

Analog SCIENCE Fact & fiction



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Clifford D. Simak
Arthur C. Clarke

IDENTIFICATION, By Christopher Anvil

Here's a Gold Mine of Suggestions for Starting A Real Nest Egg

Advice from "The Man Who Has Outsmarted The Stock Market for Years"

A YOUNG MAN WITH LITTLE EXPERIENCE in the stock market recently pyramided \$2800 in investments to \$15,000 in five months. Another amateur investor recently wrote that he made several times that amount in the market in two years.

Both men have been reported as stating that their success is in great part due to the unusual methods advised by Gerald M. Loeb, a partner in the noted brokerage firm of E. F. Hutton & Company and for 38 years a stock market investor, writer, broker, and adviser.

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This is just *some* of the startling advice given in his unusual how-to-invest book, "THE BATTLE FOR INVESTMENT SURVIVAL." (175,000 copies have *already* been sold!) And here is some more:

- Diversification can limit profits.
- The fact that a stock is widely held by investment trusts is *not* always a good reason for buying.
- "Dollar averaging" is, frequently,

throwing good money after bad.

—It's *safer* to aim at doubling your money than to aim at investing it for a 4% to 6% return.

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he is not an ivory-tower theorist who merely tested his ideas "on paper." Instead, he is one teacher who for 38 years has practiced with cold cash what he preaches. And with big-profit results — for, as *Newsweek* says, this book is "written by a man who has outsmarted the market for years."

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TRIBESMAN, BARBARIAN and CITIZEN



IN STUDYING history, there are three general, and quite distinguishable levels of culture we can identify. Our own we naturally call "civilized" or "civilization," with the implication of "completely matured and fully developed." It happens to be as far as cultures on this planet have gone; what the fourth, fifth, *n*th levels of culture may be we can't guess, of course. But judging from history, we can make one pretty high-probability guess—the next stage of development will yield a cultural system that will appear, to us, utterly abhorrent—a system founded on Evil and practicing degradation and repellent immoralities.

That's the characteristic of every level so far . . . as seen from the immediately preceding level.

To define what I mean by the three so-far known levels, I distinguish Tribal, Barbarian, and Civil

cultures; the natives of the three we call Tribesmen, Barbarians, and Citizens. Preceding all three is the pre-organized-culture level of the "primate horde"—the sort of quasi-organized group found among baboons and monkeys, in the present time.

The Tribal culture—in its never-actually-existent theoretical pure state—is a system of pure ritual and taboo. "Everything that is not forbidden is compulsory." The objectively observable system stems from an unstated philosophy—which is unstated because the Tribesman doesn't know philosophy exists, any more than a dog knows logic exists, or a fish knows that biochemistry exists. The philosophy is, essentially precisely that of the Absolute Totalitarian state . . . minus the familiar dictator. That is, in the Tribe, the *individual exists for the service of the state*. The individual has no value whatever, save as a replaceable plug-in unit in the immortal, ever-existent

machinery-organism of the Tribe. No individual exists as an individual—neither Tribal king nor Tribal slave; each is a unit plugged in—temporarily, for all these units wear out and are discarded in a score or two of years—to the eternal Traditional System of the Tribe. The cells in a living organism wear out and are discarded; the organism is, relatively speaking, immortal. So, in the Tribe, the individual is nothing; the Tribe is eternal,

In return for a practically absolute loss of self-identity, the Tribesman is rewarded with security and peace-of-mind. The Tribal Traditions have The Answers to all possible real problems; nothing can happen that the Tribal Traditions, in their ancient and time-tested wisdom, have not already solved. There are no doubts; there are answers which involve "these tribesmen must die," but Death is not intolerable. Uncertainty—Doubt—these are the Terrors that live in the Unknown. And against those horrors, the ancient wisdom of the Tribal Traditions stand a strong, sure defense.

The Tribesman has an exact, clear-cut, and perfectly understandable definition of Evil. Evil is Change. Any Change whatever is Evil. The correlation is absolute—perfect one-to-one.

