragged himself to his feet again, every month men win lotteries where the odds against them are high. Someone has to be lucky. Apparently this time it was me.

He simply could not force his body to run, now. The slope was too steep, and he too near the point of complete exhaustion. It took dogged effort even to keep up the unsteady walk at which he set forward.

Clouds were rearing dark masses between him and the stars by this time, and the shadows about his way grew thicker. Myopically his eyes blinked into them, and for a moment it seemed that one moved. The delusion faded, but it led to a thought that set even his tired old heart thumping a little faster. He had been assuming that he would be chased. But the prison guards and soldiers would know where he would make for. Supposing they hadn't gone directly after him, but had circled round to cut him off. Ambush—

A looming mass brought a short scream to his throat. Then he saw that it was only a mail box, made black and huge by the surrounding gloom. For a moment he stood rocking on his feet. He was a humble man, never intellectually arrogant enough to suppose that he knew what made and ruled the universe. And so he prayed without caring whether it was to God, or Gods, or blind uncaring powers. Please! Oh please, don't let them ambush me now.

He pressed on again, and seconds later more black, amorphous shapes swelled around him. Fear came back, and would

have forced another scream out of him; but he killed it with self-mockery. Was he going to let himself be fooled all the time by inanimate things?

Then rough hands seized him, and the glare of a hand-torch struck him in the face—

As his eyes adjusted he could see behind the torch's cone of light the thin, alert-eyed face of Mackay himself. In a queer tone, half jeering yet almost friendly, the man spoke. "Well, Fatso?"

The professor twisted his plump lips. To use that old name now, at a time like this! All right. If Mac wanted to carry the thing off with an air he would see that others could do the same. Fighting, the professor controlled his breath until it was almost normal. Then he said, "The great General Mackay himself. I am honored."

"You should be," retorted Mackay. "I've been waiting here over an hour in the cold, especially so that you and I could have a little talk."

So that's it, thought the professor. That's the secret of my miraculous escape. You calculated that if I was allowed to build my hopes high enough, and then had them broken at the very last second, my spirit would be crushed to the point where I would tell you what you want to know. Well, we'll see.

Mackay spoke curtly to the soldiers. "Bring him along."

The professor expected to be dragged back the way he had come. Instead he was pulled off into a side turning, and then through a black hole of a door into a building of some sort. Mackay, following him and his captors inside, switched on a light. The professor blinked around. The place had evidently once been a small factory, but now, stripped of whatever machinery it had contained, with its bare brick walls and concrete floor lit by one naked bulb hanging from the ceiling, it was a shadowy, echoing cave.

The soldiers released the professor, and he turned his head to look at them. There were only two, in charge of a junior officer. Mackay spoke quietly. "Wait outside, please."

The officer glanced at the professor, raised his eyebrows, and started to protest. "But—" Then realization of the other's rank overwhelmed him, and he fell silent.

Mackay smiled and jerked out his gun. "Don't let it worry you. I'm armed. He isn't. Outside please."

The officer saluted smartly and led his men through the door without further protest. Mackay turned to the professor. "Now," he said gently, "We're going to have our talk."

"Are we?" The professor's tone was grimly suspicious. "What are we going to talk about?"

"Oh, lots of things. You and I. The war. The Lanyiah and your dealings with them. You know, Fatso, that's a thing that a lot of people have never been able to understand. That after betraying the Lanyiah to us you have been able to go on having dealings with them."

"It isn't going to work, Mac. You've done everything you could to me short of physical torture. And I'm still not giving anything away."

MACKAY looked at him reproachfully, then sighed. "It used not to be like this in the old days, Fatso. We didn't have any secrets from each other when we played football together, or skipped school to go fishing; and then forgot to watch the float because we were so busy settling little things like the future of the world, and whether man would ever go out to the stars."

That hurt. More than the professor cared to admit even to himself. He'd been trying hard not to remember those days ever since Mackay had reminded him of them by using that old, almost forgotten nickname of Fatso. Now he bit his lip, raging inwardly. Why couldn't Mac have just hit him or something, instead of twisting the very heart of him like this?

Mackay spoke again. "You'd like to get out of here to your pals, the Lanyiah, wouldn't you?"

"Naturally."

"Well, there's a back way out of this building. One that the soldiers don't know about. Maybe I'll let you use it. Maybe not. It depends."

"On what?"

"Oh—things." Mackay lifted his right

hand to gesture with it, and suddenly became aware of the gun that he was still holding. He grinned briefly and tossed the thing aside so that it skittered across the concrete floor and came to rest in the corner of the room.

The professor was still stinging from the reproachful reminder of the old days. He spoke with elaborate sarcasm. "Aren't you afraid I'll attack you? I could probably injure you to some extent even if I lost the fight. And how could the people of Earth possibly win this last battle that's coming without the great General Mackay to lead them to victory?"

"How indeed?" said Mackay with a grin. Then he went on more seriously. "I've been thinking a lot about those victories of mine lately, Fatso. Do you realize that I've had to face the most powerful enemy any man was ever called on to face? An interstellar race thousands of years ahead of man in scientific knowledge. Yet I've beaten them. Driven them from stronghold after stronghold until it will take only one more push to clear them right off the planet. I'm the greatest war leader that this world has ever known—"

The professor spoke contemptuously. "You always did like yourself rather a lot, didn't you Mac?"

Mackay shrugged. "Either it's as I say, or else these Lanyiah are nothing but dirty, stinking little cowards—"

For a moment the professor held his teeth set grimly. Then a hot shout burst out of him. "How dare you say that of them? How dare you? They are wiser and braver than you'll ever be able to realize!"

Mackay threw back his head and let loose a gargantuan roar of laughter. "Thanks Fatso. Thanks a lot."

"For what?"

"For confirming everything I've been suspecting."

THE professor bit his lip. He was a simple scientist, at home in the laboratory or the lecture room, but completely lost when it came to the subtleties of intrigue. He did not know how much Mac knew now, how much more he might have guessed. But there was only one way out of it if the whole secret was not to come out.

He moved suddenly, ducking past Mackay and diving for the door. He heard the General's shout. "Come here, you fool!" But he ignored it, pressed on towards the black rectangle that led to the street. Then an outthrust foot tangled with his and sent him sprawling just as a blue flash punctured the darkness where his body had been a second before.

Mackay leaned over him, grabbed the gun out of the corner of the room, and was covering the cowering figure of the professor with it when the soldiers came plunging back into the building. "All right," he said reassuringly. "I've got him under control. He won't get a chance to try that again. You can return outside."

For a moment it seemed that the young officer was going to argue. Then he shrugged almost imperceptibly, saluted, and took his men back through the door. Mackay looked down at the professor. "Why did you do that, you old fool? They'd have burned you to a crisp if I hadn't intervened."

The professor dragged himself up from the floor. "That was the idea," he said sullenly.

"Oh, don't be such a melodramatic idiot." Mackay pushed his gun back into its holster. Then he chuckled. "Getting yourself burned wouldn't do much good, Fatso. I Know All, as they say in the video thrillers." He spoke more soberly. "Anyway, there's no need to sacrifice yourself because of anything that I've found out. I don't want to tell anybody about it."

The professor stared at him. "You don't? Then why—well, what do you want to do?"

"I want to know the password that will get me through the Lanyiah lines."

The professor's voice still had a note of suspicion in it. But there was also a faint hint of hope. As if he thought it possible, just remotely possible, that he might get the right answer. "Why should I give you that?" he asked.

Mackay gave a mock sigh of resignation. "Still going to be obstinate? All right. I'll tell you. You should give it to me because you're their friend and I'm yours."

"But you are their enemy. You're the leader of the forces that are driving them off this planet that they tried to conquer."

"Am I?" said Mackay with a gentle laugh. Then with an abrupt change of tone he

went on, "Tell you what, Fatso. Have you ever noticed how much brighter and more alert everybody is since this war started? It almost seems that we were slipping into a sort of lethargy, and needed this fight to snap us out of it. I've been thinking about that a lot lately."

"Have you?"

"Uh-huh. And I've been thinking about something else, too. The history of the Australian aborigines."

The professor jerked his shoulders, but said nothing. Mackay's smile grew much brighter.

"It's a pity, isn't it, that those poor devils were allowed to die out the way they did? Of an inferiority complex. If the white man had only been a little wiser and a little kinder he could so easily have realized in time what was happening and saved them by devising some trick to restore their self-respect. Say, forcing a war on them, then turning to flee in confusion before their primitive bows and spears while he fired his own rifles and pistols into the air."

THE professor's breathing grew more rapid, but still he said nothing. Mackay resumed, "The inferiority-caused drive to extinction among the aborigines was a mass effect, of course. If the white men had needed one of them to help put their trick across they could easily have found one intelligent enough to be immune, and bought his friendship by promising to take him off with them to civilization when the war was over. And no doubt when his job was done that little aborigine would have had a wonderful time gaping at all the wonders of New York and London and Paris. But I think that after a while he would have become rather a lonely little aborigine. I think that he would have begun to wish that he he had taken one of his own kind, a friend, along with him."

Suddenly Mackay stopped smiling, jerked his head up, and roared in a gigantic voice, "And now, you pig-headed, pot-bellied little barrel of lard, will you tell me the password that will get me through the Lanyiah lines?"

The professor looked at him for a moment, blinked, then giggled almost hysterically, "There isn't any. They use a telepathic scanner that automatically checks the intentions in your mind and either accepts you or rejects you." He laughed again more naturally. "And now, you overgrown hunk of soldiery, will you show me that back way out of this shack?"

"There isn't any. That was just a trick of mine to check the intentions in your mind so that I could either accept you or reject you." Mackay guffawed uproariously. "But don't let it worry you, Fatso. We don't need a back entrance."

He jerked his gun out of its holster, strode to the door and sighted carefully. There came three sharp cracks. A trio of blue-light lances flashed into the night.

The professor began a protest. "But—"

"Stun strength only," explained Mackay briefly. "They'll recover in fifteen minutes. But there are others not far away who'll be down before that to find out what the shooting's all about."

He took his friend by the shoulder, propelled him through the door, then gave his back a slap that thrust him in the direction of the Lanyiah stronghold. "Come on Fatso," he shouted. "Run for it."


VESTAL

PURPLE FOREVER

By JACK LEWIS

Three men on Venus . . . lolling about in their shirt sleeves and breathing in an atmosphere of chlorine and ammonia that was sure to kill a man in thirty seconds. The pictures lied! . . . they must lie! Trick photography? . . . Inquisitive Carl Keating found the true answer even stranger.

THE envelope was addressed in a bold sprawling hand that barely left room for the seventy-five cent special delivery stamp in the upper right hand corner. It was a nice stamp—a blue one commemorating the fiftieth anniversary of Harvey's first landing on Mars. Carl Keating tore it open. Inside was a single sheet of good

paper, typewritten on one side. The message read:

Dear Mr. Keating;

Must see you at once.

Norman Hamlin

He'd barely slid the letter back in its wrapper when the desk phone rang. Automatically he pushed the view-plate to a respectful fifteen inches and threw in the video. The screen swirled for a moment in a milky blur, then abruptly a man's head and shoulders jumped into focus. He was a lean, angular-faced man, with thin shoulders and thinner lips, which at the moment were set in a Lincolnish smile.

"I'm Dr. Hamlin," the face in the screen announced. "You got my letter?"

Carl nodded. "I have your letter doctor, but I'm afraid you have the wrong man. I can't imagine what you'd want to see ME about."

The image on the screen expanded as Norman Hamlin leaned toward the view-plate. "You are Major Carl Keating, retired?" the mouth asked.

Carl pushed the instrument back hoping the other man would do the same. "Retired as of last Tuesday," he said, "at the tender age of thirty-six. What's on your mind, doctor?"

The mouth got bigger till it filled the entire screen. "Major Keating, would it be possible for you to come out to Long Island tonight?"

"It would not!"

"Please it's . . ."

"Dr. Hamlin," Carl said not bothering to keep the annoyance out of his voice, "in the first place I don't even know who you are; in the second place I'm packing for a vacation in Paris; and in the third place if there's anything I detest, it's talking down someone's throat. Now if you don't mind . . ."

"Wait!" The image on the screen diminished, till over the narrow shoulders Carl could make out a book-lined study, and beyond that a sunken living room. "It's important—very important."

"So's my vacation."

"Suppose I were to make it worth while to postpone your vacation?"

"I'm afraid my while is worth more than you could offer," Keating said bluntly.

"I can offer five thousand dollars," Norman Hamlin said. "It's yours just for coming out to Wading River tonight and listening to what I have to say."

"You mean you'll pay five thousand dollars just for the privilege of talking to me?"

Hamlin nodded. "You listen to what I tell you. Then, if you aren't interested, you pick up your five thousand and leave. It's as easy as that."

Keating reached across the desk and scanned the envelope. "I have the address," he said. "I'll be right out."

IT WAS the peak of the rush hour when he left the apartment. Overhead, a congested swarm of copter traffic buzzed like an angry beehive. A block away was a monorail kiosk. Ever conscious of the strange feel of his new civvies, Keating entered it and boarded a Huntington express. From there it was only ten minutes to Wading River by copter-cab. Dr. Hamlin had left the lawn lights burning, and even before he'd paid his fare, was standing at his elbow. He extended a hand in greeting. "You made good time," he said.

Keating gripped the other man's hand. "You made a good offer."

Hamlin gestured him through an opening in the dura-glass ell of the house. The room was a library, the same one he'd seen over Hamlin's shoulder during the phone conversation. In the center of the book-bordered room was a rectangular table. A man sat at the head of it.

"Sit down," the man said.

Carl sat down. The man at the head of the table was robust, almost to the point of flabbiness. He was probably in his late twenties, but the pink flush on his cheekbones and a pair of broad-arched eyebrows gave him a mannequin appearance.

"This is Mr. Stewart Ferguson," Dr. Hamlin announced.

"Not THE Mr. Stewart Ferguson?"

"I take it then you've heard of him?"

Carl studied the man whimsically. "Yeah, I've heard of him," he said. "All the way from here to Mars and back I've heard of him."

Stewart Ferguson lit a cigarette. "Am I to

understand, Mr. Keating, that you don't approve of my so-called behavior?"

Carl shrugged. "Who am I to comment on your behavior? If I had your money I'd probably act the same way you do. Who doesn't want to sleep with a video actress?"

Dr. Hamlin coughed. "There are times when perhaps the newspapers have exaggerated Mr. Ferguson's escapades. Furthermore, I hardly think his private life is any concern of ours."

"I'm not concerned," Carl said. "If I'm being paid five thousand dollars to listen to an evening's chatter I'd as soon listen to Ferguson's autobiography as anything else . . . might even come down on my price a bit."

Stewart Ferguson dug into his coat pocket and came up with a sheaf of bills. He threw them across the table. "That takes care of our agreement," he said, "now suppose we get down to the business you're being paid to listen to."

Carl picked up the bills and rapped them across his knuckles. For just a moment he toyed with the idea of throwing them back in the playboy's face. He didn't. Not only was five thousand dollars a lot of money, but his curiosity was aroused. "I'm listening," he said.

Norman Hamlin braced his bony elbows on the table and leaned toward him. "Mr. Keating, in the course of the three trips you made to Mars with the military, what was it that stood out foremost in your mind?"

"Men's emotions vary," Carl said carefully. "An architect would probably admire the beauty of the Martian cities, while a gourmet would savor the taste of candied encoms. Probably the thing that impressed me most was the friendliness of the people."

Hamlin drummed his fingers on the table. "I see," he said. "You'd say, then, it was a reasonably nice place to live?"

"Reasonably nice," Carl agreed. "Certainly nicer than the science-fiction writers had pictured it."

"Better than Earth?"

Carl shook his head. "Not as far as I'm concerned. My tastes run to sandy beaches and women with real eyelashes. That's just my personal opinion you understand. There's almost eighty-thousand people who disagree with me—I believe that was the latest migration figures."

Hamlin thumped his pipe against the edge of the table. "I understand you've just returned from Venus, Mr. Keating. Can you give us a short briefing concerning your reactions to that planet?"

CARL eyed the man warily. "I'll be as brief as possible. There's been four landings on Venus in almost forty years. All these have been made by the military. That to me is a pretty substantial indication that no one would go there unless they were ordered to!"

Hamlin smiled. "I didn't mean quite as brief as that, Mr. Keating. I had rather hoped you'd be a little more explicit."

Carl frowned. "I find it a bit hard to understand just what you're driving at Dr. Hamlin. After all, there's been over a hundred books written on the subject. What can I add to the books? Maybe I could cram in a few more ghastly adjectives, but even then it wouldn't explain what the place was really like. You'd have to go there to find that out.

"How can you explain to someone sitting in a comfortable drawing room, the terrors of plodding through a swamp, knee deep in green fog, and wondering when a forty foot reptile is going to sink its teeth into your leg. How can you explain the sheer mental fatigue of waiting for a needle-nosed scorpion to puncture your space jumper, knowing that the atmosphere right on the other side of your face-plate can kill you in thirty seconds. How do you explain an atmosphere of chlorine and ammonia for that matter—or a color. I say purple-brown to you and it don't mean a thing. But look at the angry purple-brown landscape of Venus for two years like I did and you'd know what I mean.

"It's a primitive planet, Dr. Hamlin. Right now, according to the geologists, Venus is just like the earth was ten million years ago. Life is forming on it—primitive life. Take the chowls, for example—you see replicas of them in every department store window. They look a little like teddy-bears, especially when they walk. Still they have ten fingers and ten toes. Archeologists tell

us they're humanoid. Yet only half-a-million years ago they crawled out of the oceans. Maybe in another two million years they'll be living in houses instead of thatched hovels and pointing guns at people instead of running like a star-bound flame buggy every time they hear a noise. But right now they're scared. They're out of their natural element and they're scared, the same way our own Neanderthal man was scared before he found out how to fashion a rock-hammer."

Dr. Hamlin lit his pipe. "You're quite sure then, Mr. Keating, that man will never be able to live there?"

"Live there! Man can't even breathe there! There's less than one tenth of one percent oxygen in the air."

Dr. Hamlin pressed his fingertips together. "Mr. Keating," he said, "just how much do you know about the three men who were lost on the first Venus expedition?"

"Only what's in the history books," Carl said. "It's more or less of a legend, how Edgerton, Rhind, and Mitchell, were separated from the main party and never seen again."

"Died contributing to man's conquest of space," Ferguson said with mock drama.

"It wasn't a pleasant death," Carl said quickly. "I'd bet on that."

"Mr. Keating," Hamlin said, "do you have any ideas as to just why these three men should have disappeared at this time?"

Carl shook his head. "Could have been anything, I guess. They could have got lost and ran out of oxygen. They could have gotten snake bit. I wouldn't know. The whole thing happened before I was born."

II

DR. HAMLIN got up. "No, there was more to it than that. In spite of the fact that it happened almost forty years ago, I happen to know that the situation didn't occur exactly as the history books would have you believe. The army, it is true covered up for them and made them heroes, but Edgerton, Mitchell, and Rhind, in reality, took off on their own. They took off without orders or permission, just a few hours before take-off-time, with nothing except a six week supply of oxygen, a portable air-blister, and a few supplies."

Carl studied the man's face. The story was true. In his cadet days, old spacemen had spilled the story too many times for him to doubt its authenticity. "Suppose you tell me what all this is getting at?" he hedged.

Hamlin crossed the room. From a desk drawer he removed a palm-sized photo-cartridge and inserted it in the video adaptor. The room lights dimmed as the three dimensional screen brightened, dancing in a kaleidoscope of color. The colors merged.

He was staring into a vivid reproduction of a Venusian landscape. The picture had been taken from a small hill. Below was the violet-brown monotony of a saroo forest, visible only in small islands, where the roof of the trees stabbed out from the swirling green fog. And beyond that, almost lost in the haze, was the outline of a pair of reddish-brown spires, that reared out of the jungle, rising, till they were lost in the ever present layer of upper clouds that shrouded the planet. It was an ugly scene—ugly, yet strangely beautiful.

The camera swiveled in a 180° arc. They were looking up the hill now—looking up to where the hill tore itself loose from the green-fog level, rising for perhaps half a mile, then disappearing in the white ocean overhead. Halfway up the hill was a cluster of flare trees, their purple-brown leaves drooping in the ammonia-soaked air, and underneath the trees, a house—not the blister-type oxygen tents used by the military, or the thatched hovels of the chowls, but a real earth-style house with a peaked roof and pillar supported porch. Abruptly, the picture widened into a sharp closeup, revealing an open doorway. A man—an earthman—stood framed in the threshold. He was a clean-shaven man, probably in his early twenties. Two other men slightly older, lolled in a pair of rustic chairs set on the open veranda. Apparently none of the men were aware of the camera that recorded their every move.

Carl was aware of his hands gripping the chair arms. Except for the weird backdrop of flare trees and raton vines that flanked the house, he might have been looking at a peaceful summer resort in the Canadian

Rockies. But it wasn't an earth picture. These men were on Venus lolling about in their shirt sleeves and breathing in the atmosphere of chlorine and ammonia that was sure to kill a man in thirty seconds!

It was trick photography. It had to be. Quickly, he flicked a look at Dr. Hamlin, then looked back at the screen. One of the men was elbowing himself out of the chair now. He walked to the edge of the porch railing and stared directly into the camera. There was something vaguely familiar about the man—about all the men.

Suddenly, Carl tensed forward on the edge of the chair, conscious of a cold icicle of movement that snaked the length of his spine. The picture on the screen flicked out, abruptly. The room lights were on again, and Stewart Ferguson was studying him with detached insolence.