The Barbarian represents the Ultimate Horror from the viewpoint of the Tribesman; he is the Pure Individual. The Barbarian does not put his faith, his sense of security, in the ancient wisdom of the Traditions—

but in the wisdom and strength of a Hero, a living demi-god-man, a Leader who solves all problems.

Barbarism, in other words, is the Dictator, without the Totalitarian State. There is a Hero, who is a strong, and unusually clever leader—an individual who stands out above the men around him.

Tribalism is "a government of laws, not of men," with the minor change that "traditions" replace "laws."

Barbarism becomes a government of Men, not of traditions.

It is the first development of human culture which recognizes the value of the individual. It is *not* true that only civilized people respect the dignity of the individual; any Barbarian will assure you that Citizens have no dignity, that Civilization does not respect the individual. That only Barbarians understand what it means to be an individual.

The Barbarian, in essence, "has too much Ego in his Cosmos."

It's perfectly true that all men seek security—but necessarily, that means they seek *what they believe* is security. A superstitious Tribesman, fleeing a ghost, would happily climb a 100,000 volt power-line tower because he knows that ghosts can't climb.

The Tribesman's security is his conviction that the Tribal Traditions have sure answers to all real problems.

The Barbarian's security is in his absolute conviction that *he* can handle any problem—and if he can't,

why, of course his Leader-Hero can, and will.

While the Barbarian leader-hero corresponds with what we think of as a Dictator, the implication we attach is entirely wrong; the Barbarian's leader-hero is followed out of conviction, not out of fear. Oh, there's always the Fear of the Outer Darkness—the fear of the Unknown and Unknowable—but the Barbarian follows the Hero because he admires, respects, and adulates, not because he fears the power of the Hero.

When Barbarism first arises in any area, Tribalism is doomed. The two are mutually exclusive, and there is no possible "peaceful coexistence" between them. To the Tribesman, the Barbarian is Evil Incarnate; the Barbarian has utterly rejected all Good, Moral and Ethical values. He has rejected the Sacred Traditions, and glories in his absolute defiance of them. He blasphemes not casually, but as a way of life.

To the Barbarians, the Tribesman is a slave, a spineless, gutless coward, a disgrace to human shape. He has no self-respect, no courage to take a risk, no faith in himself. He doesn't respect himself, or any man. He won't fight for any reward, no matter how great and shining! He's a stupid, lazy slug, a disgrace to humanity.

The Tribesman won't fight for reward, he won't take a risk for great gain—because that is not in the Traditions. A Tribesman can't fight an enemy tribe for that enemy tribe's land; his tribal traditions refer to *his*

tribe's land. If he did take the neighboring tribe's land . . . there would be no traditions to tell what to do with it. It would, in fact, be a Change, and therefore Evil.

The "battles" between two ritual-taboo tribes, anthropologists have long since observed, are practically pure rituals, and actually have a vanishingly small casualty rate. Not greatly different—for all the use of spears!—than in modern college football clashes. The spears are hurled while at a range so extreme that it's sheer accident if someone gets hurt.

When Barbarism appears—that situation changes in a hurry. The Barbarian army isn't going through a ritual; they're out for blood and loot. They don't have traditions as guides, nor as limiting fences about them.

When Genghis Khan appeared, the Mongols, who had been ritual-taboo nomads were converted to Barbarians—and it was only the sheer overwhelming mass of geography that finally stopped them.

Barbarism is one of the great breakthroughs in cultural evolution; for the first time, it establishes that the individual has great value, that the individual must be respected. That it is *not* true that all men are interchangeable plug-in units.

Barbarism introduces the idea that Man can, and should, *make* his fate, rather than accept it. That Man can accomplish, that Change comes in two varieties, Good and Bad, and that the correlation Evil-Change: Change-Evil is *not* a one-to-one system.

Of course, it horribly complicates the problems of life; where before it was only necessary to show that X was a Change to prove conclusively that X was Evil, it now became necessary to decide whether X was Progress or Degeneracy.

Like most fundamentally sound and necessary ideas, the importance of the individual, which Barbarism first discovered, was very promptly overdone. The Barbarian respects *only* the individual; his respect for self becomes the only effective respect he has. He does not respect Gods, Demons, or other men. He will swear a mighty vow that will endure "so long as the sun shines, the rivers flow, and the grass grows," but which will, in fact, endure until his personal inclinations veer, and he decides he was tricked into the vow.

A democratic vote means nothing whatever to a Barbarian, in consequence. He is a Free Soul, and he spits on sniveling cowards who allow themselves to be compelled to do what they don't want to. Crawling slaves!

So, of course, to accept a vote that goes contrary to his own ideas is impossible; only a whimpering slave lets other people determine what he shall do!

When the Barbarian encounters Civilization, therefore, he is going to be enormously confused and baffled. The Barbarians of North Europe, meeting the Citizens of the Roman Republic, were meeting men who allowed others to order them about, to tell them what to do and when to do

it. Who obeyed commands they didn't, themselves, agree with. Obviously, a pack of servile slaves!

But these cowardly Roman Legionnaires, for some incomprehensible reason, did not collapse in battle. These Legionnaires who had no self-respect, who did not fight man-to-man, but used short swords so that no one of them could say, when he returned home, "I killed Urhthoth!" but only, "I am a member of the Fourth Legion,"—these Romans strangely didn't flee before the fiercest Barbarian charges.

To the Barbarians, the Citizen shows the symptoms of all the things the Barbarian rejects as vile and degrading—the essence of cowardice. The Citizen yields his will to the demands of others. He allows himself to be limited, and allows himself to be compelled against his own desires.

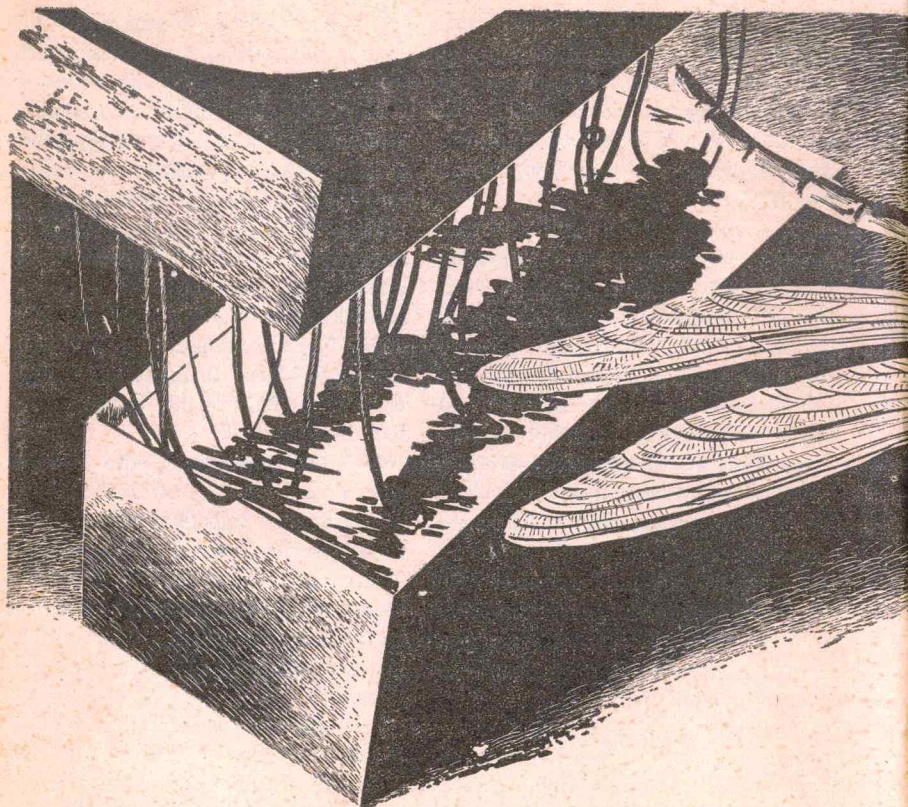
To the Barbarian, the Citizen shows the same loathsome abnegation that the Tribesman does.