"Well?" Ferguson asked.

Carl ignored him, and turned to Norman Hamlin. "Did I see what I think I saw?" he asked.

Hamlin nodded.

"But those men!"

"You recognized them?"

Carl swallowed, hard. The highball he'd had three hours before churned up in his throat. "Of course I recognize them," he said thickly. "They've been commemorated on postage stamps and cut in stone at every spaceport in the country. But they're dead! Been dead for forty years!"

Hamlin turned up his palms. "You saw the pictures," he said evenly.

"Possibly the military has been deceiving us for forty years," Ferguson drawled. "Maybe they only made up that story about the poisonous atmosphere."

Keating felt a hot flush rise to the back of his neck. "That's not true," he said with obvious restraint. "I was there—for two long years I was on Venus, and it's bad, every bit as bad as the army says it is. You'd have to smell the stuff yourself to know what I really mean. It's so bad that even after you drop your jumper in the airlock and shower, the stuff follows you inside and stinks the ship up from here to Pluto and back again. The army's not lying. Not about that they're not!"

"How do you account for the photos then?"

"I don't know," Carl said wearily. "All I know is that for forty years, no man . . ." He stopped suddenly, as all at once the full enormity of the situation dawned on him. Those men on the screen. He'd recognized them of course from their pictures. But how about those pictures? The pictures he'd seen of Edgerton, Mitchell, and Rhind, were old pictures. . . . Pictures taken almost forty years ago!

AS IF from far away, Hamlin's voice was droning in his ears. "Perhaps it's not quite as ridiculous as you may think, Mr. Keating. There's a widely recognized theory that the very air which gives us life, also gives us death. In fact, one of the chief reasons for the high migration to Mars is the fact that man's life expectancy on that planet is almost thirty percent greater than on our own. Now let's suppose that the three men who deserted the first Venus expedition had in some way found a way to breathe the air of that planet. Is it so inconceivable that the atmospheric content might be conducive to extremely high longevity—perhaps even immortality?"

Carl wanted to say something—anything. "When—when were these pictures taken?" he finally managed.

"Just a little over four months ago."

The voice had an oddly nostalgic ring to it. Carl turned. The man had apparently entered the room unnoticed. He was a big block-shouldered man, with brown eyes and a mat of inky-black hair that all but covered a low sloping forehead. He could have passed for a cargo hand at the Montauk Spaceport, except that Carl knew different.

"No need to introduce myself, is there?" the man said.

Carl shook his head. To Hamlin he said: "Paul Spero just got back from Venus too. We were discharged together—as if you didn't know."

"You should have stuck around Keating," Spero said. "Right after you left, I tied in with a three-day party. You missed out on a good time."

"I'll bet," Carl said. "I take it that you were the one who brought back the pictures?"

Spero forced a grin that didn't quite make the width of his mouth. "That's right.

While you and the rest of the crew were entertaining yourselves collecting fossils I did some research on my own."

"Did it ever occur to you that the military might want these pictures?" Carl asked.

The other man made a noise with his nose. "Just what did the military ever do for me, Keating?" he asked "Fifteen years I spent as a crewman on every flame-buggy from here to Titan and back, and after all that, I get pensioned off a miserable second lieutenant."

"You'll have to admit," Carl said, "there were times when your conduct fell something short of exemplary."

Spero tossed him a sloppy salute. "Yes, Major," he said with mock formality. Abruptly he strode over to where Carl was standing. "I don't think you quite get it yet, Keating," he said thickly. "Try using your imagination. Forget about the griping we did when we were stationed there. It's different now. Edgerton, Mitchell and Rhind have found a way to breathe, and the secret of breathing is also the secret of immortality. Suppose I'd been sucker enough to turn this information over to the high brass? Inside of half-an-hour, those men would have been interrogated. Inside of a week, the information would have been radioed back to Terra. And by now, every one on this earth and his great maiden aunt would be selling their soul to get passage to Venus. And where do you think all this would leave us Keating? I'll tell you where . . . we'd be right here sweating out a priority list long enough to stretch from here to Pluto and back!"

Carl studied the man's face. "I take it then you didn't talk to these men when you took the pictures?"

Spero shook his head. "No," he said carefully. "At first I had all I could do to keep from running up to them, but then I figured that if they saw me, they'd know there was a spaceship on the planet. All kinds of things went through my head; one of them was that maybe they were sick of Venus and would try to make contact with the ship and spill their story. In the end, I just hid behind a clump of saroo trees and took the pictures."

Carl let his gaze wander about the room. He had to think. Then, almost as if it had been prearranged, he found himself looking into a full-length mirror on the far wall. The reflection he saw wasn't old—the hair, while slightly lighter at the temples, was still for the most part dark-brown. He had a good build too, and except for a few creases radiating from the corners of his eyes, his skin had the smooth sort of thickness that many men in their middle-thirties would have envied. He'd kept himself well. It would probably be fifteen or twenty years yet before the almost invisible lines in his cheeks and forehead would begin to widen into deep grooves. But it would happen. It would . . .

And it didn't have to.

He knew what the proposition was now. He turned to Dr. Hamlin. "Let's see if I have it figured," he said. "You want to go to Venus and look for this fountain of youth. Ferguson's financing the trip, and Spero is the Ponce de Leon who knows where to look. All you need is a pilot. Right?"

"Think it over carefully, Mr. Keating," Hamlin said. "Don't be hasty in your answer."

Spero too had noticed the note of rejection in his voice. "You'd better grab the chance, Keating," he said. "Right now I'll admit I don't like Venus anymore than you. But we're going to change all that. Right after the migration starts there'll be cities, and parks and railroads. And we'll be the ones responsible for all of it. We'll be heroes—not just for ten or twenty years, but forever!"

"Did I hear someone say forever?"

The voice had a resonant, almost musical pitch to it. It was deep and throaty, more like an adolescent boy's voice than a woman's. She was standing at the arched entrance to the library, one hand balanced on the jade statue flanking the threshold. She had finespun taffy-blonde hair and a complexion to match. She wore a gray-green krylon dress, the same color as her eyes. It looked good on her. A space jumper would have looked equally well.

"I don't believe you've met my daughter," Dr. Hamlin said. "Diane, this is Mr. Keating."

Diane crossed the room. The pressure of her fingers was quick, and warm and sug-

gestive. "Hello, Mr. Keating," she said.

Carl was aware of mumbling something polite. Across the room, Stewart Ferguson had derricked himself out of the chair. Spero remained seated, caressing the girl with his sultry brown eyes.

Diane flicked an imaginary wisp of hair back from behind her ear. "Have you decided to join us, Mr. Keating?" she said.

"Us?"

She searched his face. "Why, yes. Didn't Dad tell you there'd be five of us. After all, who'd want a slice of immortality more than a woman."

"Immortality for a goddess," Ferguson said blandly.

The soft, red mouth twitched almost imperceptibly. Then the brief look of annoyance was gone. "You will come, won't you?" she said.

Keating avoided her eyes. Again he found his gaze wandering to the wall mirror; looking at his own face, coarse and ruddy looking against Diane's soft white shoulder.

"Count me in," he said quietly.

III

KEATING opened his eyes slowly, dimly aware of the familiar throbbing headache and a dull racking pain around the chest. Hazy-looking behind a galaxy of dancing spots was the instrument panel. He shook his head sideways—hard. The spots dissolved and the big panel board jumped into focus. The ship was two hundred miles above the Montauk Spaceport. He flicked a glance over his shoulder, half expecting to see the familiar blue uniforms of his fellow crewmates. Instead he saw three men and a girl—a girl with long shapely legs and taffy-blonde hair.

So it was true then. It hadn't been a dream after all.

After the passengers began to stir, he turned. "Have a nice sleep?" he asked.

Diane shot him a pale smile.

Stewart Ferguson pretended to applaud. "Splendid Captain," he said contemptuously. "A momentous speech for a momentous occasion. Come, say something more for the history books!"

There was an awkward silence. Then Spero guffawed. Carl bit off the angry reply that jumped to his lips. "All right, I will," he said. "How about someone brewing a pot of coffee?"

Diane got up and disappeared into the galley. Minutes later, she returned with a tray of containers. She stopped momentarily when Spero, leaning against one of the ports at the end of the companionway, said something to her, then abruptly, she quickened her pace. When she handed Carl the coffee her face was a deep scarlet.

Carl Keating stared vacantly out of the blister window watching the fleecy-white rim of the earth roll up toward them. The trip, less than one hour old, was already a hotbed of smoldering emotions. Worst of all, was the fact that things were almost sure to get worse before they got better. Under the best of conditions, space does strange things to individuals cramped together in the confines of a ship. Army records are crammed full of case histories where men, failing to adjust themselves to existing conditions, have reacted in ways which are probably best left in the files. But military men are schooled and conditioned for space, and while complete and mutual understanding seldom exists, there is usually, even as there was between Spero and himself, an unwritten live-and-let-live policy among crew members.

But they weren't in the army anymore, and no one seemed more aware of it than Paul Spero. Never a model officer, Spero in his new-found freedom, had become almost unbearably obnoxious. Nor could he expect any cooperation from Stewart Ferguson. He could handle him, he hoped. All of which brought him to the big question. What about Diane?

It was probably a paradox that while the more unsavory military case histories were due to men being without women, the proximity of a long-legged taffy-blonde in this case was a factor more conducive to mutiny than harmony.

And curiously enough, it was Diane Hamlin herself, who came up with at least part of the answer. She was smart—whether or not she'd been around was a question to ponder over while staring into the star-studded blackness beyond the blister ports. But one thing was certain: the girl had an

almost uncanny knowledge of the working's of men's minds an insight of psychology which she applied diplomatically if not ruthlessly to all aboard.

With just the right amount of good-natured tolerance she either ignored or subtly evaded the bluntly-pointed remarks of Stewart Ferguson and deftly sidestepped the impulsive hands of Paul Spero. On several occasions when a crisis seemed imminent, she disappeared—always good-naturedly and on a new logical pretense—into the small cubbyhole to which she'd been assigned. So tactfully was all this accomplished that they'd already passed the halfway mark before Carl realized that he hadn't spoken to her alone since during the preparations.

HE WAS mildly surprised therefore, when while spelling Spero at the controls during the sleep period, he became suddenly aware of someone standing at his elbow. She was wearing a robins-egg-blue dressing robe, loose-fitting except around the curve of her breasts. She sat down in the co-pilot's seat next to him.

"Mind if I keep you company awhile? I can't seem to get to sleep."

"A pleasure," Carl said with genuine enthusiasm. . . . He stopped awkwardly, wondering what to say. . . . Impulsively, he ran his open hand across the width of the blister glass. "Want a hunk of space, baby. Say where to cut and I'll slice it for you."

She smiled a little. "You sound a little like Ferguson when you talk that way."

Carl pretended to check the dials.

"Carl?"

On his forearm he could feel Diane's fingers. He turned.

"What makes a man like that?"

He moved his shoulders. "I don't know, unless it's because he's always been able to buy anything he's ever wanted. As far as I know, there's only been one thing he hasn't been able to buy, and he's working on that."

"You mean immortality?"

Carl ignored the question. "Why ask me about Ferguson's mind anyhow?" he asked suddenly. "You're the psychologist of this expedition." He watched her nibble on her lower lip for a moment, then went on: "You don't have to admit it. I just want you to know you've been doing a good job. I don't know how long you can keep it up or what happens after we get to Venus, but up till now you've been doing all right. There's only one thing wrong with the setup as far as I can see, and that's that this arm's-length policy apparently applies to me as well as it does to everyone else. I know it's necessary to the plan, and I know it's a selfish argument, but it bothers me!"

She turned and faced him. For a moment it occurred to him she was angry, but when she spoke, her voice was soft, and deep, and lingering. "I'm sorry, Carl, but you can see why it has to be this way. . . . I mean—"

Carl leaned over suddenly and kissed her full on the lips. She didn't pull away. Neither did she respond the way he'd have liked her to. After a brief interval he felt the pressure of her hand against his shoulder.

"Please Carl, not now."

"When?"

She turned away. On the starboard port he could see the reflection of her finely-moulded face. She looked wistful, almost on the verge of tears.

"I don't know, Carl," she said wearily. "Maybe after we're settled on Venus. Maybe after the migration starts."

Keating hacked up a laugh. "Just what makes you so sure there's going to be a migration, or for that matter any little men who never grow old as long as they have their daily diet of ammonia and chlorine?"

He watched her turn, felt her eyes bore into him. "You don't believe it, do you?"

"I'm not sure," Carl said carefully, "I want to believe it, only I've listened to so many bug yarns in my time it's probably warped my sense of values. The whole thing just sounds too fantastic."

"But the pictures?"

"The pictures were real enough," Carl admitted. "I'd vouch for that. It's just that if you'd ever caught a whiff of that stuff like I have, you'd know that no one could breathe it and stay alive for sixty seconds, much less forever."

"What do you think we'll find?"

Carl shrugged. "Who knows? Maybe the story's true. Sometimes I find myself wondering what it would be like to be immortal—I mean after all the willful-wishing's over

with, and you get down to thinking about it in terms of 'what's-in-it-for-me.' Most of us think of immortality as being something we could have on our own terms. But suppose everyone were immortal, the way they'll be—or could be—after this so-called migration starts. How much will people have really changed. They'll have just as many problems—bigger ones in fact, 'cause they'll be living on what to me is just about the God-awfulest hunk of crud in the galaxy. And the only thing they're getting in the way of compensation is the knowledge that these same troubles are going to go on forever."

She was staring at him now—attentively with her lips slightly parted. "You feel this way, and you still agreed to come," she said evenly. "Why?"

Carl forced a smile. "Like I said, maybe I can have it on my own terms. It's a gamble, but if it pays off it'll be worth it."

Diane got up. "I'd best be getting back," she said.

He watched her till she disappeared around the corner of the companionway. Then he fixed his gaze on the marble-sized disc to the right of Polaris.

"Immortality, and thou," he murmured.

CARL KEATING nosed the ship into a standard satellite maneuver, circling the planet twice before he cleaved into the unbroken ocean of ammonia clouds that shrouded the planet. Then they were falling—falling through a smoky whiteness that boiled against the portholes, settling in spots, and condensing into tiny rivulets that ran the length of the amber glass. The ship shuddered sharply three times as its powerful thrust engines reached out, challenging the herculean fingers of gravity; fighting them—fighting them to a draw. Then the misty ports cleared, and the ship settled with a gentle bump in the center of a broad meadow.

Not till after the controls had been checked, and the atomic reactor switch set to recharge, did he look at the passengers. They were standing in the companionway, their faces pressed against the ports. He crossed the control room and peered over the bony shoulder of Norman Hamlin.

Dismal-looking, even through the amber glass, the miserable panorama rolled away from them. A quarter-mile away, the meadow ended at the rim of a small ridge, beyond which a hill dipped down—down across the roof of a purple-brown saroo forest that merged with an abyss of swirling green fog that swallowed up the horizon. In the foreground, a few packing cases lay scattered about in front of a large white hemisphere topped by a radio antenna and American flag. It was all there, exactly the way it had been left by the military almost six months ago.

"That's a permanent building," Carl said to no one in particular. "Just before we evacuated, Colonel Brophy stocked it up with all our excess supplies, just on the chance someone might be crazy enough to come back here. We even left the separator running when we left. So take a good look at it, 'cause inside that bubble is the only breath of air on the whole planet."

"Very nice of the military," Ferguson commented dryly.

"Let's hope we won't have to use it long," Dr. Hamlin said.

Carl looked out the port. Rain, that doused the planet almost twenty hours a day, had started to fall, settling in small puddles at the base of the ship and drenching the broad-leafed saroo trees.

"I wouldn't bet on it," he said.

As if in a trance, Diane continued to stare at the melancholy landscape. "It's more that awful color than anything else," she said finally. "It makes everything seem so angry looking. How about the rest of the planet? Is it all like this?"

"No," Carl said, "it's not all like this. That's the trouble. This is one of the more livable spots. That's why it was chosen by the military. Roughly ten percent of the planet lies above water, but out of that, only five percent of the terrain is in the visual belt."

"I'll play the straight man," Ferguson said. "Tell us, Captain, what is the visual belt?"

"The visual belt represents the altitude from approximately three to four thousand feet above sea level," Carl told him. "Below that you have the green ground haze you see over the tops of those trees, and above it is the ten-mile-thick layer of clouds that

never lift. Both are so thick, that except around the fringe areas, you can't even count your own fingers."

"Nice place to take your girl for a walk," Ferguson said, looking at Diane pointedly.

"Is anyone interested in what I think?" Spero said suddenly.

"Think away," Carl said. "Who's there to stop you?"

"That's exactly what I'd like to talk about," Spero said grimly. "It seems to me that for a fellow who left his rank back at the separation center, you've certainly been assuming a lot of authority around here."

Carl felt a warm flush rising to his cheekbones. "We've been in space," he said. "The pilot of a ship is responsible for the actions of everyone aboard."

Spero jerked a thumb at the blister port. "I've got news for you, Keating," he said. "We're not IN space anymore, so you may consider yourself relieved of your authority. For five weeks now we've watched you swagger around the ship like the hero of a grade-B space-opera, and frankly I think we're all a little sick of it!"

"Aren't you dramatizing this a little heavy." Diane said suddenly.

"Shut up!" Spero said harshly.

Stewart Ferguson sat down, folding his hands in his lap. "My, my," he said. "A real live mutiny, just like one reads about. Tell me, when does Jack Jupiter come crashing through the lock door?"

"I wasn't aware that anyone in particular was in command," Diane persisted, "but if you think we need someone, I'd suggest we take a vote."

Spero grinned. "No, honey. We all know who your money's riding on. That's why you can forget all those dreams about you and Keating settling down in a saroo covered cottage for the next three or four thousand years. You see, I've got different plans."

From the slash pocket of his tunic Spero suddenly whipped out a snub-nosed needle gun, waving it carelessly across the width of the cabin. He flicked a glance at Ferguson.

"Surprise," he said. "Jack Jupiter just crashed the lock-door. I'm Jack Jupiter!"

"You'll never get away with this," Carl said.

The smile on Spero's face broadened. "Oh, come Keating. How corny can you get? I have gotten away with it. Since I'm the only one who can lead you to immortality, what's more natural than for me to take command? My first official act will be to detail you, Ferguson, and Dr. Hamlin to go outside and activate the blister. You'll find space jumpers in the airlock. Diane and I will stay here and figure out a plan of action."

Carl took a step forward. "I'm afraid we can't go along with your plan," he said quietly.

Spero leveled the lethal end of the weapon against his chest. "You're acting stupidly, Keating. You know you can't stop me, just as you know I'll kill you if you try. You above all people should know that."

There was a stagnant silence, during which Carl held his ground. Violently he was aware of the beating of his own heart. The tapping got louder as he watched Spero's finger tighten on the trigger. Then suddenly he realized it wasn't his heart. SOMEONE WAS TAPPING ON THE THICK GLASS INSIDE THE CONTROL ROOM.

Spero heard it, too. For a confused moment, his trigger-finger relaxed as he tried to flick a quick glance toward the source of the sound.

Then the world exploded in his face.

IV

CARL left Spero lying on the floor where he dropped him. Stopping only to scoop the gun off the floor, he ran to the control room. The tattoo on the glass stopped when he entered. A face peered in at him—a face curiously without emotion. It was a hairy-face, except around the eyes and mouth, where three patches of yellow skin peeked through, giving the appearance of three yellow bull's eyes.

Carl stared at the creature, fascinated. In his entire stay on Venus, never had he observed a chowl at such close range. For perhaps five seconds the chowl stared back at him, then quickly bounded off the ship and disappeared toward the forest.

He turned. Diane, standing at the entrance to the control room was regarding him curiously. "They look almost human, don't they?" she said.

"They are human," Carl told her. "Humanoid anyhow according to the people who are supposed to know about these things. We don't know too much about them really. They're so timid, it's a novelty to get within half-a-mile of them."

"This one wasn't."

Carl scratched his head. "I know. It's the first time I've ever got that close to one. I guess he didn't know what a spaceship was. You notice he didn't wait very long after he saw us through the window."

"What are you going to do about Spero?" Diane asked suddenly.

Carl walked over to the gun cabinet where he poked around a moment, then returned with the key. "I don't know," he admitted. He placed both hands on the girl's shoulders. "Just how much does this immortality really mean to you?"

Diane appeared to think about it a moment. "I'm not sure. I'm not sure at all. Sometimes I find myself wondering if I'm not more interested in finding out how it's accomplished than I am in applying it to myself. Do you feel that way, too?"

Carl looked out the window.

"I've always felt that way," he said.

SPERO, aided by Dr. Hamlin, was just beginning to stir when they returned. He shook his head dazedly for a moment, then sat up massaging his jaw.

Keating regarded him with a questioning stare. "What do you think we should do with you?" he asked bluntly.

Spero patted his pockets and came up with a cigarette. After it had been lighted, he blew the smoke in Carl's direction. "If you were smart, you'd kill me," he said. "Only you're not smart. You know you won't, and I know you won't. So suppose we all relax and stop trying to build up suspense."

Carl dropped his hand inside his pocket, allowing his grip to tighten around the butt of the needle gun. "What makes you so sure I won't kill you?" he said. "I could, you know. The fact you know where Edgerton and his cronies are wouldn't stop me. I could probably find them myself if I wanted to. And I'm not even sure that I want to."