Which makes it all the more incomprehensible that these sniveling Citizens win battle after battle. They who have sacrificed their Manhood, have given up their right to individual dignity, somehow prove able to fight like maddened demons!

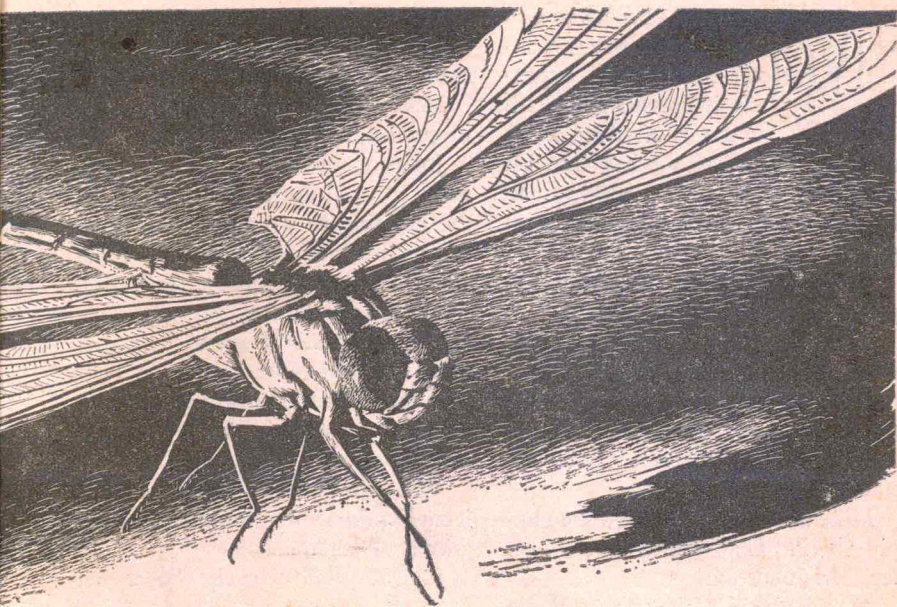
At each stage of cultural evolution, the preceding stage appears loathsome . . . and the succeeding stage appears to partake of those same loathsome characteristics.

As a rough guess, it's highly probable that the next stage of cultural

Continued on page 176



There are certain circumstances under which it is extremely undesirable to "see ourselves as others see us." And that form of trans-identification would, if imposed, be most effective . . .



IDENTIFICATION

By CHRISTOPHER ANVIL

Illustrated by Schoenherr



MIKE CARSTAIRS rose to shake hands with his latest client, a tall, expensively-dressed man with a streak of silver at his temples. The client reached into his coat pocket as he sat down, and handed Mike a small newspaper clipping.

"This is yours, Mr. Carstairs. Do you mean it seriously?"

Mike glanced at the clipping, which was a small ad reading:

"Law enforcement agencies punish crime. Criminal syndicates *commit* crime. We *prevent* crime. Call Carstairs Consultants . . ."

Mike nodded, and handed the clipping back. "That's the service we offer, Mr. Johnston."

Johnston said hesitantly, "I am in a very serious position, Mr. Carstairs. This is a matter of life and death."

"We'll do everything we can for you," said Mike.

Johnston glanced first around the office, which was furnished with expensive simplicity, then at a framed drawing on the wall, behind Mike's desk. The drawing was an artist's sketch of the Carstairs Building, and showed it rising impressively in a stretch of flat land well outside the city. Mike, who considered the building to be ugly but functional, had put the drawing where he wouldn't have to look at it, but where it would intimidate the type of client who otherwise would have a thousand questions as to Mike's ability to perform the service he offered.

Johnston said hesitantly, "I under-

stand your principal interest, Mr. Carstairs, is in manufacturing electronic components."

Mike said, "Was that your purpose in coming here, Mr. Johnston?"

Johnston started to answer, hesitated, glanced again at the sketch of the building they were in, and then shifted his position uneasily in the chair. He leaned forward and said, "As a matter of fact Mr. Carstairs, I'm here because of a very ugly personal situation. Now, I hope you'll excuse me if I ask a little further as to the service you offer. You say you can *prevent* crime?"

"We can prevent certain crimes, including generally, the more serious crimes of passion."

Johnston said tensely, "Can you prevent murder?"

"Generally."

"Will the potential murderer, when he has been stopped, try again to commit murder?"

"No. Once we stop him, he has usually had enough for a long time."

"Will he be injured mentally?"

"He may suffer something similar to the dread, anguish, and remorse he might have felt after he had committed the crime."

"But this isn't anything similar to . . . say . . . prefrontal lobotomy?"

"No."

"I see." Johnston hesitated, then said tensely, "Mr. Carstairs, three years ago, my wife died. Some time after her death, my son and I had a serious disagreement, and I was forced to discharge him from my firm. There were some pretty harsh

words spoken. Then last year, I remarried. My wife is considerably younger than I. Last night, I came home from the office somewhat earlier than usual, and overheard my wife crying, and being comforted by my son." Johnston hesitated.

Mike said, "Your son had a key to the house?"

Johnston shook his head. "I haven't quite got the picture across, Mr. Carstairs. My house is a very large one, really much larger than I need. When I discharged my son, for business reasons, I saw no reason to throw him out of his home. We don't get along. But the house, as I say, is a very large one. He has his room in another wing, and takes his meals in the kitchen. Our paths seldom cross. For some reason, it never entered my head that he and my young wife would do more than nod in passing if they chanced to meet. I realize now that this was extremely stupid."

"What did you do when you overheard them?"

"I stood stock-still for the moment, and listened. My wife's voice, between sobs, was very low. My son was saying, rather briskly, 'Don't worry. I'll take care of him for you. There won't be anything left when I get through with him.'"

"Did you see them?"

"No. I just heard them. The conversation seemed rather out-of-focus to me. It was a great deal clearer to me this morning, when my brakes failed in heavy traffic, and I narrowly escaped a serious accident. The brake hose had been cut."

"What did you do?"

"I'd seen your ad in the paper a week or two ago, and been curious about it. I immediately bought a paper and turned to the classified section. You see, I don't want the police or private detectives in this. There is too much possibility of scandal. I want you to find out what is going on, and if my son *is* behind this, stop him. It seems clear enough that the situation is very bad. But it may be possible to save something out of the wreckage."

Mike leaned back and carefully thought over what Johnston had told him. Then Mike said, "Would you mind repeating what you heard your son say?"

"He said, 'Don't worry. I'll take care of him for you. There won't be anything left when I get through with him.'"

"How did he say it?"

Johnston frowned. "He said it briskly, as if he were about to squash a spider."

"Then what?"

"My wife was crying, and saying 'Don't. You can't do it,' or words to that effect."

"What did you do?"

"Well, I was furious. To tell the truth, it didn't *all* add up to me until my brakes failed this morning. But I had a perfectly plain impression that *something* was going on behind my back. I was home early, you see, or I wouldn't have come across this. For just an instant, I considered walking in on them. Then, instead, I went

back outside and closed the door heavily as I came in. Sure enough, my wife acted odd when I got there. My son had gotten away, and I didn't see him till this morning."

"How did he act?"

"Perfectly cool, as usual."

Mike thought for a few moments, then said, "How did you get here? Did you come in a taxi, or did you drive out yourself?"

"I drove myself."

"Did you, by any chance, notice a car that stayed behind you for some time?"

Johnston looked at Mike sharply. "How did you know that?"

"It seemed a reasonable inference, in the circumstances."

"Yes, there was a blue sedan about three years old, that I noticed several times in the rear-view mirror. Sometimes it was one car behind, and sometimes two. I was suspicious, because of the accident. I slowed down, and the car slowed down with me. When I speeded up, it dropped several cars back. But when I pulled into the parking lot here, it went on past."

"Did you happen to notice this car when your brakes gave out?"

"Mr. Carstairs, I didn't notice anything."

Mike laughed, then said, "When did you plan to go home tonight?"

"Not till around eight. There's some work I have to finish up at the office."