Spero took a drag on the cigarette and derricked himself to his feet. "I wasn't thinking of that," he said quietly. "I just happen to know that you haven't got it in you to kill a man in cold blood, Keating. I could do it but not you. You got too many principles. The worst you could bring yourself to do, Keating, would be to put it up to a vote. And if it came to that, everyone here —probably you included—would vote to let me off on the promise that I wouldn't do it again. Go ahead, put it to a vote. See if I'm not right."

Keating let his eyes wander across the cabin. . . . To Stewart Ferguson, white-looking, and curiously without comment. . . . To Diane, outraged amazement on her face—but still a woman. And to Norman Hamlin, wondering what made the man tick—but still a doctor. He looked back at Spero, blowing small curls of smoke at the ceiling.

No, he didn't have to take a vote.

Impulsively, he waved the gun in the direction of the cubbyhole where Diane had been sleeping. "Get in there," he said tightly.

Spero stubbed out the cigarette, swiveled a tight-lipped smile across each member of the party, then shrugged his shoulders and shuffled into the room.

Carl locked the door and stuck the key in his pocket along with the key to the gun case. While neither of the locks were built for durability, at least Spero would have to make a noise opening them.

To the others he said: "I'd suggest we make our future plans without figuring on Spero's cooperation."

"But how can we," Dr. Hamlin said. "We'll have to find Edgerton, Mitchell and Rhind first. They're the only ones who know the answer to what we're after."

"The secret of immortality is nothing more than the secret of breathing the air here," Carl said crisply. "Let's not kid ourselves about that."

"Well, what is the secret?" Hamlin said impatiently. "I'm sure I haven't the slightest idea."

Carl studied the man intently.

"Haven't you?"

Diane shot him an odd look.

"What's that supposed to mean?" Hamlin said hotly.

Keating ignored the question and jerked a finger at the window. "Suppose we leave Spero here and go over and activate the blister. It's much more comfortable. It'll be a nice change after being cramped up here for six weeks."

"Suppose you explain that statement first?" Hamlin said.

"There's jumpers in the airlock," Carl went on. "I'll explain after we're settled over there. Who knows, maybe by that time I'll be ready to apologize."

"I certainly hope so," Hamlin mumbled. "I can't understand what's got into everyone all of a sudden."

"This way," Carl said.

Inside the lock, he helped each member of the party into a jumper and adjusted the air valves. When everything was in order, he pressed a switch, and the lock-door hissed open.

Another moment, and they were wading through the purple-brown, ankle-deep slosh of Venus. The blister-building was only about three hundred yards from the ship, but the rain—coming down in torrents now—had turned the ground into a soft-slimy ooze that was sometimes knee-deep.

Carl led the way, shouting instructions through the speaker-unit encased in his helmet. Once when Diane fell, he went back and helped her to her feet. Through the helmet glass, he could see her face for a moment. Then she jerked her arm free and plodded on. Behind him he heard Stewart Ferguson swear.

It took a full twenty minutes to reach the building. It was big. Two hundred feet in diameter at the base, it sloped out of the sea of mud like a giant stemless mushroom. Carl led the party around the base to the far side where the lock-door was situated. Then he stopped.

The rest of the party had caught up with him now. They stood in a restless semi-circle in front of the great doors. From behind mud-splattered face-plates, three pairs of eyes were regarding him curiously. He didn't answer their solemn stare. Instead he continued to stare at the great lock-doors.

They were open.

FOR a full minute he stared into the darkness, then he touched the switch of his helmet lamp. The beam, seemingly thick enough to walk on, stabbed into the cave-like interior. He went in. First, he'd have to get the pumps working. Then, after the lethal gases had been pumped out, start the separator motors. Even then, the place wouldn't be livable for three weeks. He swore.

Abruptly, from behind him, he became aware of three flickering beams of light. Diane and the two men were following him inside. He turned, waving his arms backward. "Stay back!" he called. "Wait till I get the lights working."

He watched them stop.

And then, the lights WERE working. They came on all at once, illuminating the big structure with dazzling brilliancy. From behind him, he was aware of the staccato crackle of a squawk-box being readied for use. Then, like a bass drum in a brick tunnel, a voice boomed out of the stillness:

"Welcome! Welcome to Venus!"

He stepped back, trying to peer over the row of packing cases. The voice had originated from the control room at the far end of the building. He flinched when something touched the sleeve of his jumper, then relaxed when he saw Diane peering at him through a mud-stained face plate. The men had joined him, too, looking at him and shifting from one foot to the other.

The squawk-box was silent now. Impulsively, Carl allowed his gloved hand to brush against the butt of the needle pistol holstered in the webbed-belt of his jumper.

"The gun won't be necessary, I assure you. I'm unarmed!"

The speaker stood at the far end of a corridor of wooden cases, spotlighted in the glow of an overhead lamp. He was a young man, with close-cropped sandy-blonde hair. He wore a blue spaceman's uniform—obviously salvaged from one of the cases.

He remained motionless a moment, like a man waiting for the press photographers to finish, then walked slowly toward them, his bare hand extended in greeting.

"I'm Raymond Edgerton," the man said.

Awkwardly, Carl grasped the bare hand

with the thick glove of his jumper. "I know," he said. He was suddenly at a loss for words. What DID one say at a time like this? Certainly not the time-worn Dr. Livingston cliche.

Stewart Ferguson said it anyhow.

Carl studied the man carefully, watching the rise and fall of his breathing. The man WAS breathing—breathing the lethal gases that should kill him in thirty seconds.

"You find it hard to believe, don't you?" Edgerton said suddenly.

Carl nodded. "I have a nephew who collects stamps," he heard himself saying. "He has one with your picture on it. It's a rarity now, 'cause it's almost forty years old, but the picture on the stamp looks just like you—just like you do NOW!"

"How is it done Mr. Edgerton?" Diane asked pointedly. "Why is it that you can breathe this air when it kills everyone else?"

Edgerton's eyes narrowed when he heard the voice. Then he leaned over and peered into the mud-stained face-plate. He smiled. "I'll be damned," he said. "A woman. A real live woman! Pretty too."

"How is it done?" Diane persisted.

Edgerton's grin faded. He turned to Carl. "You mean you don't know?"

Carl eyed the man, his lips set in an aggravating silence. Then: "Yes, I know. Or at least I think I know. Furthermore, Dr. Hamlin knows too. He's known all the time. Obviously, this girl is the only one who's still in the dark. I think it's about time someone told her."

"Wait!" Dr. Hamlin said.

"Say, what's this all about?" Edgerton said suddenly. "Where's Paul Spero anyhow? Rhind and Mitchell are waiting!"

Carl flicked a look at Diane, then turned back to her father. "Are you going to tell her? Or should I?"

"Tell me what?" Diane said. "How does he know about Paul Spero? Spero told us . . ."

V

"SPERO told us a lot of things," Carl said thickly. "He told us he'd taken pictures without speaking to anyone. It served his purpose better to keep us in the dark about how this immortality thing was really worked until after we got here. After that, he figured he'd take over and we'd have to go along with him whether we liked it or not. Furthermore, Ferguson and your father were in on it from the beginning, weren't you?"

"Please," Dr. Hamlin said nervously, "it's not near as bad as you're making it out to be. It's only a minor adjustment."

"Minor adjustment!" Carl grasped the arm of Diane's jumper, pulling her along with him through the long corridors of boxes. At the far end of the structure, he found what he was searching for. Three boxes—slitted in front like a zoo cage. And inside the boxes, peering at them through sad yellow-rimmed eyes—were three chowls.

"There's the answer to your immortality," Carl said grimly. "Rhind and Mitchell were both doctors—surgeons. Do you get it now?"

Raymond Edgerton and Norman Hamlin had joined them now. "Mr. Keating," Edgerton said, "I'm sure if you were a doctor, you wouldn't be so squeamish about a thing like this. After all, what's a simple operation?"

"Simple operation!"

Carl reached over clamping his gloved hands on Edgerton's shoulders. Quickly, he raked the steel-tipped fingers of both hands down the man's back. There was a tearing noise, as the open-collared shirt ripped apart at the seams, revealing a broad fleshy back—smooth-looking except for where an angry gash dipped in a deep U between the shoulder blades.

He jerked his thumb back to where the chowls were chattering restlessly in their cages. "In case you don't know it," he said, "chowls are humanoid. They're the only things on this planet with any sign of intelligence. Killing them's not only murder. It's worse than murder. It's genocide! All that has to happen is for this story to get back to Terra, and you'll have every quack who can yield a scalpel up here cutting the lungs out of these poor creatures!"

Alongside him, he was aware of Diane getting sick inside her helmet. Ferguson coughed.

"Since you were apparently aware of this all the time, Keating, just why did you come along?" Ferguson asked.

"I wasn't aware of it all along. It wasn't till I saw Dr. Hamlin nursing Spero's jaw that I began to wonder why he wanted a doctor along in the first place. He needed you to finance the trip, and he needed me to pilot the ship. But why Dr. Hamlin unless there was some need for a surgeon? Then I remembered the chowls, and everything began to fall into place."

Ferguson sat down on one of the wooden cases. "As usual Keating, you're not being very logical. As a matter of fact, he didn't need the good doctor at all. He had two doctors right here. Remember?"

Carl nodded. "Yes, I remember," he said grimly. "That was the part of the puzzle that didn't fit. But now I think I've even got the answer to that."

"Do tell?"

"Yes, I'll tell you," Carl said ruthlessly. "It was because with all the build-up these would-be-gods gave you about this immortality gimmick, they were sick to death of it. They were sick of the loneliness, sick of the rain, sick of the color of purple. In short, they were sick of this foul planet and were willing to trade it in for whatever the earth had to offer them! That's where Dr. Hamlin came in."

Doggedly, Carl spun on Edgerton, trying to draw the tatters of his shirt back across his back.

"Who's lungs were you going to take, Mr. Edgerton? Mine, or Stewart Ferguson's?"

"He was aware of Diane pulling on his arm. He turned to the two men in the mud-splattered jumpers. "We're leaving for Terra in an hour," he said crisply. "Are you coming, or staying?"

Ferguson and Hamlin stared at each other.

"Make up your mind!"

Abruptly, Dr. Hamlin walked over to where Diane was standing. "I'm an old man," he said. "All I have back on Earth is twenty years at the most. Stay with me, Diane?"

Breathlessly, Carl watched the girl—watched her shake her head, slowly. "How about you?" he asked Ferguson.

For a long moment, Ferguson appeared undecided. Then he looked at Dr. Hamlin. "I'm in trouble back home," he mumbled. "Bad trouble. They're going to find out about it any day, if they haven't found out already. . . . I—I'd better stay."

WITH Diane grasping his arm, Carl started down the long corridor of packing cases toward the open lock door.

"I'm sorry it turned out this way," he said. "As soon as we ready the ship I'll go back and talk to them again. Maybe they'll change their minds."

Diane didn't answer. Instead she turned a last backward glance toward her father. It was a long glance. Too long. He was aware of her steel-tipped fingers digging into the sleeve of his jumper. He wheeled. Ten feet away, standing in a niche between the wooden cases, was a man. He wore a regulation space jumper and helmet, and was regarding them curiously over the barrel of a Westinghouse-chain-rifle. The man spoke:

"I'm interrupting something, I hope," he said evenly.

The man was Paul Spero.

Carl eyed the man warily. Diane choked out a heavy gasp.

"You should have killed me back in the ship like I suggested," Spero said smugly. "Now I'm going to have to kill you instead."

Carl flicked a quick look at Diane. "What about her? Are you planning to kill her too?"

The overhead light sparkled briefly across the rifle barrel as Spero snapped the weapon to his shoulder. Across the sights he said: "Diane will stay here with me. That's the way I planned it and that's how it'll be."

"I know I'm interfering with your plans," Carl said with mock-concern, "but I don't think she is. Not unless she wants to of course."

From behind the face plate, Spero flashed a double row of teeth. "Stop stalling for time, Keating. You had your chance on the ship, and you muffed it. Now it's my turn!"

Carl waited—waited while Spero's gloved hand tightened against the trigger-switch. The bolt coil snapped back. There was a dull click—nothing else. . . .

"Did you really think I'd be stupid enough to leave you alone with a caseful of live guns?" Keating said thinly.

Bewildered, Spero snapped the rifle down to chest level, fumbling awkwardly with the trigger assembly.

"It won't work," Carl said indulgently. "Before we left the ship I removed the anodes from every gun in the case. It's an old army trick, in case you haven't heard."

With Spero glaring at him, Carl allowed his arm to brush against his own needle gun. He didn't bother to draw.

"I think your friends are waiting for you," he said.

Back in the control room, Carl went through the motions of readying the ship for take-off. Back in the galley he could hear Diane sobbing softly.

Idly, he glanced out of the amber blister ports toward the big sphere-like structure that rose out of the sea of purple mud. It looked evil, and ominous-looking against the rain-sodden backdrop of the saroo forest.

Then from the edge of the tree line, moving shapes suddenly began to make an appearance. He rubbed his eyes. There were hundreds—no, thousands of them. Slowly and curiously they poured out of the rain-soaked forest, deliberately converging on the open lock-doors of the huge, white building. Some were carrying sticks, some stones, some nothing. It was as if the mystic forces of evolution had chosen this exact moment to endow the chowls with an emotion hitherto lacking in their makeup. Call it hate; call it self-preservation; call it anything you like, it was something they hadn't had before, yet needed badly.

Quickly, he bit off the half-formed cry that rose to his throat. Diane was still back in the galley. He was glad she wasn't watching. Actually there was no need for her to know about it ever.

Silently he made a vow never to tell her —even as a few moments ago they'd both vowed to keep another secret: The secret that could spell the life or death of an entire planet.

THE FATAL THIRD

By THEODORE L. THOMAS

Peace had had its fling in the 21st century. Now was the time for violence . . . and rugged Third Officer Webster . . . and the miserable Uranians who knew not what they unloosed.

HANFORD WEBSTER, third officer of the space ship *Polaris,* was afflicted with what would have been known in the twentieth century as a first class jinx. However, more about the jinx later. He wasn't thinking about that right now where he was on duty standing his trick in the astrogation chamber. The fleet was nearing its destination—Uranus. And then it happened.

One instant the ten-ship Earth fleet was streaking through space. The next moment nine of the ships broke up into small pieces, actually disintegrating there in his visi-plate before the bulging eyes of Mr. Webster. Twisted fragments of metal formed a cloud in space and began to fall in a gentle arc toward the planet Uranus some fifty thousand miles away. It was a hideous cloud, liberally sprinkled with frozen bits of human beings who had been the pride of the space fleet only a split second before.

The tenth ship almost didn't get away. It was flying lookout position four hundred miles behind and above the main fleet. Even so, it got a severe jolt—like smashing into a solid wall. If anybody except Third Officer Hanford Webster had been at the controls God only knew what would have happened.

Third Webster saw the whole thing in the visi-plate just as his own ship gave a mighty lurch. A lesser man might have blacked out under the shock. But Webster kept his faculties. Almost automatically he kicked the *Polaris* in a wide circle away from the tiny ship that had put out from Uranus. And at the same time he started to check the damage.

"First," he called over the intercom. "First."

No answer.

"Second," he called.

"Here," came a weak answer. "What happened?"

"I don't know yet, but we're the only ship left. Find the First and come up."

"Okay."

One after another Webster checked the crew. No one dead or even seriously hurt. Fourteen men had been knocked out. There were a few sprains and pulled tendons and at least one bruised soul. Even disaster seems to have a sense of humor. The Chief Machinist had been sitting in the head when the blow struck. They found him there helpless, thrust deep into the toilet, wildly cursing.

The First arrived at the Control Room. The *Polaris* by this time was heading swiftly back to Earth.

"Have you warned Earth?" asked the First.

"Not yet," said the Third, "I've just finished checking. We're in good shape."

"I'll tell them then," said the First. "What a surprise this is going to be. It will upset everything."

And so the call went out to Earth. The Uranians had destroyed an Earth Fleet at 0622 Greenwich on April 13, 2072.

Right after the *Polaris* grounded, its officers were summoned to appear before the World Court. All the officials were there. Every branch of science was well-represented.

Third Officer Webster led off. He minutely described what he had seen. He explained how the *Polaris* had acted. But it had happened so fast that his description was sketchy. No one was able to figure out how the Uranians had done it. Webster's best guess was:

"It looked like the ships were yanked off their course and just broke up under the

strain—like a strong magnetic field suddenly appeared in the middle of them. But that couldn't be."

The others agreed. Scientists long ago had found that things like death rays and peculiar beams could never exist. It was impossible to get enough energy in an extended beam to have any effect on anything.

Several hypotheses were proposed and rapidly shattered. The question of what had done it reached a blank wall.

But even more puzzling was the question of *why*. The Uranians were utterly incapable of bearing the malice necessary to start a war. They were as detached and unemotional as a rock.

Again the Court got nowhere.

Doctor Trant stood up.

"I don't think we can separate the two questions, *how* and *why*. So I recommend that we play back all the tapes we've made since we first contacted Uranus. Most of us know the whole story already, but with all of us listening together we might pick up something we've missed."

IT WAS a good idea. The Court decided to start the recital the following day in the Great Auditorium; it would take until then to get everything organized. In the meantime the scanners continued to watch Uranus for signs of any hostile move.

That night the Spacemen's Bar was unusually crowded. It was mostly due to the Uranus situation, but not entirely. Third Officer Hanford Webster had been a Third Officer for six months now. He was due to pop again anytime and get busted. And when he did the Spacemen didn't want to miss it.

Han Webster was a monster of a man, huge and ugly. He had a face like a bottle of warts topped with a great shock of brown hair. He stood six feet seven, barefoot, and weighed in at two-hundred and sixty-three pounds, plus or minus five. Yet there wasn't an ounce of fat on him. He had hands like two bales of hay and legs that were as big as most men's waist. Despite his bulk he moved like a cat; he was beautifully coordinated.

None of those that knew him ever realized he was ugly. His quick laugh and ready friendliness seemed to change his warty complexion into one of peaches and cream. He was probably the most popular man in the whole select group of Spacemen. There was only one thing wrong with him; he never took the trouble to avoid trouble.

Webster rose quickly through the ranks once he got out of Space School. His mind was as alert as his body so he outdistanced all his peers; the seniority system of promotion had long since been outmoded. A man rose on his own merits.

Webster had been a Third Officer only three months when he ran into his first little difficulty. He was strolling down the center of the street when a parade headed by a band started coming the other way. A burly Space Patrolman kept just ahead of the band clearing the way. When he saw Webster he called out:

"Out of the way, Third."

Somehow that didn't set right with Webster, so he just stopped and looked at the Patrolman. The Patrolman got annoyed and made a fatal mistake. He laid his hands on Webster. The next instant he sailed through the air and landed at the feet of the crowd that was beginning to form at the curb.

Webster started to leave but by that time the Drum Major was up to him. The Drum Major didn't think Webster was moving fast enough so he gave him a little shove. Then things began to happen.

An assessment of the damages later showed that in the battle of Webster versus the Band, Webster was the victor. It took a hack saw to get the trombone player out of the wrappings of his trombone. Several other players were wearing their instruments too. And Third Officer Webster became Sixth Officer Webster.

But you can't keep a good man down. In three months he was up again.

The second incident wasn't his fault at all. He was leaving the Post Delicatessen one night after buying cold cuts. As he approached his runabout he saw someone fiddling with the controls, apparently about to drive off in it. With a roar he heaved his package at the dimly-seen figure. The package burst open from the jet-like power of his huge hand and various objects sped toward the intruder like a charge of buckshot. One of them found its mark. But Webster wasn't so proud of his aim a moment later when he pounced on the man. Webster

had conked himself an Admiral. The Admiral struggled groggily to his feet. He had been hit squarely in the mouth with three feet of whistling liverwurst. It took the medics two days to make the Admiral a new set of teeth. But it only took the Board fifteen minutes to make Webster a Fifth.

It was along about then that Webster's friends began kidding him about never getting beyond Third. He didn't mind—not too much. And the next time he got up to Third he kept an eye on himself. So did half the Fleet. But it didn't do any good.

He was standing at the bar one night chatting with a few friends. He'd had a couple of drinks, but nothing much. None of the Spacemen drank much. Anyhow a group of eleven men gathered behind him and began needling him. He good-naturedly parried their remarks for awhile. Then one of them called him a cave man.

Webster's great hands were resting on the bar. His muscles tightened. He spun around and charged right through his tormentors. Since he happened to be carrying the top of the bar at the time, the fight ended right there. But the Board took a dim view of a man that destroyed property. So Webster was reduced to Seventh.

There was no doubt about it. There was a jinx riding on the Third Officership as far as Webster was concerned. He couldn't overcome it. Everytime he got there those two drag-buckets he used for hands would push him back. And there was no way to overcome it. He was living in the wrong kind of world.

WEBSTER was a man built for violent action. If he could have joined Count Raymond IV on the First Crusade the other eight probably wouldn't have been necessary. Or if he could have stood with the Housecarles at Hastings that October day in 1066, Harold would have been king of England, not William. Webster should have lived in the days when a brilliant man with a powerful body could carve himself out an empire if he wanted to.

But he didn't. Instead he lived in a world that hadn't seen a war in over a hundred years. Violence was dead. Even sports calling for physical contact had vanished. Weapons were unknown except in museums. The only competition to be found anywhere was in such sports as track or swimming or tumbling. Webster excelled in those but it wasn't enough. Something deep in his nature called for more. And unfortunately the call always seemed to come when Webster's superiors were considering moving him from a Third to a Second. But after surveying the wreckage they always changed their minds and moved him the other way. Webster was a man born a thousand years too late. And the only place he could even begin to use his talents was with the Space Fleet. He was almost happy there.