"Good. We'll be on the job by then. I think we can protect you, but chance can always enter into the things, so be on your guard."

Johnston nodded. "It will be worth a great deal to me, if you can take care of this."

"We'll do our best."

The two men shook hands, and Johnston went out.

Mike leaned back in his chair, shut his eyes, and thought it over carefully. Then he snapped on the intercom.

A few minutes later, Sue Lathrop came in.

Mike took the sheet she handed him, glanced at the background information Johnston had filled in while waiting for his appointment, and noted the type of car Johnston drove and its license number. Mike picked up the phone, and asked his man on parking-lot duty if the car was there.

"It's right here, Mr. Carstairs, parked near the west wall of the building."

"Has anyone been near it since it was parked?"

There was a pause of about thirty seconds. "No, sir. Ten minutes ago, a man walked past the car . . . oh, about twelve feet away . . . and got into his own car. That's all."

"Have we a blue car in the lot? One about three years old?"

"N-No. We haven't. But one drove through the lot slowly about half-an-hour ago, and went out again."

"Drove in, didn't park, and drove out again?"

"That's right. As if it were looking for someone."

"Did it pass near the car we're interested in?"

"Yes, sir, it drove right past it."

"Good. Get the license number from the films, and see if you can find a decent shot of the driver. Have it blown up and sent up to me."

"Yes, sir. I'll get right at it."

"Fine." Mike hung up and glanced at Sue. "How much did Johnston give you as a retainer?"

"Five thousand. He said money was no object, and not to hesitate if we thought we needed more."

Mike nodded and picked up the phone again. Looking at the addresses on the data sheet Sue had given him he said, "Hello, Martin?"

"Right here, Chief."

"Send one of our special cars out by 1430 Ridgewood Drive, and another to 1112 Main Avenue." Mike read off Johnston's name, gave a description of him, of his car, and briefly described the trouble he was having. "You might put one of our own cars out to follow him when he leaves here, and have the driver keep his eye open for a blue car about three years old. You can get what is probably a good picture of that car from the lot."

"O.K., Chief. You'll want us to have a couple guys in the tank, too, won't you?"

"Yes, I don't think we can afford to waste any time."

"O.K. We'll get right to work. Good-by."

"Good-by."

Mike hung up and glanced at Sue. "How did you know to send Johnston in to me, instead of one of our interviewers?"

"I can usually tell when it's serious."

The phone rang, and Mike picked it up to hear the man on duty in the lot say, "Mr. Carstairs?"

"Right here."

"We've run into something a little peculiar."

"What's that?"

"The license plate on the front of the blue car we want to trace is splashed with mud, as if the car had gone through a puddle."

"Does that obscure the number?"

"Well, no. But there's a blob of mud that partially covers that last numeral in the date of the plate."

"This is in front?"

"Yes, sir. And, strange to say, there's a blob just about the same shape over the same numeral in back."

"You think the plates are old ones?"

"Yes, sir. It looks as if the plates are old, and probably the numerals of the date are retouched."

"What about the driver of the car?"

"He's got a hat on, and he's wearing a big set of dark glasses. Aside from that, we've got a fairly good picture of him."

"Well, send it up, and send pictures of the man and the car to Mr. Martin, too."

"Yes, sir."

Mike set the phone back in its cradle, glanced at Sue, and said, "You heard me describe this to Martin. How does it seem to you?"

Sue frowned. "A little out-of-focus."

Mike smiled. "It could be. Or it could fit the pattern of a slightly careless murderer. He has a plan that strikes him as brilliant. It *is* brilliant. But he's afraid that if he waits, something about the situation will change. Therefore, he puts the plan into effect right away, and drives it hard to finish things off fast before they get out of control. From the look of things, I think this might come to its conclusion pretty fast. How would you like to be in on the end of it?"

"I'd like to. I could have one of the other girls take over for me here."

He smiled. "Care to go in the tank?"

She shivered. "I'll watch at a screen if you don't mind."