The whole Fleet was rooting for him when he got his Third for the fourth time. The seventeen-hundred men that manned Earth's seventeen space ships were all behind Webster to help him over the fatal barrier. Even those that bore the scars of his violence were all for him. He was too good a man to dislike.

But Webster's problem shrank to almost nothing after the disaster that destroyed over half the Space Fleet and killed nine hundred of the world's finest men. The Spacemen were in a murderous mood. All of them had lost good friends. They were a closely-knit body and there wasn't a man left among them that wasn't ready to blast Uranus right out of the system.

But with what? There was no such thing as a war weapon any more. Of course it would be possible to assemble one of the old lithium-hydride bombs, but there didn't seem to be any chance of getting close enough to Uranus to do any good—not with the new weapon the Uranians had. There was nothing to do but wait and see what turned up at the Court tomorrow. So the Spacemen milled around the Spacemen's Bar that night, grumbling and restless and keeping half an eye on Webster.

THE recital started early. The auditorium was packed. Many of those there had been on Uranus and knew what the Uranians were like. The recital was old stuff to them. They heard how the rocket ships had successively explored Venus, Mars, Jupiter, and Saturn and found them all lifeless, even sporeless. They heard how the ships approached Uranus with no lively hope of

finding anything worth while—of everyone's surprise to discover an advanced civilization flourishing there. They heard the transcribed voice describe what the Uranians lookel like:

". . . about a hundred and fifty centimeters tall. They have three legs and three arms each composed of three segments of massive bone surrounded by a heavy layer of fat and leatherlike skin. Each limb terminates in a small prehensile finger. The body measures forty-five centimeters in diameter on the average. The top portion of the body has three eyes, three nostrils, and two mouths. One mouth is used for water, the other for food. In appearance, the Uranians seem outlandish to Earthly eyes. They walk . . ."

The experienced men smiled. Outlandish, he says. They looked like a three-armed watermelon sitting upright on a three-legged stool. A man could drive himself nuts trying to keep track of how they walked. Two feet were always on the ground, the third one moving forward. Each foot took its own turn. The end result was that each Uranian seemed to have dozens of feet when he was in motion. And he could change direction with the startling suddenness of an ant. His body wouldn't turn at all; he'd just suddenly begin moving off at a tangent.

". . . no language as we know it. They communicate with one another in short bursts of sound which verge on the supersonic. We understand their speech only by means of instruments which graph the duration and pitch of the sounds they make. As a consequence our intercourse with them is limited. We have been able . . ."

Frank Wadden smiled to himself, remembering the endless hours on Uranus trying to make sense out of the shrill bleats of the Uranians. Wadden's Group Leader had been the man that finally found the key. Like all keys, it had been simple. The shrill bleats were a code. Each bleat of a certain pitch and duration conveyed a concept, a word picture, in much the same way that the Chinese language did. But the human voice couldn't reach the high range where the Uranians conversed, so sound machines had to be used. And they were far from satisfactory.

". . . disease among them for fifty thousand years. They now do very little medical research since, in the absence of disease, none is required. Those suffering from organic malfunctions are either cured by surgery or exterminated. There is no question but that their medical skill is of a very high order. They have arrived at a point which we will probably never be . . ."

Doctor Trask snorted. Yeah, they were great doctors all right. No wonder. With no animals to experiment on they simply used each other. When a Uranian doctor needed a guinea pig he merely stepped outside his laboratory and snagged the first passerby. And many of their diseases in the old days had been wiped out by killing off all the victims. Medical students learned anatomy by cutting open their fellow-citizens alive. New foods and liquids were tested by observing the reactions of those who swallowed them. Yes, sir. Their medical skill was of a very high order.

". . . only possible because their nervous system does not register pain. In fact, their nervous system is such that they are completely emotionless. There is no possibility for a Uranian to feel any of the Earthly emotions such as love, hate, rage, or pride. They approach the status of vegetation in that respect. They . . ."

That was something that had always puzzled Johnson. He couldn't understand how it was possible for a reasoning creature to be such a cold fish. He remembered the day he had landed the *Vaga*. Just before the ship settled to the surface three Uranians had blithely strolled into the rocket's blast and fried themselves. Johnson had been horror-struck. But it didn't bother the other Uranians in the vicinity. They calmly disposed of their countrymen's cinders as though they were throwing away a burned-out match. They were completely disinterested in the whole incident.

BOLTON, too, had faced that disinterestedness, but from a different angle. Bolton had been with the Group that tried to find out if the Uranians had wanted anything that the Earth could supply. He had tried to show the Uranians something about Earth foods and Earth science. But the Uranians weren't interested. Often right in the middle of a difficult conversation the Uranian would just up and walk off.

It wasn't that he was annoyed. He wasn't capable of being annoyed. It was just that he'd thought of something better to do. It was frustrating as hell.

". . . science as advanced as our own along a few narrow channels. Their rocket fuel is very similar to our Ozonile but they have never used it to explore anything outside their planet. Their IR scanners too are strikingly similar to ours. In the discovery of the Kant Alloy though they have surpassed us. A pellet made out of this alloy will attain a high velocity when it is immersed in a magnetic field. The velocity has been known to reach the same velocity as our space ships, namely one-ninth the speed of light. Unfortunately only a very small pellet can be accelerated in this manner.

"Temperature plays a very important role here. The Kant Alloy will not accelerate except under the extremely frigid conditions as they exist on Uranus or in space. Our latest information shows that the Uranians have been making attempts to increase the velocity of the pellets. Our magnetic shields will still protect our men and ships, however, no matter how fast the pellets travel. We need not worry about future carelessness from the way the Uranians use the Kant Alloy. They . . ."

Grizzled, gray-haired, Don Hedge closed his eyes. He had been aboard the *Altair* the time the Uranians got careless with the Kant pellet. He'd never forget it. He had been standing by the fuel pumps as the *Altair* prepared to land on Uranus. Suddenly the whole ship reeled from a tremendous blow. Concussion stretched out half the crew. The scream of escaping air filled the ship. Only the quick action of two crew members saved them from asphyxiation. Everybody aboard thought they'd been hit with a tiny meteor. But as soon as they got down to Uranus several Uranians came over and began taking measurements of the two holes in the *Altair*. It was so unusual for them to take an interest in Earth ships that the crew got suspicious. A few laborious questions brought it out. Oh, sure. The Uranians were conducting a little experiment—had to find out what the little pellet did to an Earth ship. There was a stunned moment's hesitation; then the Earth crew jumped them.

That fight brought two factors to light. One; a Uranian would fight when he was personally attacked by a foreigner. Two; a Uranian was just about the equal of an Earthmen encased in a space suit. Don Hedge remembered that fight proudly. He'd done well for a young fellow in spite of the difficulty of coping with three arms. He would really have fixed his Uranian if Jones hadn't stepped in with that spanner wrench.

The Uranians forgot about the fight as soon as it was over. They didn't hold a grudge; they felt no malice. But every Earth ship and every space suit was modified to carry a gentle magnetic field over its entire surface. And there was never any more trouble with the Uranians and their scientific experiments.

The recital droned on.

THIRD WEBSTER stirred restlessly, not listening. Somewhere here lay the answer. Somewhere mixed up in the Kant Alloy and magnetic fields lay the solution they were all looking for. It couldn't be a ray; science had shown that to be impossible. Or had it? The Uranians were good along certain lines. It would be just like them to pop up with the impossible.

The recital ended toward evening. Immediately Ashdown's clean deep voice cut in:

"Gentlemen. One thing seems obvious. Whatever it is they've discovered, they are only testing it out. They are not trying to destroy us. If that's the case we need only wait until they get enough data, then it will be safe to go near them. It might be safe now. We could send a remote-controlled gig from one of our ships to see if they down it."

The argument started. Some wanted to send bombs. Others wanted to wait and see what happened. But a majority wanted to follow Ashdown's suggestion even though it might mean the loss of one of the eight remaining ships. A vote was taken. Ashdown won.

At reveille the next morning volunteers were called for from among the Spacemen. Every man was ready. So the Board sat down to pick the crew.

Admiral Cantwell was to go as First Officer. There was some discussion about the

Second but he was soon picked. When it came to Third the Board didn't even have to think. Webster. But as his name was being written down one of the Board remembered something. He leaned forward and hesitantly asked Admiral Cantwell:

"Is Webster all right with you, Admiral?"

"Of course. Why not? He's the best we've got."

"I know, but—well. You and he had a run-in so . . ."

"That's done with," said the Admiral. "I shouldn't have been handling his runabout anyhow." He stopped a moment, then went on. "You know. We could clean up this whole situation if we could only get Webster down on Uranian soil, say right in the middle of Central City. Damn. Can you imagine what would happen?" He fingered his mouth reminiscently.

The others tried to imagine it, and couldn't. So they got back to work listing the crew.

At dawn the *Sirius* took off. A hundred thousand miles short of Uranus she swung into an orbit around the planet. That was close enough.

Two hours later the remote-controlled gig was ready. All hands watched it flash away from the mother ship, gathering speed every millisecond, set on a course that would carry it within fifty miles of the rim of Uranus.

Webster sat tensely at a visi-scope in the *Sirius*. Maybe he'd see something that would crystalize the formless thought within him. More than ever he felt he had the answer right at his fingertips. But he couldn't drag it out.

He saw a Uranian ship rise to meet the gig. The two drew closer together. And when they were about ten-thousand miles apart the gig suddenly crumbled. There was no explosion, no sign of a ray, nothing. The gig just broke into little pieces.

An audible gasp went up from the crew of the *Sirius*.

Webster heard the Admiral and the Second talking behind him.

"I didn't see a thing. Did you?"

"No, sir."

"How about you, Webster?"

"No, sir," said Webster, turning around. "But they're getting something across. There's got to be something there."

"Yes, but even our spectroscopes didn't show anything. I don't know. This beats me." He shook his head. "Radio Earth and tell them about it."

Webster did so. He handed Earth's answer to Admiral Cantwell. He grunted when he read it.

"Return to Earth, huh. This has been some mission. Well, we've got to obey it. Take her home."

Webster gave a last try for the answer. His mighty body was rigid with the tension he was under. But it wouldn't come. He was beaten. He gave a big sigh and sat back and relaxed as the *Sirius* swung around toward Earth.

Then it hit him. He had it. He leaped up with a yell that shook the panelboards. The Admiral and Second jumped a foot in the air looking wildly around.

"I know how to get through," shouted Webster. "Admiral," he calmed down a little, "Let me have the other gig. I'll take it down. I can get through. I know . . ." He broke off and headed for the door.

"Come back here," roared the Admiral. "Dammit, man, you scared ten years off me. Settle down now. Tell me what's this all about?"

Everybody calmed down.

"I THINK I know how they do it," said Webster. "If you'll let me take the gig I can soon find out without risking the *Sirius*."

"You're crazy," broke in the Second. "Try it with a remote-controlled gig. It'll only take a few hours to rig it. There's no sense in your going."

Webster ignored him.

"May I try it, sir?"

The Admiral was silent, looking at the towering figure of Webster. He spoke softly, half to himself:

"It's a helluva world when a man can't risk his own neck trying out some fool idea." Then louder. "No. I can't let you. Tell us about it first so I can see if it's any good."

Webster shook his head.

"I'll tell you about it over the radio, sir. Then you can follow me in the *Sirius*. That is—if I'm right. If I'm not, it won't matter."

"In that case, forget it," said the Admiral.

"I'm not going to have you torn to shreds."

Webster started to protest, but the Admiral cut him off.

"No. That's final."

Webster strode out mad enough to spit. He pulled up in front of a bulkhead, raised a mighty fist—and stopped. He didn't even give a second thought to the idea that crashed into his mind. He lit out down the passageway.

Ten minutes later the second gig took off, with Third Webster at the controls.

In the first few seconds Webster had a horrible thought. Suppose the Uranians now had enough data. Suppose their experiments were over and he just flew in, and they didn't even try to knock him down.

He switched on the visi-scope and radio. No. The Uranian ship was turning around and coming to meet him. Good. He reached for the throttle and cut off his rockets. The Admiral's voice came over the radio:

"Webster, you'll get thrown out for this. Come back here. And for God's sake don't slow down like that. You're a sitting duck for them."

Webster cut in his forward rockets to slow himself even more. He turned on the magnetic shield and then spoke to Admiral Cantwell.

"That's the idea, Admiral. All the ships that have been knocked down have been travelling at full speed. And that's what's done it."

He kept his eye on the Uranian ship. It was almost within range. He went on.

"We knew the Uranians were trying to increase the velocity of the Kant pellets. Well, I figure they've done it."

"But they still can't get them through the magnetic shield," said the Admiral, his tone growing less stern.

It was almost time. Webster's speed was down to five thousand miles an hour.

"They don't have to get them through the shield," answered Webster. "I figure the pellets now move at close to the speed of light. So when one of them passes close by our ships going the opposite direction under full power it sets up—"

The gig gave a slight lurch. That was all, just a slight lurch.

"See?" shouted Webster. "They can't knock me down when I'm going slow. The relative velocity isn't great enough."

The Admiral's voice took on a new note.

"I think I see what you're driving at. Mass goes up with velocity."

"Right."

The gig gave another small lurch. Webster laughed and went on.

"The relative velocity between the ship and the pellet is probably only a few octillionths short of the velocity of light. So somewhere in the pellet-ship system a huge mass momentarily appears. It's enough to tear the ship apart. And our own high velocity has been what made it possible. They don't even try to hit us; they just try to come within some minimum distance."

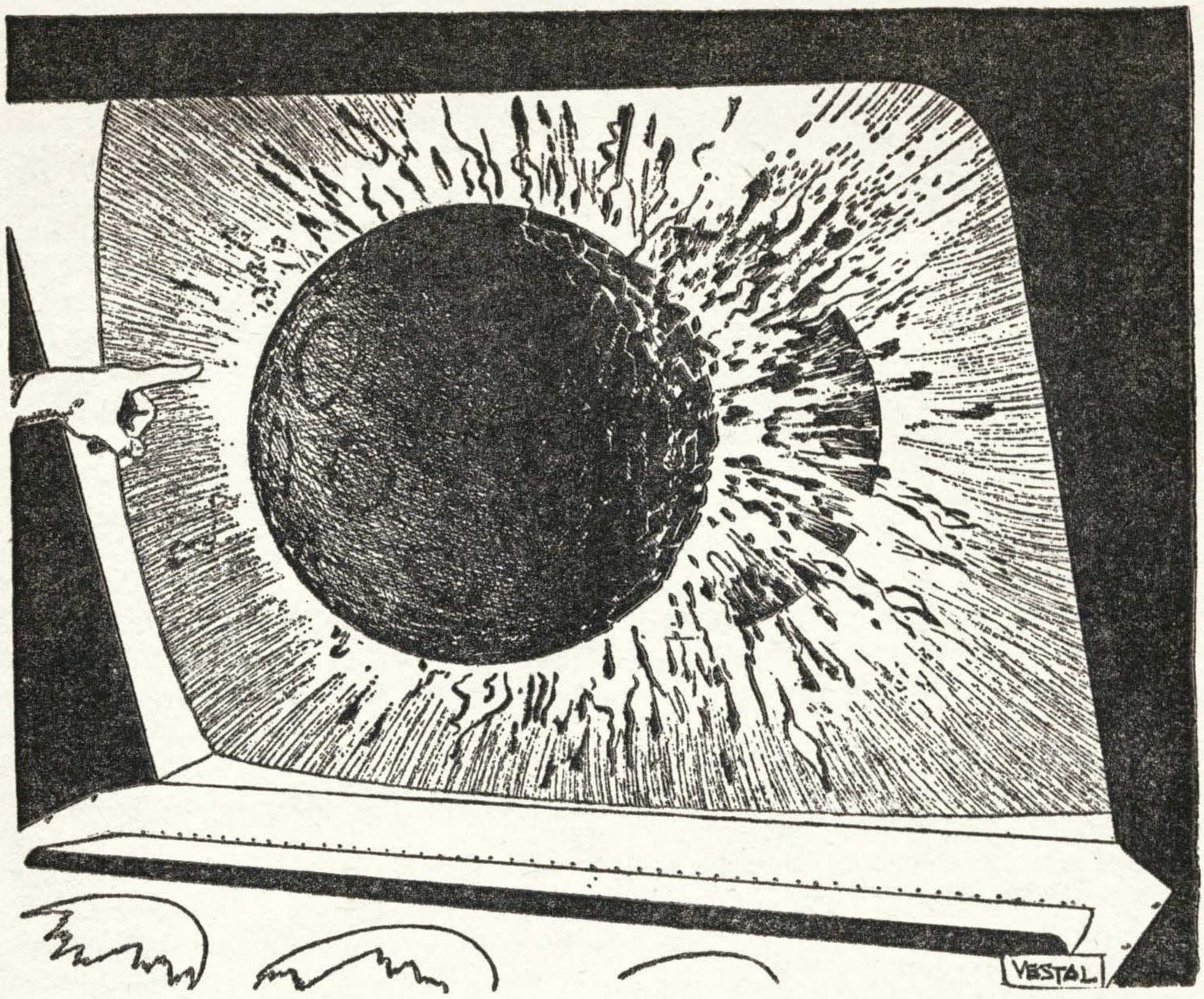
Silence from the *Sirius*. Then.

"Well done, Webster. Well done. Go on in. We'll follow. You've got about a twenty-minute start on us so we'll meet you in Central City." He stopped, then went on: "I owe you something for that runabout incident I guess, so I'll overlook this disobedience. Besides, if you're ever going to get beyond Third somebody is going to have to overlook something. This'll do it. Good luck, man."

Just before Webster clicked off the radio he overheard the Admiral say to the Second:

"The Uranians have one thing to be thankful for. They don't have any teeth."

Webster grinned and happily pulled on his space suit. The jinx was broken. Second Officer Webster coming up. There was nothing but Uranians ahead of him. And just wait till he got his hands on *them*.



BEYOND THE X ECLIPTIC

By FOX B. HOLDEN

Earthman was dying of boredom; Hope had become folly. Work merely a means to avoid insanity. And death was the great reward . . . until Cragin, step-son of darkest space, dared the Barrier; dared to soar beyond the X Ecliptic—to the machine planet—where The Owners grimly governed all the fading galaxies.

EARTH'S eyes still blinked in the bright sunlight in which they suddenly gloried again; Earth's throats, no longer fevered and parched, still wondered at the cool feel of fresh water, which had not trickled down them for more than five centuries. Earth's minds were still ignorant of the answer; they knew only that this was Life, although they had failed by themselves in cheating Death, and had already calculated the dimensions for their graves.

The small calendar on the podium said Sunday, June 9, 3024. Cragin placed a small black notebook beside it. Neither his carriage nor mien were those of the gaunt-faced, tall-browed men of science who sat, ill-at-ease, mute, in the broadly-aisled tiers of the echo-whispering auditorium. For Cragin was not one of them. He was young-old, something of slate and steel; gray, something almost of legend and of the mystery of Deep Space itself. He had the quiet voice of all men who had lived their lives within arm's length of the Barrier.

"Gentlemen," he began, "I doubt if I have many of the scientific answers you

want. In calculated, scientific terms, I am not able to tell you why there is water once more in the river beds, clean air to breathe again, snow once more in winter and rain again in springtime. I know little more than the simple facts that the grass is once more green; that the hell-deserts have vanished. I have come here with few heretofore unknown scientific phenomena which I know you seek to explain the rekindling of the Sun and the replacement of Earth in its old path around it.

"The President told me that all I say is to be recorded so that you can pick it apart with the proverbial fine-tooth comb when I'm finished to see if I've dropped some new hint on which you can go to work. He told me personally that I'm your last hope for a solution to the riddle of the Change, because I'm the only living man who ever took a ship further than a light-year beyond the Barrier; because I've flown more parsecs of Deep Space than anybody else; because I know more about what's out there, and what is not, than you do.

"Add what I have to tell you to the many theories you've already amassed but for which you can find no scientific proof in knowledge as you know it, and you still may not have the kind of answer for which you're looking. Not unless, gentlemen, the Change has taken place in men as well as in the solar system in which their graves were once already dug.

"If, somehow, the little I know is sufficient to give you your answer; an answer which satisfies you completely, then the Change has been to yourselves as well as the ground upon which you walk. If it is not, then perhaps you may never have one.

"A little more than ten years ago, this is how it was . . ."

He opened the notebook.

"I DON'T think it's a runner, sir. Not unless they've found a new place in Deep Space to bootleg their water. But we're hearing English all right."

The communications lieutenant tried for a new track on the com-beam and gambled that there were a few minutes of overload time left in the amptubes. The stacatto whisper faded altogether for a moment, then came back a trifle stronger.

"Blow 'em out if you have to! Mister Grimes, stand by with auxiliary communications." The Stellar Patrol captain readjusted his own headset and waited. It was all there was to do. The drive had been cut; the ship was vibrationless, soundless, and the crew's breath was shallow. Grimes hunched over the auxiliary unit as though waiting for the main amplifier to blow up in the lieutenant's face.

Then it came; weak, but distinct.

Griffin calling . . . this is Griffin calling —SFBB-3. Lost . . . Fowler Griffin dead. This is SFBB-3 can you hear me . . .

"Good Lord, sir—"

"Mister Cragin! Can you estimate her position? Grimes, contact the nearest base in this sector. Get a relay from Earth on the flight plan of Special Flight Beyond Barrier Three. Mister Kramer, I want a running plot of the track every three minutes. Cragin!"

The Captain punched the red FSA driveroom button and the Patrol ship slid from her drift into a white-hot mushroom of speed. The tower deck vibrated beneath Cragin's feet.

"She's further out than I've ever been, sir. I can give you an approximate trajectory, but where she is it's suicide—"

"For how far out beyond the Barrier do you have exact knowledge of critical warp speeds, Cragin?"

"A light-year maybe, sir. No more. Beyond that nothing makes sense; beyond that the variables will shoot any comptometer on this type ship to hell. Beyond the Barrier it's like tight-rope walking between the dimensions and after you get just so far—"

"I know all that. How far out is she?"

"Fifty light-years anyway. Maybe two hundred. I can't tell. I think she's holding for dear life to a critical. If she loses it, we lose her for good."

"You think she'll make it to this side?"

"If she's lost, no, sir. She'll just keep on out there until—"

"Until?"

"Until her comptometers break down, until her drive is exhausted, until she makes a mistake. Until eternity."

"Sir," Kramer broke in. "Three minutes since pick-up. Her trajectory's whacky. She's sort of side-slipping in, but at the

speed she's making, she's going to miss Barrier just by the width of her skin. She'll tangent off sure." Kramer thrust a hastily prepared three dimensional plot-check forward.

"To bring her in we've got to go out and pick her up, sir," Cragin said.

"Grimes!"

"Here, sir." Grimes came up with a similar plot-check, described on a regulation ship's form. The senior Patrol officer compared the two, the flight plan and the running trajectory laid out by Kramer, and Cragin's teeth glinted through his lips as they went slack in amazement.

"God, sir, that's impossible. It *ends* at the square of light-speed!"

"Fowler Griffin is—was—one of Earth's topmost scientists. His work is beyond question, Mister Cragin. More so, perhaps, than that of any other. Your irreverance is out of order."

"Unintentional of course, sir."

"Plot the difference between Griffin's planned return and the trajectory Kramer just tracked. Drive room!"

The sleek Patrol ship quivered with the added thrust of her auxiliaries; her needle-tip nose swung a half-minute to her own three-quarter starboard axis.

"Can we pick her up, Cragin?"

"We'll have to go the limit."

"Then take over the panel, Mister Cragin. Kramer! Attempt return communication!"

"As she sails, sir."

Cragin's thin, sensitive fingers flicked over the flight control panel with a dexterity and familiarity that is born only of a million light years of intimate, sometimes desperate familiarity, and the Patrol ship's complex, high-strung nervous system responded as though it were a part of the man who held its throbbing life in harness.

TO RANDOLPH CRAGIN, born under a dying sun and of a mother dead from desert-parch even as her labor ceased, there had never been life worth the living anywhere but in the cold, clean loneliness of Deep Space.

He had bought odd second-hand parts from a junk dealer to build the first craft he had ever flown; he had made the moon with it before its jets blew and left him with the gray scar that ran from his left temple to the point of his square chin. He had been sixteen then, and too old to scare, too young to deter. From then on, there had been work in a lunar mine to pay for his next ship; then prospecting the asteroids to pay for a better, faster one. There were five years of hauling black muck from Venus and water crystal from the low ridges of Mars before he had the money he needed to build the ship that would take him into Deep Space for the first time, and a couple of years after that doing routine commission jobs of surveying outlying planetoid belts for the government to earn enough to keep his drive alive, and when he thought of it, his body.

In between jobs, when he flew until he was broken again, Cragin found out more about Deep Space and about the Barrier, beyond which only one other beside himself had ventured, than any other man who lived. His predecessor had not. To Cragin it was sort of a challenge—sometimes more than a daring wanderlust, sometimes a little less, when he picked new directions from sheer boredom. But beneath it all, there was something that rebelled; that bordered on resentment, and at the same time on awe. He had never known which was the cause of which, only that the men of Earth (and they were the only men in this lonely system of planets) were dying, and had long since ceased to be awed by anything, or to be stirred beyond the narrow limits of their own complacency. They had achieved all there was to achieve; death was to be their reward. Hope had become folly; work a means to avoid insanity; science the only comfort and pleasure, because it had been thoroughly mastered.

Except, perhaps, for the Barrier itself. Beyond it, Earth science had little hold, its concepts little validity. It was therefore a worthless waste, for it did not adhere to the facts that men said were true. And Cragin had found it difficult to decide why it was that he had chosen to let himself get swallowed up in it. Maybe for the sheer pleasure of laughing because it was so easy (the comptometers did all the work of plotting the warp paths and keeping the ship at the right critical speeds so it wouldn't leave them and go plunging off into dimensions

from which there would be no return) maybe because he hadn't been as positive as he was supposed to be that what was beyond the Barrier was such a waste after all.

To keep himself occupied he remembered what there had been to learn; to recam the comptometers in anticipation of the ever increasing speed of warp shifts; how to change direction and yet keep a bearing on home; how to fly some of it by himself, juggling equations in his head while the comptometers cooled off.

Then two years ago he had joined the Patrol. Chasing water bootleggers who stole from government reserves and sold at fantastic prices was something he hadn't as yet had a hand in. That he had become an officer in a year and a half instead of the usual six hadn't surprised him much; if he weren't a captain in another year and a half he'd resign. And dig the asteroids again maybe. It didn't matter.

"At Barrier in four minutes, sir. Grimes, stand by comptometer One with her coordinates . . ."

Comptometer One rose from a deep hum below the range of hearing into audibility. "Now, Mister Grimes!" Comptometer Two checked in and the hum rose steadily to a high pitched whine. Three came in.

"I've got her on the radar track, sir! There she is—good Lord!"

"Signal her to cut her drive before we lose her altogether. Grimes—" But Grimes was too slow at resetting comptometer cams. Cragin plotted a trajectory in his head and kept alert for the least change in volume of the comps. Deliberately he brought the nose of the hurtling Patrol craft swinging about under the grazing touch of his fingertips and sought to keep the big ship on her warp while he estimated an intersection point.

"Sir," Kramer was howling, "I can't raise—yes, there! She's cut her drive. But she's not bow jetting a squirt!"

"Just get the M-fields ready. I'll tell you when," Cragin said. If there had been any excitement in his voice before, it had disappeared. He knew they'd catch her now. He was on the Patrol ship's back and he knew he could ride it down.

"You've got maybe a dozen seconds, Cragin," the captain told him. "At a drift her critical will be shot to blazes—"

"M-fields!"

The Patrol ship jolted, and Comptometer Five checked in and rose to a scream as the struggle to maintain critical speed with the suddenly increased load was fought. And won.

Cragin manually checked in Six just to make sure, and kicked both ships into the trajectory that would fall them through the Barrier.

Then it was all over, and a tiny, bullet-shaped, explorer-type craft of less than a fifth the Patrol ship's length was secured alongside, her aft tubes still smoking.

Cragin relinquished his command and waited, while two space suited crew members picked their way along the M-field on their portable mag units. It took them less than ten minutes to get back. They carried another form between them; a form smaller than a man's, and limp.

"It's his daughter all right," Cragin said as the Patrol captain waited at his side while the two crewmen undogged the girl's fully-transparent helmet. "Name is Lin, I think. Lin Griffin, student of her father's, and up with the best of 'em, they say. What in hell they were doing out there only she'll be able to tell us. If she'll tell us."

"If she lives to," the captain said.

The oval shaped, sharp featured face was pasty with space fatigue, and the large, wide set eyes were closed in unconsciousness. The short-bobbed, copper-hued hair that clung close to her slender neck and set off the wide forehead was still well groomed, but the high cheekbones on either side of her small nose showed sharply through the taut, smooth skin that covered them, and bespoke perhaps days of near exhaustion. Cragin fastened his eyes on the girl's wide, generous mouth, waiting for some sign of returning consciousness. But there was none.

"Hardly out of her teens," the captain muttered. "Two damn young to die. Get her to my quarters; notify the ship's space surgeon and have him put a corpsman on full duty. Want to know soon as she comes around."

"Aye, sir."

Cragin turned to his superior. "Special orders?"

"Have Kramer make a signal for a hospital ship and sign it with a priority one. That's all."

"Yes, sir. You know she isn't beautiful but she's not bad."

"Too damn young to die. Tell the crew we're back on SOP."

"As she sails, sir," Cragin said, and wondered if the girl would die, at that.

II

IN OLD fashioned black letters, the legend on the thick metalo glass door said OFFICE OF THE ADMIRALTY, SPACE ARM. Cragin swung past it as though it had said Control Room and an officer of the day clad in an Earth Headquarters uniform told him that an Admiral Kirkholland would see him immediately.

Kirkholland's name was on the next door, and under it in smaller letters the single word, "Intelligence." What the hell, Cragin mused, why argue.

"At ease lieutenant. Sit down, Cigarette?" Big, thought Cragin. Tough old bird, red faced, cropped white hair, chief pilot's rockets pinned to the plain front of his tunic. Cragin wondered how long he'd been flying the eight-foot plastaloy desk.

He accepted the cigarette and sat.

"More time we save the better, Cragin. Here it is. You were recalled because your records how you know your way around in Deep Space better than anybody in the whole Arm. HQ figured it'd be a better bet for this job to rely on what Intelligence training a regular Patrol officer gets than to try teaching a specialized Intelligence officer how to handle himself out where only yourself and Lin Griffin have ever flown and gotten back to tell about it. Except that so far, you're the only one who's told anything."

"Not sure I follow that all, sir. I take it Miss Griffin—"

"She's getting along all right. Ready to leave the station hospital in a day or two. Only she won't talk. Just mumbled something about an Ecliptic X when she finally started coming around, cried a little, and then shut up tight. Doctor says it's extreme shock. I don't think so. You can't do reams of mathematics that nobody else can make head or tail of when you're suffering shock. She not only won't talk, but after she finishes each sheet of calculations, she tosses it in the bedside incinerator tube. So I'm making guesses."

Cragin let a little smoke dribble from his nostrils and tried reading Kirkholland's penetrating look.

"The market, sir? There wasn't a gram of water crystal in her ship when—"

"The report's been read phonic by phonic, Cragin. We've had the market pretty well under our thumbs up to now, and we can't go taking any chances. Setting up clay pigeons to lull us into a false sense of security is as old as the Martian ridges but it's worth thinking about if they've found a way to operate outside the Barrier."

"What about the flight plan she and her father had to file, sir?"

"In order, of course. Maybe just a clever part of the scheme. And who would suspect a man of Griffin's caliber and position?"

"I see. She's a definite suspect, then, and—"

"Can't say that. Officially. But because of the circumstances surrounding her return, she's certainly subject to observation."

"My job."

"You've been cleared by HQ, and put on carte blanche answerable to myself only and to the President. As soon as you go out that door, you're on the job. And remember we're not interested in her any further than to whom she leads us. This," Kirkholland handed him a small, smooth, slate-colored rectangle of enamelite with the insigne of Space Intelligence atomically engraved through its molecular structure, "will take care of anything you need at any time from any department of the government and of course from any private citizen."

Cragin recognized and accepted it. He knew that it had been activated to his own unique neurophysical vibration specie, taken of course from his personal record. Within moments it would turn glittering white, and only as long as it was white would it be valid. Taken from him or lost, it would revert to the gray color and belie its bearer as either a chance finder or an imposter.

"Good luck. And I repeat, if we're right, it's to whom she leads us that I want brought in. Now blast off, lieutenant."

"A-blast she sails, sir."

Something new, anyway. Not exactly new, but it could mean tight-roping beyond the Barrier again. Cragin's pulse picked up a beat. Routine as hell of course. Take a week, maybe ten days. But it was something he hadn't tried before. Until he had it all under wraps, it could be interesting.

HE HAD almost lost her in the sudden sand flurry, but it wouldn't have mattered because he knew now where she was headed. He hoisted the aircar a thousand feet and slacked throttle.

"Security channel 12 open. Central Port please ack."

"CP go ahead 12."

"This is Cragin on CB-42-SMBB. Check please and know me by this."

"Clear CB we know you."

"Is that custom job registered under Griffin still in your park?"

"Registered all right and primed to the forejets for a big ride if you ask me. Orders?"

"Whack up her radar, but not with an axe. And warm me up an SP-15 if you've got one, with a ten comp bank. Soup the drive and gun circuits. Want a duplicate of her flight plan. That's all and beam me when she blasts."

"When she blasts."

Then it was just a matter of sweating her out. Once Lin Griffin took her trim craft into Space it would be routine, if her bosses, if she were actually heading for any, didn't risk a track beam on her. If they did and picked him up at the same time, they'd need faster guns than he had.

The SP-15 looked brand new, and Cragin had little more than buttoned her up when flight control beamed him. He kept the Griffin ship tracked for a full minute, let it cut the edge of the Mars ecliptic before he cut in his own drive. She was giving Pluto her starboard when he decided on a comfortable watch dog position, and she was headed for the nearest Barrier co-ordinate within an hour afterward. Just as though, Cragin thought, somebody had written the whole script out for both of them, and all they had to do was say their lines and pretty soon the whole thing would be over.

He checked the gun curcuits, tried the detectors for a track, jacked in the comptometer bank. One began to hum a little and it took him off guard; he hadn't expected it this soon. She had picked up speed and was going like hell even for a Barrier bust. But he was certain she hadn't spotted him, and he was flying in her blind spot to keep out of her electroscopes. Sooner or later she'd check in her radar proximity beams and when they didn't work—If she were as smart as she looked she'd be swinging her electroscope lenses all over the sky.

Her Starwasp took the Barrier bust as though it were just so much Space between Earth and Moon, and Cragin straightened a little in his cushioned acceleration seat. He threw a track of his own on her, got an echo measure on it and entered it as a constant into the comp bank, knocking out the variable that had represented his own control-error margin. It was the only way he'd be sure to keep her. But if she made a mistake or her own comps broke down, they'd both fall off the tight rope.

Three cut in and began whining. Cragin tried a speed check; they'd passed light-speed, and there was no more danger of her catching him in her electroscopes. The velocity needle began wider oscillations, and the hum from Four verified it . . . the critical speed changes were getting trickier. Twenty minutes ticked off, and Cragin knew they were further out than when he'd picked her up two weeks ago. Light-speed trebled.

Back to double. Now times twelve.

Six was screaming. Seven started humming, and Cragin felt his clothes beginning to stick to his back. By himself, he'd never had more than seven comps to fly on, and had never taken the risk of flying past breakdown. That was suicide. The SP-15 had been fitted with ten as he had ordered. According to the books, if you tried to use more than that, the circuits in One would burn up. Nobody, except Fowler Griffin and his daughter, had ever tried past seven except himself. The risk wasn't worth what you got out of it, and listening to a bunch of comps getting ready to blow themselves to hell didn't net you anything but a bad heart.

Eight came on. One began to glow. Cragin knew he either had to break communi-

cations silence or kick himself clear into eternity.

His thumb slipped on the mike switch.

His fingers felt like wet sticks, and the mike was cold and greasy to his touch.

"Calling you Starwasp calling you. This is Cragin, Space Intelligence on a CB. On your track at 900,000 your six o'clock level. Let me hear you, Miss Griffin."

There wasn't any answer and he tried again. Nine was humming. "I've orders to burn you up if you refuse to acknowledge. Ack please." He tried to keep his voice flat and machine-like so he wouldn't give himself away, but he sounded like an hysterical schoolgirl compared to the voice that answered him. It was that of a woman; a woman who might have died and shriveled in the deserts a hundred years ago.

"FOLLOW me, Patrolman, if you have the courage. Turn back if you'd rather be safe to choke your life away on the sterile place you call home. There's a lot of room beyond the Barrier, but little for men who worship merely their own perfection and stay blind to problems which they cannot solve. Or go ahead and burn me up if you think it will be of some help to you."

"Starwasp!" He felt like a rank recruit. But Nine was beginning to shrill. She was goading him, challenging his courage, daring him to burn her when she knew that by so doing he'd defeat his own purpose. "You contraband? I'll give you ten seconds to answer." He was being ridiculous; had mishandled the whole thing. What the hell was the matter with him? She was stalling him, making a fool of him, until his comptometers couldn't take it any more.

"There is more that is contraband where I'm going than you dream of."

"Where you bound?"

"The X ecliptic. Before he died, Fowler Griffin found it. He found the single machine-planet that circles within it. I expect to join him there."

"Miss Griffin . . ."

"I've told you enough. Among the people of Earth there's too much apathy already; my story would only make it worse. Follow me if you want to, burn me up or turn back otherwise. But make up your mind."

"It's made up!" Cragin barked back. "I—" He wondered what she meant by the machine-planet and by the X ecliptic. That was what Kirkholland had said something about. And he wondered about the other things she said. Earth was a sterile place. . . .

"Since I only have ten comptometers, I—"

"That's all I have," came back.

And, in the last analysis, he would be safe just to choke his life away. . . .

"My ten is beginning to hum already—"

"So is mine."

And maybe the people of Earth were stuck on themselves just a little. . . .

"OK, I'll follow."

"You'll have to now."

And they were apathetic, just sitting back, waiting, telling themselves that all had been done that was possible to do. Because they had done it.

"Velocity needle's going crazy—"

She didn't answer again, and Ten was screaming so he couldn't have heard her if she had. Maybe two minutes until it broke up in his face.

The needle went wild. It hit—*just where the original Griffin flight-plan had ended—light-speed squared!* And then it fell off. And Ten cut out, and so did Nine, Eight, Seven . . . Six—Five. Four hummed evenly. And Cragin knew that he'd never forget that impossible series of critical speeds for what remained of his life. Wherever they were, it was within seconds of the absolute . . . a second Barrier, Cragin thought, which existed simply because men didn't know how to devise a way to go any further. But—

"You're in X ecliptic now," Lin Griffin's voice told him. But it was a different voice than it had been before. There was something new in it. Something Cragin couldn't find a word for. "Within it, you'll find flight conditions very similar to those of ordinary Deep Space. In a few minutes, you'll be able to pick up the machine-planet in your electroscopes. That's where we're going. Unless you want to turn back. You can, now that you know how the warp pattern works."

"Trying to shake me?" His hands weren't slippery any more. "I won't shake. You're taking me straight to the boss or I'm placing you under arrest. I remind you that the Patrol's jurisdiction extends to wherever in

Space one of its ships may fly. Acknowledge please."

He felt a sudden, uncomfortable warmth in his cheeks when she laughed. It was a light, almost merry thing. She was doing it again!

"Wherever I am, I rule, is that it?"

"In effect, yes. And—"

"There is no head man, no leader of a giant smuggling ring where I'm going, Patrolman. Just—" Her voice tapered off; the laugh was gone. "I will be easy to follow," she said.

The planet toward which they flew—Cragin could see it easily now in the electroscopes, although he could see no other and the 'scope seemed to draw what stars there were no nearer—was hardly half the size of the moon of earth. It glowed, somehow radiating a pale phosphorescence of its own, and its surface seemed entirely without configuration. Completely smooth, unmarked even by stray chunks of hurtling cosmic waste. It was in a definite orbit, yet around—nothing. It circled in an ecliptic described in three dimensions; they were no longer flying a tight rope, and the comps were quiet. Yet it was an ecliptic that men had never found. Except for Fowler Griffin. As though reading his thoughts, his daughter spoke.

"You wonder where its center is. It has a center. What did you say your name was? Cragin. It has a center, Cragin. Around which it has revolved for untold millenia. Only by accident, while he was searching for an almost negligible mass error in one of his computations, did my father discover that this ecliptic must exist, and must contain at least one revolving body. He found it. He determined its orbit. He found that the solar system itself is the center of the machine planet's orbit. It has neither aphelion nor perihelion, nor does its ecliptic ever shift. It is always perfect."

"I could almost believe you lady if you told me somebody had made it. But you'll never—"

"Somebody did."

"You mean your father—"

"My father discovered its presence, Cragin. I helped him with the latter stages of his calculations; accompanied him out here. He discovered its presence and he discovered its function. And they—"

"Function? You mean it's a mine of some sort? Water crystal?"

"No, Cragin. It wasn't built to serve men. It rules them. For want of a better term, call it a control point. Because the machine-planet has absolute control over the axial rotation and orbital revolution of every planet in the solar system; over the heat emitted from its sun; over the physical laws which are peculiar to each of its planets. Father was trying to learn how to use it. He thought if he could discover how it worked he could readjust Earth, replenish the sun, remake—"

"I don't believe you, Lin Griffin. It's a ruse—"

"I will show you the mark where he died. They killed him, and let me go, half-crazed as I was, to keep men forever in fear of passing through the Barrier. I think they underestimate us psychologically, and that is why—"

"They? Who?" Cragin cut in, disbelief still welling in his brain, edging the tone of his voice.

"The—Owners, I call them, Cragin. They told us they own the universe."

III

IT WAS as gray as the sand-blown skies of Earth in every direction; once past its artificial veil of luminescence, the machine-planet was a colder, more sterile thing than the widest valley on the dark side of the moon. His mind refused to believe what it knew to be true—that the surface of the sphere was hard, unyielding metal, worked in some gigantic factory on some impossible world to an almost frictionless smoothness. After he touched down, Cragin had to keep his forward jets checked in at almost ten times their normal landing thrust to bring the SP-15 to a skittering halt.