Mike laughed, and glanced at his watch. "I don't think anything will happen till Johnston reaches either his home or his office. That gives us an hour, and probably a lot longer. It might be a good idea to have a light lunch first, then go on down to the tanks. We may be there for a while."

She nodded. "Good idea."

Sue and Mike had lunch in the dining room at the top of the Carstairs Building. Mike, having had the building constructed well out of town, had also provided a place to eat. The dining room he'd had built was quiet, modern, and pleasant, but the view from it was terrible. He looked out the window and groaned.

Sue followed his gaze, and laughed. Directly below was the blacktopped parking lot. Then came a tall wire mesh fence. Beyond that stretched the

railroad track, a mathematically straight strip of cinders dividing the scrubby vegetation into two halves. In the distance, the city hunched on the horizon, its manufacturing district contributing a pall of smoke to the general desolation.

Sue said, "It's no worse now than when the Indians were here. It only seems bad by contrast."

"The taxes aren't bad," he growled. "And it gives us room for expansion. That's about all you can say."

The waitress brought their order, then moved quietly away.

Sue said, "Yet, five years ago, I wouldn't have thought this was possible. I was still your combined stenographer, receptionist, confidential secretary, and laboratory assistant. When the bills came, I'd divide them into three classes. Those without threats or pleading went into the wastebasket. Those that tried to appeal to our better nature and sense of fair play went into the wastebasket. The ones that threatened us with lawyers, I passed on to you."

He laughed, "Yes, and I could always reduce that bunch by three-quarters, at least."

"And we ate lunch in terrible places, or brought it in with us."

"True," he said, "and what is this leading up to?"

"We're here," she said.

A messenger threaded his way among the tables to Mike's place at the window, apologized for interrupting, and handed him a brown envelope about twelve inches by eight. Mike opened it up, and took out two

large photographs, one of a blue sedan, and one of a pale man wearing dark glasses and a gray felt hat. Two smaller photos showed the mud-splashed license plates. Mike studied them carefully, then slid them across to Sue.

"Not much," he said. "That's a popular car, and those license plates are probably inside the car trunk by now."

"If we ever see this man," said Sue exasperatedly, "we can recognize him by the nondescript appearance of the lower half of his face. Plus that mole just to the left of his nose."

"I know. The mole is the only distinguishing feature. And it could possibly be a fake."

They ate in silence for a moment, then Mike said, "What did you mean when you said, 'We're here'?"

"I mean, we've arrived. You've done it, and we've reached the goal." She glanced at him with a trace of exasperation, "What I'm trying to say is, here you are, a success. We are now eating in a dining room *that you own*, rather than in a scrubby joint. But somehow, I don't think it really means anything to you."

He looked at her earnest expression and laughed suddenly.

"Why is it funny?" she said. "What I said is true. Not one man out of a hundred thousand has done what you've done in so short a time. And what do you do? You don't like the view." For an instant, she looked as if she might cry.

"The view," said Mike quietly, "stinks. Now let me tell you some-

thing. I am very grateful that things have worked out as they have, because it gives me a limited power to do things the way they ought to be done. There's nothing I know of that's much more painful, mentally, then to know what's the right thing to do, and to have to stand by powerlessly while some self-assured fool does things in exactly the wrong way. But you have to be careful, because the odds are good that that self-assured fool wasn't always a fool. He got there by a natural process. And one of the steps in that process can be what people call 'success'."

"What do you mean?"

"There are two ways to look at success. One is to look at the outward result, an accumulation of goods and power. The other is to consider the cause, the combination of work, thought, and good fortune that brings about the outer success. The outward things are subject to loss anytime. A war, a change in business conditions, or a natural disaster, can wipe them out, either in a flash or by slow stages. A new technological innovation could make this place, for instance, as obsolete as the four-horse chariot.

"Put your faith in outward signs of success, and you're in about the position of the owner of a sand dune. It may last quite a while, or it may blow away, and leave you with nothing but a gritty taste in your mouth. The man who achieves success is confronted with this problem. What will he do? If he doesn't see the problem at all,

he is likely to get a rude shock. If he sees it and tries to ignore it, he has the mental strain this creates in his own thinking. If he sees it and recognizes it, he may fall into the trap of thinking, 'All things are impermanent. So what's the use?' Or, on the other hand, he may decide to *not* put his faith in outward signs of success, and then the whole problem vanishes. Instead of priding himself on something out of his control, he is free to concentrate on the attitudes of thought and work that he *can* largely control, and that helped bring success in the first place."