Quickly he donned magnetic boots, space helmet and suit, and buckled two short-barrelled Krell guns around his waist. They were loose in his holsters as he clattered toward the opening airlock of the Starwasp. He opened up the suit's intercom.

"Just keep your hands at your sides."

"Don't be ridiculous. I'm here to do a job, not play Junior SP-man. If you want

to help me, I can use you. If not, just keep out of my way."

"Miss Griffin, I—" But Cragin let the words trail off because he knew that for the first time in his life, he was out of his element. True, he was in an unknown Space on an unknown sphere, as he'd been too many times before to count—but this was somehow different. And Lin Griffin knew more answers than he did. He thought about showing her the small white rectangle of enamelite that Kirkholland had given him, but it would make him more the fool. She knew what he was; she had not defied his authority. She had not actually tried to evade him. She had simply talked him into something and he didn't know what it was. Believing her was his fault.

He followed her about a quarter mile over the smooth metal plain until she stopped before a ragged mar that had been forcefully seared into its surface by a distorch. Cragin saw what it was; it was a cross. The girl paused a moment.

He had never seen anyone bow their head to pray before. He stood silent.

Finally all she said was, "Someday I'll make them tell me what they did with him."

"All right. Let's get on with it. Where to now?"

"Not far."

It was only a hundred yards further that they stopped; this time the sear in the hard metal was shapeless, not as deep as the one before and obviously more hastily made. She fumbled in the pocket of her suit, and by instinct, Cragin's hands fell lightly over the butts of his guns. She produced a small, circular thing, pushed a catch on its side, and placed it near the ragged burn.

"A vibrokey," she said matter of factly. "Something father devised. You can find anything with it, once you know the object's vibration pattern. And you can open anything with it. It experiments with all possible combinations of magnitudes and speeds of vibrations, until it simply hits the particular pattern needed. Without it I would never have found the burns I left, and without it we wouldn't get in. Father said it could shake a whole building down . . ."

Within seconds a panel less than a meter square slid back, and he and the girl were beneath it. Then it was closing. There was a passageway of some sort with a totally invisible source of illumination. Almost like what he'd run across beneath the abandoned gold mines on Venus, except. . . .

"Now we have to move quickly," Lin interrupted his thoughts. "We have very little time. They know we're here."

"I didn't hear—"

"THEY know. Down this way." There was another burn, this time on the wall of the long, gently twisting tube. It hurt his eyes; it was like walking down a huge, brightly-polished gun barrel, except that it was not quite straight, and it was hard to tell just when it turned.

"Can you do what your father failed to do?" Cragin said. He asked only to hear his own voice; it gave him at least a finger-hold on reality.

"Perhaps, if there is time. I did not waste those weeks in the hospital."

A panel telescoped silently into itself. It opened on a cylindrical chamber that had seemingly been made of a single sheet of metal, so flawlessly had the banks of control boards which it contained been built into it. The soft green-blue glow with which the chamber was suffused was generated by an ingredient of the metal itself.

Circling the room at about shoulder height was a continuous row of what were obviously telescreens; below and above them were the banks of machines which were constructed according to an electro-mechanical concept with which Cragin was totally unfamiliar. According to Earth standards, it was so much junk, a distorted caricature of scientific equipment.

And in the center of the chamber, just at eye level, was what Cragin knew must be the "brain" of the entire assembly. A cylinder within a cylinder, its inner workings thoroughly screened by a shifting yet motionless opalescence through which he could not see. What lied in the heart of the thing would be as completely beyond his knowledge as were the visible machines over which it was master.

The girl watched him as his eyes remained fixed on it. "It's the power source, as far as we could determine. For everything."

"For the entire planet."

"For the entire solar system."

"Sure, but not today."

"Not only for today, but for all time. Gravity, warp, everything. If you don't believe me, try explaining the difference between Space as it exists inside and outside the Barrier sometime. Those—" she gestured toward the upper rows of machines, "control the power. When you know how to manipulate them, you can move any body within the system at will—in any direction, at any speed. The sun itself, if you want to."

"All right, I'll admit it's smooth," Cragin said. His hands went to his hips, resting just an inch or so above the butts of his Krells.

"You're a fantastic man, Cragin."

"*I*—" and he laughed a little. "The trouble is, Miss Griffin, you people just never know when to quit. The average Patrol officer may not have much imagination; police never were supposed to have. It's true if you spin a good enough yarn to begin with, you might get away with it. But if you take it too far—well, it's sort of like overacting a part. The audience just doesn't believe it any more. You might almost have convinced me, I'll admit. But as it is—"

His words were falling uselessly about him. Lin Griffin had begun her work near the largest of the telescreens. In a moment she had made it come alive, and in a moment more Cragin was watching the entire system. She made another adjustment, and he was watching Earth alone. A second later, he was watching Earth, Venus and Mercury in their stolid journeys around the sun.

Something that sounded very much like a comptometer was whining somewhere, and he watched as the girl began working a three dimensional orbit plot.

Cragin didn't interrupt. He knew that had he been sure that she was trying desperately to bluff out a well-staged fake, he would have stopped the whole performance but there was something in the way she had turned from him, had simply started at her work.

"I could take a chance now," she said suddenly. "Do you think I should take a chance, Cragin?" She looked full at him. Whatever she was talking about, he knew she was not kidding.

"Chance? I'm just a dumb cop, remember?"

"I think I could move it. I think I've uncovered the secret of at least Earth's orbit and axis control. It's the balance resultants that worry me . . . and if I were wrong—"

"According to you, Earth is a dead duck anyway, princess. So go ahead and make a mistake. You fast-talked me into tailing you here. Or I fast-talked myself. But according to your story, you can move the whole damn system and make it grow little men with big ears right from this cozy little spot. O.K. I'm watching."

The look in her eyes said she thought of him as something only a little more than a Venusian crag lizard, and then as her hand moved toward a console of circuit stabilizers, the look changed. Her hand stopped where it was.

"You haven't been any help so far. I brought you because there was no getting rid of you. But Patrolman, right now we've got trouble. Do your duty or something—"

The voice simply said,

"You did not obey."

Cragin spun around, the Krell barrels coming level. But he found himself completely helpless to press their switches. The mind that had spoken within his own had taken control.

WHAT Cragin saw was like a man. The similarity continued beyond the shape and size of body; it went further to his dress, and there it stepped backward in time. The wide shoulders supported a cloak of so dark a hue that its outlines seemed to become a part of the space around it; the large, perfectly proportioned body beneath them bore with the same arrogance a uniform of deep scarlet mail which seemed to shimmer although its wearer stood immobile. He wore no space-helmet, nor any weapon that Cragin could see.

"You have tampered with a work of the Owners," the voice said, "and have thereby broken their law." His cloak alone moved, as though sheltering a statue in a pre-storm breeze.

"That takes a death penalty in your book I suppose," Cragin said.

"There is another kind?"

"It's a cinch you never heard of civilized society. If there's anything we've got, it's lots of different penalties. But we've got our share of death, too. Ask goldilocks here."

"Death is nothing new to the people of Earth," the girl said evenly. "Nor are penalties."

"Yet you defied the warning."

"Because it might have meant life to us."

"Life and death are not yours to direct," the voice said. "That lies solely with the Owners. That is universal."

"By what universal right?" The girl's voice rose to the pitch of half anger, half contempt.

"How?" Cragin's voice was touched with the mixed overtones of curiosity and incredulity.

"By their own right. Through methods of their own."

"That's a hell of a scientific answer," Cragin said.

"It is no answer at all!" the girl said. She took a step forward toward the intruder, and there was high color in her cheeks. Only his cloak moved. "Perhaps you control your own destinies, if that is what you care to think. But not ours! For the use of your machinery, we will gladly repay you, in any medium that you desire that we are capable of supplying. But our role isn't that of intruder or wrong doer; it is simply one of desperation. With your machines, our planet, its life, might be saved. If you know of life, you know of the high value men put upon it. If you believe in—"

"Save your breath, honey. I think the bull of the woods here is trying to work up an angle. He's a phony. All he's got here are a bunch of damn good telescreens, and they've never moved anything yet. . . . Right, Buster?"

The figure in scarlet mail moved then. There was no sound, and hardly a show of motion as his fingers played over a switch-studded panel. The telescreens came to life. In each were pictured solar systems, some binary; one with three suns. All were circled about with planets turning in a precise geometry of motion. With barely a nod, the figure singled out the screen in which the binary and its brood of planets shown like so many pin-points of light rolling in eerie slow motion through Infinity. A finger flick that Cragin could not follow and—

Three planets suddenly plunged headlong; in seconds there was a blinding flash. Even as he shielded his eyes, Cragin knew that he had been witness to the destruction of an entire system. Although it had been light-years distant, and the telescreen had relayed the coruscations of its destruction instantaneously, Cragin knew that there was no way to deny what he had seen.

"Ours is the power," the voice said, "of life and of death."

He wanted desperately to convince himself that it was all part of the same colossal fake—that it was simply one of the most fabulous illusions ever devised behind which to direct a system or galaxy-wide bootlegging net. It had to be that.

It had to be, he realized with uncomfortable suddenness, because if it were not, it represented a science which had no regard for the laws that impeded men; one that had risen to far greater heights than that of which men boasted so proudly. And that of course could not be. It was that knowledge alone which had made life worth the living for centuries. Perhaps, when she had refused to speak of what she had seen, Lin Griffin had been wiser than he thought. But she had said—

Cragin felt himself becoming sickeningly mixed up.

And whether he wanted to believe his own senses or not, he knew that here was no phony, no fake, no illusion. Realizing it hurt like hell.

THE cockiness was gone from his voice; he tried, but he couldn't keep it as he spoke.

"You are one of the Owners?" The girl said nothing. Her face was white, yet Cragin did not think her confidence was gone, just shaken for the moment. She had seen the hand of what seemed to be a man hurl a solar system to instantaneous destruction at will.

"I am not," the voice said. "I serve. I am of the second rank, as are all of my race, in the service of the Owners."

"You are here alone?"

The hand touched another stud, and a smaller screen wavered into luminescence. Cragin saw a fleet of spaceships, hovering in a geometrically perfect formation, any one ship of which would have been, by itself, capable of searing to dust the entire Stellar Patrol in a single, brief engagement. The formation of sleek juggernauts extended as far as the eye could see. It was like looking into two opposed mirrors.

"My guard," the voice said. "Manned by a race of the third rank."

"I think I get it. The Owners sit home and quietly rule the universe while somebody else does the—" Cragin cut himself off. It was the wrong track entirely. It must be done differently. "The woman and I," he said evenly, "would be willing servants."

For the briefest moment there was silence, save for the muffled gasp that Cragin heard at his shoulder. But the girl said nothing.

Cragin watched as the hand of the red-mailed figure grazed other banks of relays. In quick succession all telescreens went dark.

"On each screen," the voice said, "you have seen a complete system of planets. In this control point there are exactly three hundred screens. Throughout the Owners' domain there are perhaps slightly less than a full billion of such control points as these. And there have seldom been any which have not been so well concealed, in suitable relationship to the intelligence level of that system-group controlled, as to have yielded to discovery."

"You have not answered my proposal," Cragin retorted. "You're as aware as I am of what's going on in my mind or you wouldn't bother with all the gory details. You know we could serve, even on the—the 97th rank or so . . ."

"Proceed."

"Don't try to cover up your own slip. You talk slow, but you get a little ahead of yourself. This outfit is supposed to be cached away with such cleverness that an Earth-mind wouldn't be up to locating it. Only we did. We're not as dumb as we look, even to you. Your record would get a little smeared up if you did away with a couple of potential servants. The wheels might not like that. Tell me I'm wrong."

"You think quickly. You dare to offer a proposition to an emissary of the Owners."

"It's no proposition, it's a statement of fact."

Cragin could feel the sweat behind his ears start to roll down his neck, and his clothes were beginning to stick to his back again. But he had been in jams before. When you couldn't shoot, you had to talk. About anything that came into your head, but you had to talk.

"Servants of the second rank do not err, Earthman. Upon reexamining my logic, I find it sound. Yet in the process of carrying it to its ultimate, I conclude that inasmuch as the mathematical possibility exists that you are capable of being tested successfully for a servant of the menial ranks, a final decision warrants the deferment of your destruction pending administration of such examination."

"You mean we live."

"Failure to qualify as a servant will mean your destruction."

There was near hysteria in Lin Griffin's voice as it broke the spell Cragin's argument had created.

"Cragin, you can't realize what you're doing! You're selling us into sl—"

"Service, Lin Griffin," he cut her off. He knew he was bruising her arm with the quick pressure of his fingers. "Service to the Owners."

"Then follow me," the voice said.

IV

CRAGIN had little idea of how long they had flown, and none of the number of continua through which they had warped. They had been allowed to sleep, and upon awakening, had received food. That they were under guard was only to be sensed.

"They can afford to take us for granted," he muttered. He felt for the butts of his guns; they were still at his hips.

"Don't—" the girl said.

"Don't give it a second thought. I know when I've had it, and they know I do."

"You're convinced, then."

Cragin looked about the confines of the small metal cubicle in which they had been quartered as though trying to see through its walls for another glimpse of one of the flagship's crew. The servants of grade three

were as unlike men as their cloaked captor had been similar. But not less incredible than other creatures he had seen. Only—intelligent. That, if nothing more, Cragin mused with a grimace.

"I could use a different word, kid, but it would come to the same thing. If IQ meant the social register around here, even the snottiest ancestors either of us ever had would look like only moderately successful bums. They got us where the gray matter's short. Of that I am convinced."

"They didn't have to fight very hard. Or should I be thanking you for my life?"

"Up to you. I'm just stalling for what we can get out of it. Who wants to die? Oh, I forgot—"

She turned away from him, and he fiddled with the controls of a small built-in telescreen. It was simple enough and he got it working easily, but it showed nothing. Just blackness. He left it on.

"You're thoroughly convinced of everything he told us, aren't you?" she asked at last.

"From a purely logical standpoint, what else—"

"Purely logical! For a little while I thought there was a chance that—that you weren't like all the rest."

"All what rest? I don't get your range, kid," Cragin answered.

"First you thought they were fakes—"

"At first that was logical, too. But old cloak-and-ray-gun there proved pretty damn conclusively that the crowd he works for are the bosses, the big bosses. That's what gets me."

"And it's the real reason, isn't it, that you wanted to call them fakes? Couldn't bear the idea of the precious culture of Earth taking a back seat to anything."

"That sounds good, coming from one of our top-notch scientists. The daughter and pupil of Fowler Griffin. One of our most respected . . ."

"Did you think we weren't human? Are scientists something to be worshipped?"

Cragin looked at her for a long, steady moment. He was mixed up again, and she was doing it.

"Without our science, Miss Griffin, we'd've all died five hundred years ago. Maybe that's why it takes top rating back home. What our men of science say we can do, we do—what they say we can't, we know we can't. It's that simple, only I don't see why I'm telling you this. For five centuries men have known from the day they could talk what their lives would be from that day to their deaths, and from one end of the universe their forbears had mastered to the other. It's all mapped out. It has to be, because the scientists tell us—they draw the maps. We follow them."

The girl was silent then for a long time, and Cragin fell to wondering exactly what she was getting at. Or maybe—maybe it was just the strain, or the shock of realizing that there were scientists who were of greater stature than Earth's, and it was they who truly ruled.

But the girl still had him mixed up.

There was a sudden gasp from her and he turned his head. The blackness in the telescreen had suddenly become punctured with white-hot, burning dots of light. Dots of light, perfectly aligned, in long, straight rows—a gateway! A gateway of stars, forged by the hands of those who owned all Space and Time, put into position to notify the entire cosmos that here for all who might seek it was the entrance to the home of the Owners!

For a moment Cragin could say nothing. He had seen their cloaked captor give a demonstration of raw power. And here was its counterpart at the other end of the ultimate in mastery—unvarnished, positive control.

They owned a universe, and were its architects as well.

"Ten million miles wide!" the girl breathed.

"A light-year long if it's a foot," Cragin said in a low voice. "And at the end—"

THEY watched as the pattern shifted; the dots grew larger until they were coruscating balls of white flame. And then, with a majestic slowness, the entrance to the gateway became a static, unchanging picture of unprecedented geometric symmetry.

"It's—we've stopped," the girl said.

"Cut our gun, that's all. Probably waiting for clearance to enter. The whole damn fleet of us."

"It's—it's pompous ridiculousness!" Her

voice was edged with frustrated anger and it mounted as she spoke. "A gate-way, a show-piece—a stupid affectation of the ultimate in egocentricity! With or without their little pathway, there's all of Space from which to make an approach—"

"I doubt it, princess. Outside this little welcome-mat I'll bet my pilot's papers there's a destructive field of some kind that'd blast the dye out of your hair at ten light-years. One gets you a thousand that this is the only way you get to see the top brass. And you don't do that without an O.K. from a big somebody."

The minute hand on Cragin's wristchron made seven complete circuits before the gateway again began expanding to receive them on the telescreen.

And then they were past its opening, and hurtling headlong down its great length at what Cragin knew must be a speed which, although no longer requiring flight by comptometer, would have taxed his skill to the utmost.

He and the girl watched the telescreen in silence for minutes, watching the pin-points of light on either side grow from minute flecks in the blackness to great spheres of flame within so many seconds, and then pass. . . .

"Look!"

"Yeah, it's a great show. But—hell! It couldn't be a—"

The scintillating point of light which lie dead ahead, in the exact center of the gateway and at its extreme end, could not, Cragin realized, be a planet. Unless it were a perfectly polished reflector, it could not show so much like the miniature stars at either side.

It was a star, itself.

"It must be just illusion," he said evenly. "It's got to be."

"Oh no," Lin Griffin said. "Of course they live in the center of a star! They rule all, don't they? They're the great masters of all creation, aren't they? Certainly you don't think your great masters would live on anything so simple as a mere planet! But of course they live where the temperature is only several billion degrees—"

She began laughing and Cragin slapped her across the face.

"Cut it, kid, CUT IT!"

There were tears coming from her eyes and her face remained in the twisted contortions of hysteria even after her voice had become soundless.

She pulled away, and Cragin left her to herself. In a little while she began to cry and he could hear her sobbing above the even hum of the telescreen, but he left her alone.

And he knew one thing. It *had* to be illusion. Damn it, Owners or not, no matter what the hell they were, it had to be illusion!

Cragin had never felt shaken through to the inside of him before. Fear and awe had been banished from the minds of men for five centuries. Yet he felt as though he were staggering blindly, and he knew he was helpless.

The pin-point had become a searing, blinding thing, and even as he shielded his eyes, it filled the screen. They were going into it.

Into it.

Into a live star.

No, was the only word he could think. No.

NO!

He spun away, wrenching the telescreen off as he did so.

But nothing changed, and he did not die. Somehow, there was no change at all.

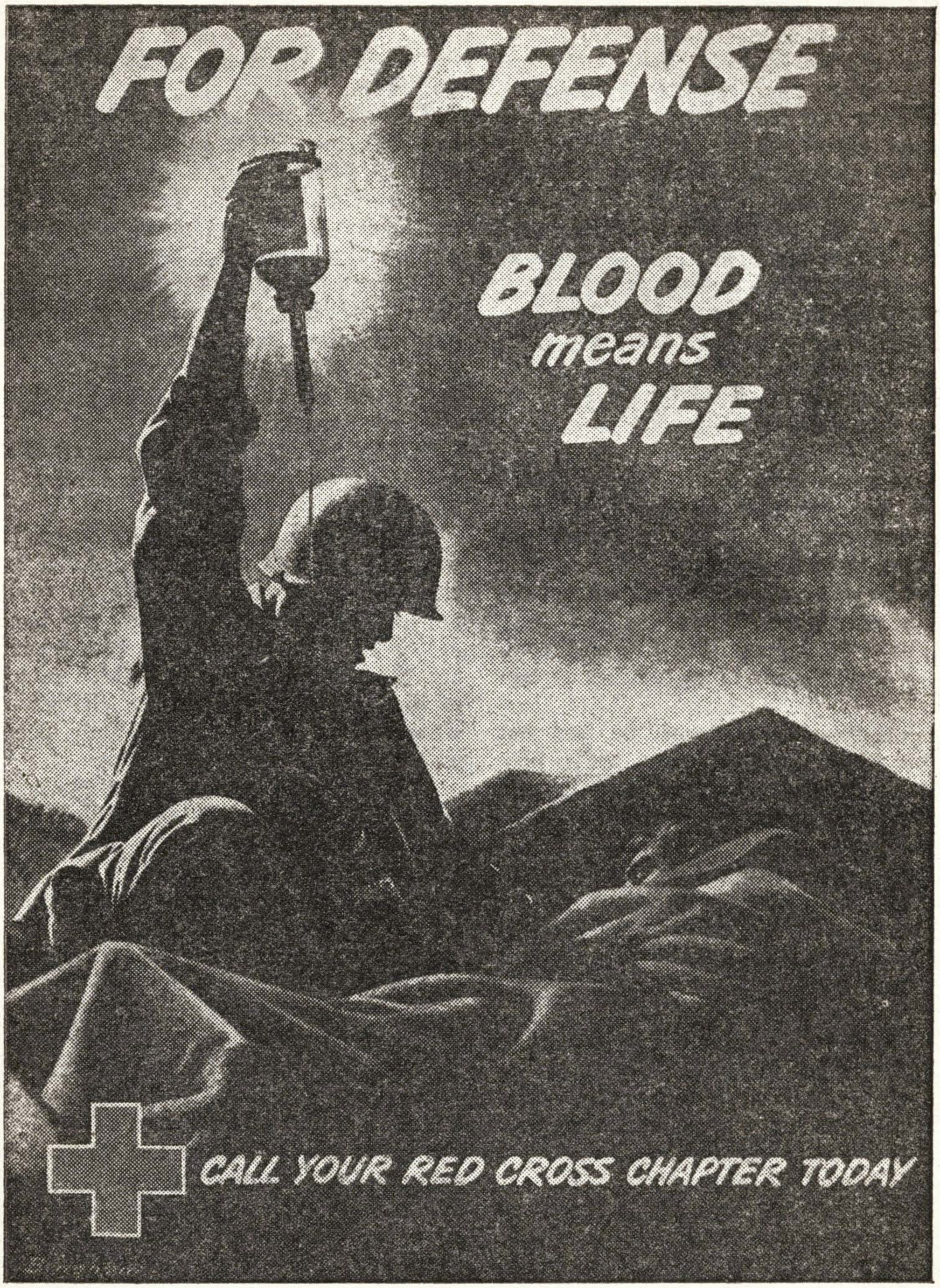
He sat upright, rigid, as though self-hypnotized for what could have been hours or minutes. And there was no change, no awful, searing wave of white heat, no last instant of torture before death.

Simply, suddenly, a light jar.

And Cragin wondered sardonically if his small rectangular bit of enamelite would be at all impressive on the planet the Owners called home.

NEITHER Cragin nor the girl ever saw the planet as such. And it was a planet, Cragin learned, a planet little larger than Earth, honeycombed with subterranean tubes and chambers as had been the control point; a labrynth which contained a civilization of little more than twenty million members; a headquarters for those who ran and owned the universe.

They were escorted to the testing place by two creatures of the fourth grade; bipeds,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shorter than men, with hunched backs and splayed tentacles for arms and hands. Cragin noted that they carried armament of a sort; simple tube-like objects which were aimed at him while he was relieved of his Krells.

Then he and Lin Griffin were placed in a bullet-shaped vehicle, one of the guards operating its controls and the other stationing himself behind them.

Cragin was not prepared for the girl's sudden outburst and jerked his hands vainly at the empty holsters at his hips.

"Of course we can escape from these simpletons!" she cried. "We can easily overpower these dimwitted brutes—"

There was no reaction from their guards; Cragin's hands relaxed slowly.

"What—"

"Don't you understand? They're fourth grade—two less than our cloaked friend. They are our guards, so of course our superiors in intelligence, but still not on a high enough plane to interpret the emanations of pure thought as he was."

"You'll do, I guess. But I've still got a feeling that if either of us twitches an eyebrow—"

She continued as though he had not spoken. "He took your guns; we're now held prisoner under weapons. They have to rely on material means of power. Look, Cragin!"

Highly-polished curved metal walls of an alloy comprised of ores that he could not begin to identify flashed past at such speed that all sensation of motion was negated. There was no sound.

"I'm looking."

"It's a safe bet the tests will be something devised by the Owners themselves. Something that will measure our total thought potential—something based on an extremely advanced function of psychometrics."

"You're over my head again."

"If we're acceptable, Cragin, we're established in one grade or another—and will be constantly under the supervision of creatures of the next highest grade—that's the way it's been working so far, with the exception of the little excursion we're taking now."

"In other words—"

"In other words, we've got to think in the simplest patterns possible. Childish things. Anything that will belie our true intelligence level. What's your I.Q.?"

"I didn't ask you how old you were, duchess, but I test out at an embarrassed 158 or so."

"We match within ten points. It'll have to do. Because we've got to fake—test out at about 115."

"Like I say, you'll do. Testing out at 115, our bosses on the next level shouldn't be a shred above 130 or so. So—"

"So we've got them by almost a 30-point margin. We'll be in a position to out-think our immediate guards, and perhaps even those over them. It's our only hope."

"Mental imposters. . . . You just forgot one little item, honey."

"Oh of course. They're the masters of all, so there's no possibility that a mere human—"

"Take it easy. I didn't say it's no go. Just wondering if 115's are acceptable. If not, you know what happens. We go to the bottom of the class never to rise again. Maybe even 160's aren't eligible. Remember, the control points are hidden relative to the mental ability of the civilizations whose planets they control. Only people who exceed the Owners' estimate—"

"If they control our system, they control billions of others—we were told that. Some higher, some certainly lower. And we did discover the point."

"You and your father. I never would have."

"Look, Cragin. It's the only chance there is. But if I fake and you don't—"

"Yeah. You think it'll work?"

"I don't know."

"But you'd rather die, that it, than be a knowing slave to another civilization, even though it is undisputed master of—"

"That's why I'd rather die, Cragin! Because they're false masters!"

He didn't reply. She was confusing him again, and perhaps the basic reason for the confusion was that he didn't understand why she mixed him up. If there was anything Earth's culture stood for, it was the integrity of the fact—maturation and development of the individual through strict adherance to the known. Only the proven fact was worthy of belief and acceptable as a basis for thought. Nothing else.

But the girl wasn't behaving that way.

"All right. We gamble that an IQ of 115 is acceptable. Then we gamble that we can effect a break. In other words we just take a chance on a chance; make a really long shot out of it."

"Will you, Cragin?"

He laughed a little. Hell, sooner or later, anyway—

"Hand me my rattle," he said. "I better practice. The asteroids are falling down, falling down; the asteroids are falling down, my fair lady . . ."

V

THE panels to two adjacent chambers were open.

"Guess they don't trust us together," Cragin said. The dark blue plastiglass of his Patrol tunic dully reflected the subdued half-light that emanated into the tube-like corridor from beyond the panels. Like a nightmare, he kept telling himself, like a nightmare. Impossible impossible impossible. . . .

Her face was the color of white sand, and it was the only indication that she understood.

"Please try, Cragin."

"Sure."

"You want to try . . ."

"It's a cinch I can't arrest 'em, princess. And I know you want out. You want to sink 'em all and so do I. If there's any way, believe me—"

Cragin knew he would not forget the look etched in the thin white lines of her face as she was led into the testing place; there was something in it that he had never seen before in the face of an Earthman. Not an expression caused purely by reflex in time of danger or pain; not one carefully controlled after finding an unpleasant solution to an inescapable problem. Neither of those. But what others. . . .

Cragin looked then to what he might be more successful in understanding. The testing place which had been readied for him was a small, independent laboratory, much like the control room of the machine planet, save for the complete absence of telescreens. And awaiting him were two cloaked figures in red mail—technicians, second grade. The Owners were taking no chances.

He lay at full length on a sheet of metal that was as comfortably resilient and warm as an old-fashioned bed of feathers, and waited expectantly.

"Are you prepared, Earthman?"

"Fire away, braintrust." He wondered at the absence of equipment. Nothing was attached to him—no electrodes, none of the usual electroencephalographic devices. There was only a low hum, and the pale glow from the indistinct walls about him.

"The test begins, Earthman. Display your mind as you see fit."

The hum deepened. The walls became more indistinct, and the glow somehow became a part of the sound that filled the tiny chamber.

Cragin flashed his mind to his first years of schooling. He had been 10 years old, had learned the square of the hypoteneuse is equal to the sum of the squares of the two opposite sides . . . "i" represents the square root of the quantity minus one, and is termed an imaginary number . . . for every action, there is an opposite and equal reaction. . . .

He lost all sense of time, and guarded against thinking of it, lest he betray even a basic knowledge of continuum dynamics. Had to keep it simple, child-like, simple. . . . The intensity of light diminishes inversely as the distance from its source is squared.

The voice inside his head was at length the signal that the test was completed.

"From this examination, Earthman, it is evident that you stumbled where you did purely by accident, and that the craft in which you traveled was out of control, operating entirely beyond your understanding."

Cragin kept his thoughts diffuse and made no effort to reply.

"Do I serve or die?" he asked at length.

"On a probationary basis, you serve. Grade, twelfth."

The test was done, and Cragin had won the first cast of the dice.

The ruse had worked, Cragin knew, not because the Owners and their test had been outwitted but because the test itself had been logically constructed to measure the level of a mind which was functioning at its maximum. The trick was based on folly

—folly in which higher level intelligences would not indulge, and which lower ones would not recognize as a gamble for higher stakes than slavery. Cragin knew he would not have indulged in it had the chance been up to him alone.

What surprised him of course was that so far it had worked. And it made Lin Griffin all the more mystifying, almost inscrutable. Theoretically, she should have dismissed such a plan as ridiculous. But logic and the theory upon which it was based, and what Lin Griffin did, were two different things. Cragin tried to put the puzzle from his mind. And the girl. The probabilities were against his seeing her again. And that, for reasons as puzzling as the girl herself, made him peculiarly miserable.

OTHER slaves from a hundred other civilizations, ranging from the shape of a man to shapes that Cragin could not identify with his three dimensional senses had been packed into the hull of the spacecraft with him; they were all of his assigned grade, and therefore would constitute little problem. He could tell by their reactions to outside stimuli that he was their mental superior.

The pilot might be a different matter. He carried arms much resembling his own Krell guns, judging from their outward appearance of construction and functional design. But there was one thing—they had a fixed grip, like the ancient pistols of Earth. It meant they could be used from only one hold, and indicated that they were copied from the product of a civilization perhaps a hundred years behind his own. But perhaps his slim margin of advantage would be enough.

A cloaked and red-mailed servant of the second grade had briefly addressed the group prior to take-off, and for moments Cragin had feared that he would accompany the consignment. But he had not.

The voice had simply said, "New servants of the Owners, you are about to be transported to your place of work. As servants of the twelfth, and lowest, rank, your duty will be the mining of unconsumed zronon, employed by the Owners to maintain their home and their glorious gateway on an equal level of brilliance to that of the stars themselves. Death awaits that servant who lags in his output. Your destination will be the eighth mining planet, nearest the edge of the Trespass Limit. It was once, like all other mining planets, a live star, extinguished and cooled by the Owners that its highly precious and combustible substance be turned to their own desired ends.

"Are there any for whom this directive has not been reduced to sufficiently simple terms?"

There was silence.

"Very well. Be it remembered among each of you that the Owners, those who near the goal of the creation of life, and who are long since the masters of death, command you."

Then it was over, and Cragin waited in the hot, dank hull, sweating inside his helmet, in which there was an endless supply of his own unique atmosphere. His own helmet, because it was far from being so perfect, had been taken from him upon completion of the test. Such was the case with each of the others, and the textures and colorations of the stuff they breathed or absorbed was as varied as the planets on which they were spawned. And there was hardly any helmet of the same shape or design as another.

The waiting did not last long, but Cragin's plan was in his head as completely as he could fashion it when he felt the landing jar. If it were to work, it would be executed with split-second speed and precision, or again, the alternative would be destruction. It was evident that to use his advantage to the utmost, it must be coupled with the dual advantages of immediacy and surprise.

The airlock opened; with the rest, Cragin filed through it. He took glancing note of the positions of the few guards; kept their pattern of surveillance stenciled in his memory.

The file was split—a quick maneuver placed him at the end of his own section as it was led to the opening of a shaft even darker than the leaden twilight which hung low like a weighted shroud over the entire sphere.

It would be in a moment, or a month, or a year. . . .

The slave ship had not prepared yet for take-off; its tubes smoked lazily, cooling.

He Was the Last Man

Pfc. Hector A. Cafferata Jr.,
USMCR
Medal of Honor

IT WAS DURING the Chosin reservoir fighting. Against F Company's hill position, Reds were attacking in regimental strength. The last of Private Cafferata's fire-teammates had just become a casualty, leaving a gap in the defense line. If the enemy could exploit it, they could smash the entire perimeter.

Exposing himself to devastating fire, Private Cafferata maneuvered along the line. Alone, he killed fifteen Chinese, routed the rest, and held till reinforcements plugged the hole.

The Reds hit again. A grenade fell into a gully full of wounded. Private Cafferata hurled it back, saving the men but suffering severe wounds. Ignoring intense pain, he still fought on until a sniper got him.

"If we really want to protect ourselves from the Commies," says Private Cafferata, now retired because of wounds, "we've got to go all out. And one thing all of us at home can do—*should do*—is invest in our country's Defense Bonds. Sure, Bonds are our personal savings for a rainy day. But they're more—they're muscle behind our G.I.s' bayonets, too!"

* * *

Peace is for the strong!
For peace and prosperity save with
U.S. Defense Bonds!

Now E Bonds pay 3%! Now, improved Series E Bonds start paying interest after 6 months. And average 3% interest, compounded semiannually when held to maturity. Also, all *maturing* E Bonds automatically *go on* earning—at the new rate—for 10 *more* years. Today, start investing in Series E Bonds through the Payroll Savings Plan; you can sign up to save as little as $2.00 a payday if you wish.

A month, even a day, would be too long. If it was to be attempted at all, it was to be NOW.

AND Cragin had the squat guard on a grip which broke his spine before his heart had time to beat again. The gloom helped; the din that issued dully from the mine's lower levels covered the near silence of the death which Cragin had meted out. The weapon was the guard's only insigne of identity, and Cragin had it cradled in his own arms before the thick, broken body hit the ground.

Then he ran, laboring against a slightly stiffer gravity than his Earth-muscles had been born to, waving the weapon above him with all the strength he had!

Toward the ship and its smoking tubes—gesturing, pointing toward the cave-mouth, and yelling his head off, wondering how closely the time-lapse would match between the time he reached the ship and the other guards, even now running their first steps toward the cave mouth toward which he pointed, would realize that although he was giving alarm, he was running away from, not toward, the indicated trouble point.

He was within the airlock by the time the first guard to answer his cry of distress had taken twenty running steps, and had, upon taking the twenty-first, realized that Cragin was going in the wrong direction. But the margin had been enough—

The lock slammed shut.

The pilot, returning to his control panels from the brief recess he had taken elsewhere in the ship, only saw Cragin for as long as it took the Earthman to unleash the weapon he had captured. There was a flat explosion, the weapon bucked uncomfortably, and the pilot died with a large, blue hole through what Cragin took to be his head.

There was only one more thing left to logic, and the rest—

For the second time in his life since he had met Lin Griffin, he wondered what, if something there was, might lie beyond logic.

The simplified control panel resembled something that might have been manufactured in Earth factories half a century before. It had been obviously designed for the capabilities of the servant-pilot to whom it was assigned. If only she had the guts—

Cragin blasted off, and twisted the speed-control full on.

The Trespass Limit would shatter him, of course. Or within moments at least, the death which the Owners themselves controlled would seek him out. Unless . . .

He could not understand the symbols, but he knew the acceleration and velocity needles were going crazy—they were deep in a red-hued band and nearing its limit.

Even through the inverse inertia field, Cragin could feel the thrust of the terrible acceleration and then—

There was a click.

A hum which rose within seconds to a high shrill followed it and then another click came, another hum, then going up the scale.

Such sounds could be only from—COMPTOMETERS!

Cragin spun a telescreen control, a mad laughter welling from within him, bursting through his blood-flecked lips, shaking him uncontrollably. There was blackness! The gateway, gone—the great, star-like home of the Owners, vanished! Somehow, he was out!

A critical speed, and the comps going like crazy!

Cragin laughed and laughed until he fell unconscious.

VI

IT HAD been, as closely as he could tell, nine years.

Nine years of aimless—no, helpless, wandering from planet to planet, from sun to sun, flying tight rope between countless dimensions, following his fantastic escape from the realm of the Owners. He should feel excitement now; should want to laugh until he deafened himself because even now, swimming palely in the field of his forward electronoscope was the solar system, his system; HOME.

Luck, chance, whatever you wanted to call it, he was home. Stumbled on it, of course, as he had stumbled his entire way the length, depth and time of all creation. He should laugh, but there was no strength for laughter. There was just a tranquil kind

of acceptance, a mould of thought into which Cragin had long since forced his mind, in order to retain his sanity as he ran the never ending gamut of change which was the very fabric of the infinity in which he had plodded.

Home.

A place of torture and of slow death, but at least a place where he might die among his own kind.

Had he not been barely minutes through the Barrier with the comptometers still warm, the insistant radar signal wouldn't have been worth its interruption of his thoughts.

But anything so close to the Barrier demanded at least cursory investigation. He flicked a radar panel relay to TRACK.

The object's speed was building up. It was without a doubt a controlled acceleration. No school kid could fail to recognize a comptometer-regulated trajectory. Within seconds his fingers were flicking across a three dimensional plot check.

Headed for a Barrier-bust!

Cragin checked the comps back in, mentally replotting a new trajectory of his own for them to pick up as he did so. As his hurtling craft entered a sliding, almost too-closely cut parabolic reversement, he cut in his com-beam.

"This is Cragin, Stellar Patrol, please ack, whoever you are. You are heading for the Barrier. You must alter course. You have not more than three minutes. Acknowledge please if you read me."

He waited, wondering. There was no answer, just the emptiness of the void echoing hollowly to the eternal half-whisper of Infinity.

But—the track altered! The ship was slowing, curving off! Forty seconds went by, and it had gone into an oblique drift.

For the first time in nine years there was a sweaty feeling in the palms of his hands, in the stubble of his upper lip. He cut his comps out, hauled his ship into a paralleling trajectory, then angled a gradual interception path.

"This is Cragin," he repeated. His voice felt husky as though he had not used it for a century. "I am friendly. I intend no trouble. It is for your safety that I request permission to board you. Have information essential to your flight . . ."

There was no ack. He had his spacehelmet dogged tight as he slid alongside the slender, dark-hued craft whose jets had been choked to the lazy, red-hued combustion of idling speed, and reached for his Krells. He hesitated, let them remain hanging on the bulkhead. He had said he was coming as a friend.

He flicked a single A-intensity magnetic tractor to the craft that seemed to float motionlessly beside his own, scrambled along it on his spacesuit's mag-unit, and was still perhaps five feet from the smooth side of the silent ship when an airlock growled open to receive him.

Once shut behind him, he tried to trace a million half-finished thoughts as the lock chamber cycled up to pressure.

Who was in here? Scientists who had long since learned the secret of the Barrier? Hardly, or his warning would have gone unheeded save for a polite acknowledgement. Who then—another explorer as Fowler Griffin had been? Or someone else who had stumbled onto the presence of the X Ecliptic and the machine-planet?

Or some alien flightmaster of some foreign universe who was either exploring or lost, as he had been lost. . . .

A blue light flashed the intergalactic symbol for PRESSURE and the inner lock slid back.

THE small control room was illuminated only with the soft wash of light emanating from the compact but complete instrument panel—an instrument panel at once strikingly similar to that of his own ship. A figure turned to meet him—

There were 40 years etched into a countenance that should have borne barely the hint of nine. The sag of the narrow shoulders told of the soul-breaking exhaustion that reflected dully from the sunken eyes more eloquently than the straight, bloodless mouth could ever have told. The gray lips were almost motionless as they parted.

"Hello, Cragin," Lin Griffin said.

"Greetings. My name is Randolph Cragin, Stellar Patrol. Your cooperation is appreciated, and was requested inasmuch as it is my duty to—to . . ."

The light was so uncertain, yet—there

was something about the face. The forehead —deep within the eyes—

"Yes, Patrolman?"

"No," was all he could find to say. "No." He watched in an agonized disbelief as the suggestion of a smile mingled with the shadowed wrinkles of her ashen face.

"Even as yourself, Cragin, I—eluded them. It took this long, for a woman lacks the ready brute strength which so often turns impending defeat into quick victory. I am glad that you were successful, that you're alive. It was worth heeding your call to see you again."

"But I—I thought they. That is after I escaped they—their anger could have taken only one direction."

"It was not anger, precisely. Just—shall we say, a rather intensive increase in police efficiency? No, it was not anger. Mine was the anger. But now—" She hesitated, turned her eyes toward the instrument banks, then back to his. "Now I've got the high cards, Patrolman." There was a subtle change deep within the sunken eyes, as though a smoldering candle flame had suddenly become a tiny bit of polished steel glinting in the rays of a new sun at noon. "But this time. don't follow."

"I don't get it. Somehow you're still alive. But somehow—well, you—"

"Aged? Gotten old? Don't be afraid to say it. The vibrokey did most of it. Residuary effect. It has potentialities that I'm sure even father never dreamed of."

"Vibrokey? I don't—"

"Think back. Remember how I located the entrance to the machine planet, how I opened it? How I told you that father had said that it could shake whole buildings down? How I explained that it experiments with all possible combinations and magnitudes of vibration speeds and patterns until any assigned pattern is matched—"

Cragin scowled a little. Something stirred stealthily in his memory, and then the whole thing crept slowly back, piece by piece.

"You mean you slammed your way out with that gadget?"

"In a way. The one my father made was of course taken from me and destroyed. But I had helped him build it; I knew I could build another. But I had to steal what bits and pieces of materials I needed whenever it was possible. Sometimes I waited months for an opportunity, only to lose it at the last moment. Yet the waiting helped in its own way. Even as I slaved for them, Cragin, I thought. I figured, refigured. And when, after seven years, I had accumulated the few simple parts I needed, I knew I could build a better instrument than Fowler Griffin himself had."

"And you built it—"

"While the others slept and the guards ate. That took almost two years."

"Then?"

"I vibrated a guard into senility. He died of old age within seconds. In what simple uniform he wore and with his weapon, I bluffed my way aboard this ship in which we stand now. I had to kill a pilot and three crewmen before I was successful in tuning the key to a dimension existing in a completely different pattern of atomic vibrations. The transferal itself was instantaneous. Then on critical speeds I found my way back."

Cragin took a deep breath. "And you once told me I was impossible. But just the same I don't want to be kidded, even if you have got more circuits upstairs than I can ever be wired for. Remember I didn't pick you up going *toward* home. The nose of this barrel was about to do a little Barrier-busting."

The faded smile returned to Lin Griffin's age-contorted face. She had not been completely immune to the device of her own making; even her brillance had been unable to devise a vibration scheme which would resolve to zero the reaction effects of dimension transferal through alteration of atomic vibration patterns.

"I wanted to see Earth again, Cragin. I don't know if you understand that or not. Love is a common word, but few understand it.

"Our people, advanced in scientific knowledge and wisdom as they are, had long since forgotten it when we first met. It was seldom in their past that their faith was placed wholeheartedly in it. But they're my people just as they're yours, Cragin, and I love them because they are. And that's why I'm on my way to take over the machine-planet; to destroy it. To destroy it so that it can never be replaced."

"You aren't making sense, gal."

"I am, Cragin. Because Owners or no Owners, the Earth—the entire system and the universe in which it lives—have true physical and chemical values of their own—values determined in the very beginning by an entity far higher than they!"

"You mean you actually believe—"

"I do and I'm proud of it!"

Cragin felt his face grow warm, knew he reddened, was not sure why. He felt a strange compulsion to turn his eyes from hers. Mad? Easily said, of course, but—No. No. Not mad at all.

"I may understand more than you think, Lin Griffin. I am human."

There was a moment's silence. Then, as though she had not heard him, she spoke rapidly.

"Once returned to the X Ecliptic, Cragin, I shall set the vibrokey adrift within its circumference, to set up a vibration field which will negate any form of other energy, including counter-vibrations, and which will mean complete destruction to any form of matter. I intend to activate the key from the machine-planet itself with nothing more complex than a simple radar beam, after I have restored the solar system to its original values."

"That'll mean everything within the Ecliptic will be destroyed; the machine-planet; you too. You're telling me you don't mean to come back. I can't let—"

It was as though she was totally deaf to each word he said.

"I don't believe in the Owners as masters of all, Patrolman, despite their extreme advances in the realm of both pure and applied science. You do. You do, because they symbolize the scientific ultimate. . . . But science was only ever meant to be a useful tool for men. Not their God."

Cragin felt funny inside.

"You'll die," he said like a child.

"But you shall not. You shall live. Such a thing," she said, "has been done before for the peoples of Earth.

"Now go, Cragin."

There was nothing else to do.

He paused. His wide shoulders sagged a little; he was not given to long talk, and he had discerned the signs of restlessness among a few of the impassive assemblage. Others were more kind. Little else, perhaps, could have been expected.

"As I confessed when I began," his quiet voice resumed, "I do not have many of the scientific answers you want. Hints that Lin Griffin gave me before her last trip beyond the Barrier—they are all I have to explain why the solar system is as you see it now; altered, changed, alive.

"Unless, gentlemen, you would accept a better answer; one that Lin Griffin herself might have given you. She would tell you that there is more to the Universe—the macrocosmo and the microcosmo as well—than Man has yet measured. To speak of Universe means, gentlemen, to speak not only of its known contents, but of its unknown as well, for it is eternally the container of both.

"Logically, I should have met death in my attempt at escape. Logically, no human woman could have endured what Lin Griffin endured, nor conceived the strategy with which the machine planet was erased from existence. According to the logic of the last five centuries of human culture, what Lin Griffin did, how she thought, were both impossibilities.

"Yet Earth is green again.

"So when next you seek to plumb the Universe, gentlemen, and to equate yet one more of its myriad unknown quantities, think again of the half-gods, such as the Owners—such as we ourselves strove so mightily to be—who would equate them all. For it is always inevitable, gentlemen that soon or late, though the Universe remains, the half-gods go.

"There are some, I believe, who would seek too high an office. You—you may thank God, gentlemen, for the few who will not let them."

Then Cragin's voice at last fell silent, and silently, he stepped from the podium.

The time was five o'clock, Sunday, June 9, 3024, and from somewhere far off there was the gentle sound of a tolling bell.

THE VIZIGRAPH

(*Continued from page 3*)

his own against any other scribbler save the late and great Bergey. Those two guys have been doing the best jobs of any cover-carvers since I joined actifandom and started noticing the names of the artists. I haven't seen much of Andy's work, true, and I shouldn't condemn him on that little, but what I have seen compares roughly to Bergey, circa '46. Tell Anderson to grow up, will ya?

I think I will send you a story, Jack. From what I have read of your space-opera, you might like my style. Wanna know why? 'Cause I think it stinks. Or maybe that is a little too violent. Your stories don't actually stink, but they could be improved a little. You are, I think, confusing fantasy with space-opera. Frigsampul, SALES TALK, thish. From the pic alone I could tell that it was fantasy, mixed with one dash STF. Leave the fantasy to fantasy zines, will a, and pub straight STF. 'Twas once said that good space-opera is STF at its best, and if you start printing *good* space-opera, you will be raised immensely in my opinion. Meanwhile, watch out for that story.

Paul Mittlebuscher: Ever hear of that one ish of a Z-D mag, with ALL stories by Dick Shaver?

Val Walker: You're darn tootin', Val. The VIZ has tamed down recently.

Mrs. Alfreda Runyon sounds like one of them rabble-rousing pacifists. Also she sounds like one of them people you should steer clear of, Jack: A fanatic. Fanatics about anything are dangerous, but fanatics about sex are the worst!

By-the-bye, does anyone happen to know where the term "bem" was first coined? The first I ever heard of it was in Brown's novel, WHAT MAD UNIVERSE. But it seems to go back earlier than that. Any old fen in the group who can help me?

Mrs. Bertha Sundet and husband are another pair of fanatics. Get rid of them, will ya, Jack? Leave the letter column to us nice, peaceful fen, so we can take turns tearing out your's and each others' tentacles.

That's about it. If you don't mind the lousy typing, the way I tee off on anything in sight, and other and sundry ways I manage to make myself fairly obnoxious, and decide after all to print my letter, I will take the illo on pages 50-51. As there is not one chance in the Ultimate Prime Number of my rating any lower than first, I will not list a second or third choice. However, if you wanna get tough about it, then, to quote another fan (or fam), typewriter ribbons at ten paces, and fight it out like a bem.

Love and kisses,

RON ELLIK,
A Hitherto Unknown Fan

Ed's note: Cautiously shall I be opening the mails henceforward.

I'D DIE FOR DYE

Battery A 90-mm. Gun
6th Training Battalion AAA RTC
Fort Bliss, Texas

Dear Ed,

I haven't dropped you a line since I won that illo before Uncle Sam called me up for duty—but after diving in and soaking up the VIZIGRAPH in the July issue, I almost blew my top. So Val Walker considers sex in the same category as taxes, huh! And he's finally come to putting up with sex on the covers, huh!

Man! I enjoy it!.

I would suggest that you send an illo to Jerry Megahan except for one thing. In his letter he had the gall to comment that, THE MAN WHO STAKED THE STARS was only good and not a classic. —Mister Jerry, Suh! Get off your rocker and grow up. That story by Charles Dye was good, damned good, better than any story I've ever read in GALAXY, and durn sure deserves to be considered a classic—even by fans such as Mister Jerry, Suh! pretends to be.

Now this character named Patrick has the best letter of the current crop. I agree with him. Science-Fiction is above and beyond, just as it should be, but sometimes an author tries to carry things a little too far.

As for Berry, I've only one thing to say—if you're buying stories like his, why didn't you ever purchase one of mine?

I'm certainly relieved though. For awhile I thought Berry might really be a pen-name of Bradbury, who might have hit a writing slump and was ashamed to use his own pen-handle.

By the bye, what ever happened to Bradbury? Nearly all of the stories that came out in the slick-mags of recent—were old stories that saw print in PLANET and TWS. Hasn't Bradbury come up with anything new in the last year or so? Is he still writing for a living? Since he first gained recognition in PLANET as a writer, maybe you can find out something about him, huh.

As for Berry, maybe he should try a field of writing more suitable for his talents—nursery rhymes for instance.

Yo-La,

CLAUDE R. HALL

Ed's note: Just so you'll feel a little less worried about Mr. Bradbury, Claude, we have incorporated one of his yarns in this issue.

A TOPIC FOR DISCUSSION

163 Devonshire Avenue,
Southsea, Hants,
England

Dear Editor,

You must forgive me if this letter is out of date as the latest copy of PLANET I have is dated, May, 1952. It is damnably hard to get hold of American Science-Fiction magazines and when they do turn up it is usually in a junk shop and many months old.

My reason for writing is a somewhat pessimistic letter printed in the VIZIGRAPH of the May, 1952, issue which may or may not have been argued to shame. In case it hasn't and is still leaving a doubt in people's minds I should like to put forward my own, non-scientific, reasons for doubting such wet blanketing.

The letter I refer to is by a Mavis Hartman. Her seventh paragraph pours cold water on the idea of finding life on other worlds.

As it is the nearest planet, let us discuss Venus first. What general facts of consequence do we know.

Diameter, Volume and Mass are respectively .99, .97, .79 as compared to the Earth. It is 677 millions of miles from the Sun, (.723 Earth). Axial inclination 55 degrees. Rotationary period 23 hours and a third, aproximately. Now let us theorize as to how life like ours could survive on such a world.

First, at 67 million miles the heat gathered from the Sun would be twice that which we receive so some means of tempering such ferocity must be found. Spectroscopic and other observations have

proved beyond all shadow of doubt that Venus has a dense atmosphere similarly composed to ours and we all know the terrific reflecting power of the planet. Putting two and two together I suggest that the Venusian atmosphere is divided into two parts. An outer layer of thick white cloud which reflects, say, a half of the Solar rays, and a lower atmosphere that need not differ appreciably from ours. That I think will allow beings like us to survive the extra heat.

Second, Climactic variation. It is common knowledge that, due to the large axial inclination, the seasons are much more pronounced than ours. A planet with a heat belt that, more or less, roves from one hemisphere to another would be most uncomfortable to our mode of life. There are only two answers to these conditions, Nomadic or Hibernatory life. Other considerations come into this poser. The planet is extremely mountainous, far more so than the Earth and, also, storm ridden.

Mountainous country and terrific storms, I think, rule out the possibility of Nomadic life. I suggest therefore that life on Venus will have natural habits akin to those of, say, a squirrel.

I could enlarge and digress but if this letter is of interest I do not wish to take too much space.

Mars. I don't think I need quote facts again as they can be found in any encyclopedia.

This planet is small and has a very transparent atmosphere. This does not necessarily mean that it is any the less dense, only that it allows a high percentage of Solar radiation to reach the planet's surface.

The yellowish color of Mars as viewed through a telescope also need not imply deserts, what is there against the preponderant vegetation being of a yellowish hue; there is plenty of terrestrial vegetation of that shade. So, given atmosphere and vegetation, (I think the presence of moisture is generally accepted), what is to prevent life flourishing. A personal opinion is that, as the planets' surface attraction is so much weaker the life forms would be correspondingly lightly built, I never preclude the possibility of it being mainly aerial.

I will not delve into the problems presented by the outer planets. Let me just suggest that they are big enough to be heated internally and that the amonia and methane atmospheres may only be, shall we say, covers?

As a topic for discussion may I suggest, "Is there any meaning to the way planetary satellites increase in number the further the planet is from the Sun." I know in the light of present knowledge that doesn't hold true, but small planetary bodies as far out as Uranus and Neptune are difficult to see.

Well, that's it. My ideas may be out of date or just plain silly, but please remember that I have nobody to discuss these things with.

Incidentally, if it so happens that I arouse interest, I would welcome discussion.

If it is of any consequence to you, I like your magazine.

Yours sincerely,

A. K. KING

COPPEL COOPED

Newburgh,
New York

Dear Editor:

I firmly disagree with many PLANET enthusiasts who demand trimmed edges, because the expense needed to accomplish this might better be devoted to the purchasing of top flight stories for which your periodical is noted.

Whatever you do, get Anderson's aristocratic paintings back on the cover. On the July cover Freas makes a futile attempt to impersonate Anderson's style.

Even your Freas fans will have to admit that Anderson was a great improvement over Parkhurst, his predecessor.

Jack, you had the audacity not to embellish the Sept. cover with Alfred Coppel's name. Coppel, whose latest top-notch creation, PREVIEW OF PERIL, is worthy of being called a novelet, happens to be my favorite spinner of yarns. I, and many other fen, are waiting to see novels by Coppel, the "author of chaotic strategy."

Maybe you can help me out with this question. Is Basil Wells, who is one of the best modern STF writers, any relation to the eminent Herbert George Wells? (Ed's note: Perhaps the fen can help you on that one.)

Concerning the September issue, it is my guess that Sol Galaxan is really Gardner Fox. (Ed's note: Sol Galaxan, in this case, is none other than your very dear favorite, Mr. Coppel.)

The Benevolent Bureaucrat,

BOB BURROS

HEARKEN, WRITERS!

Grove School,
Madison, Connecticut

Dear Jack:

Just a note complimenting you on several of the works of fiction presented in your current issue. Topping the list was GAMA IS THEE!, with TASK OF KAYIN runner-up.

Your boy, Berry, didn't make such a good impression on me with his three stories a few months back. Since I am not a steady reader of your zine, I didn't read the two later fiction works from this writer. I do, however, realize his potential and am expecting to see more and better works from Bryan Berry.

One more thing. Why don't you give some indication of your coming attractions? Many times, your stories end short of the full page. In fact, while you're at it. Why don't you go monthly? Your magazine has long been the breeding ground for new writers. Witness: Bradbury, Abernathy, Walton, and—we hope—Berry. Give more a break. Certainly, they're out there. And they all can't hit the top markets right from the start. Think it over.

Sincerely,

BURTON K. BEERMAN

Ed's note: Thanks for the "coming attractions" reminder. Shall do—when the subsequent issue is well defined and space permits.

THE EVALUATOR EVALUATES

3118 Church Ave.
Brooklyn 26, N. Y.

Dear Ed:

Some questions about this little ish: (1) Whaddya call a novel? Seven hundred words to a page and twenty pages add up to 14,000 words in my book. Next time, how about pushing it under its proper heading of a novelet? (2) In our story (this addressed to Dickson Gordon) how come our librarian hero starts a revolution, burns up a city, and knocks off our black evil-doer, along with a barrel of other relatively unimportant people, when he could simply

have hypnotized said evil-doer and gotten Shakespeare, girl and glory all in one? For laughs, no doubt.

Besides, it was so damn hacky.

Some other bad ones. Aha! We slip in the goo that that is SPOILERS OF THE SPACEWAYS. I didn't like it—seemed to be uninteresting, especially when the hero started to utter the lines (something like this): "I'll have to go myself. You cover me and I'll try to sneak in in back. . ." Ugh!

TASK OF KAYIN. Fact that he had wings given away by illustration. Good.

ETHIC OF THE ASSASSIN. Quite a punch ending. I gather that our friends cut ye olde villain up into delectable little pieces. Come to think of it, I need a few faces, preferably handsome, myself. Trade you them for my little brother's ears. Yoo-Hoo! Out there! I said. . . (How can a guy with no ears hear? Perhaps you've noticed him slinking throughout the story minus hearing aids? Author: explain this mystery for us poor un-science minded peasants)

SALES TALK. Interesting but familiar.

Liked GAMA IS THEE even though it was hack in its purest—or unpurest—state. Refreshing but ancient.

Now, the little star spot of July! WHERE THE GODS DECIDE by McKimmey, one whom I've never heard of before (but my memory *is* poor). I found this story unusual, stimulating, and better than anything I've seen in the last three ishes of your mag (even faintly Bradburyish; faintly, mind you—he's still tops.

Letters: (1) Paul Mittelbusher (most interesting slop) (2) Patrick ('zat your first or last name, o, professor of Ancient Zoology?) (3) Jerry Megaham, for no good reason at all.

(Planet's in the box, Ma! You can u e the Air-Wick now!)

Verdict: so-so.

Yours truly,

JOHN BUTLER

PAR FOR THE COURSE

385 No. 8th East St.
Provo, Utah

Dear Jack:

This time the bricks can remain neatly stacked, this side of the limit of outraged endurance.

THE MAN THE WORLDS REJECTED was really the outstanding story this time. It's a good thing you made it the lead novel!

Rating the stories this time from 1 to 10 with 10 representing an all-time great, etc:

6—THE MAN THE WORLDS REJECTED
5—THE ETHIC OF THE ASSASSIN
4—GAMA IS THEE
4—TASK OF KAYIN
4—SPOILERS OF THE SPACEWAYS
3—WHERE THE GODS DECIDE
2—SALES TALK

Now, if some genius wants to go through the proper mental gyrations he will find that the average for this ish is 4.0, which isn't bad at all. Actually it indicates that PLANET is one of the leading pulps, which we already knew anyway. Those discriminating (?) fen who read only digest stf mags miss out on some of the most enjoyable stories of the year!

Bryan Berry's letter should squelch any more gripes about his trio of stories, but perhaps he's only opened the floodgates for others of a different nature. His statements could be taken many different ways by as many people. Shall we wait and see???

Best letters this time (disregarding Berry who isn't in the same league with us poor struggling fen):

1. Bertha Sundet; 2. Alfreda Runyon; 3. Marilyn Shrewsbury.

Never could figure out which story the cover was attempting to portray. Does it matter? Not really—that type of cover has become PLANET's trademark and recognition signal. If it went to spaceships traversing the void or abstract art it would be like a radio station changing its frequency. Loyal PLANET readers, (who don't miss an ish—slogan), don't care *how* many BEMS are menacing the FEM (see that tiny avenging figure in the background, with the sword, of course? That's our hero—always), we'll read the contents anyway. The case rests.

Sincerely,

CAROL MCKINNEY

LYNCHING PARTY

6438 E. 4th Pl.
Tulsa, Okla.

Hoy,

Cheer,Cheer,Cheer,-yip-yip-yip.

The July ish of PLANET was the best in quite a while, mine friend. No kiddin', Mert, all the stories were darn good. Wouldn't even try to rate them. WHERE THE GODS DECIDE is the best of the bunch. Could write a page about each story. Just say once more they were all pretty darn good.

One tiny gripe—the VIZI—it's just not long enough. Another two pages anyway.

Speaking of length, the short stories were all long. I mean they had plenty of meat in them. Good, swell, terrific.

Now to the cover, again—swell. Who done it?

This is awful, can't find a thing to gripe about.

Ah well, leave me turn to the VIZI—probably find something there.

Maybe I should go into long peals about Bryan Berry's letter.

I won't.

If Patrick must gripe about something, he should at least sign his name. It's people like that who do things like that and cause people like me to write letters like this and start fights, which I would love to do right now becuz I'm not in a peaceful mood. So to keep from being personal I will say that all people who write griping letters and do not sign complete name should be hung from the mast head.

There's another gay boy wanting to keep space opera out of PLANET. Hang him from the mast head along with Patrick.

Now that he mentions it, hurry up and get another yarn by Anderson or we will hang you from the mast head.

Paul Mittelbusher good as always.

That red-head on the cover. Baby. Well by the times some of the nice people get thru with me I'll probably be on the masthead also.

Bye, Bye.

Sincerely,

VAL WALKER

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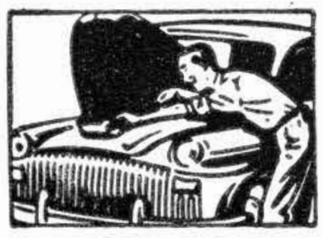

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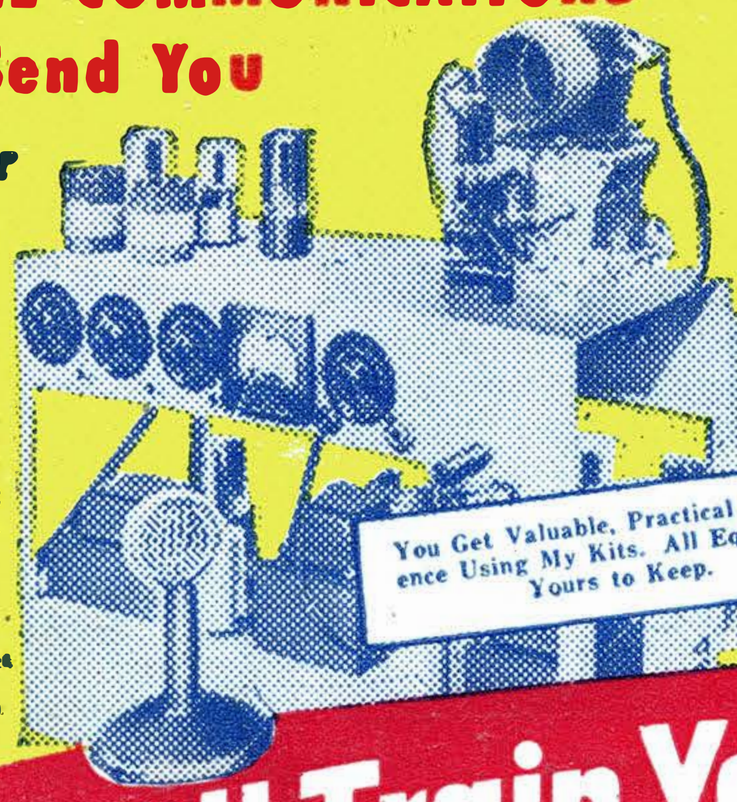

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