Another messenger was at Mike's elbow, and apologetically handed him a small envelope. Mike thanked him, opened it up, and pulled out a slip of paper. He read the message, wrote briefly on the margin, and sent it back.

"The license plates," he said, "are a blind alley." He glanced at Sue, who was looking at him with an unreadable expression. He decided that she thought she had been lectured. He said defensively, "Well, you brought up a philosophical point. I say outward success can be a trap, if you forget the part that inner attitudes and the Grace of God play in bringing it about. There are a lot of people with one foot in this trap wondering what it is that hurts."

Sue laughed. "I wasn't criticizing you. Do you remember what we used to talk about over day-old doughnuts and tap water?"

"Well," he said, "I guess a lot of things."

"Yes," she said, "and this very thing was one of them. I thought at the time that you had that idea because of circumstances. Certain ideas, you know, naturally go with day-old doughnuts out of a bag, and others with cake on a tray."

"True," he said, "but those ideas are moochers, not friends. When you need them, they're just on their way out. It's better to have ideas that stick with you when things get tough."

She looked thoughtfully out the window for a moment, and then said, "You know, as a matter of fact, that view *does* stink."

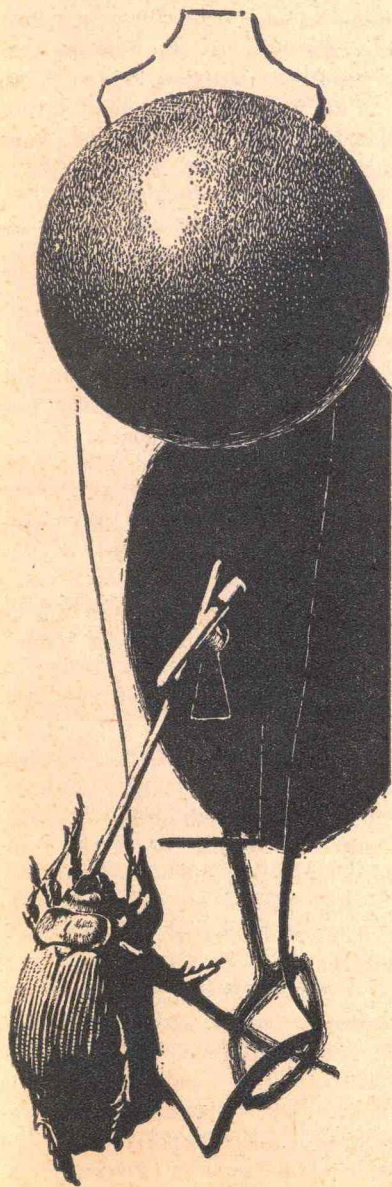
"It sure does," said Mike, "and there's no escaping it. Well, suppose we go on down and take a look in at the tanks."

"You go ahead," she said. "I'll be down in a few minutes—if I don't lose my courage."

"Still uneasy about it?" he said. "Why?"

"I don't know," she said, as they stood up to leave. "Somehow, there seems to be something horribly fundamental about it. But I can't say what."

The "tanks" were located in the subbasement of the building, and even though Mike had planned the layout, he was always surprised when he saw it at close range. He had started out in three rooms, after a blowup with stubborn-minded superiors in a giant corporation. It now struck him as a sort of grim poetic justice that his own business had



flourished and as a result was coming to take on some of the characteristics of the monster corporation he had detested. The only compensating features were that *he* owned this business, and he had such a long technical lead that there was comparatively little sense of the competition breathing down his neck. That might change overnight. But until it changed, he was able to run things as he thought they ought to be run.

He stepped around a raised, heavy glass tank about eight feet long by four wide, with a framework of rods and levers above it, and clusters of waterproof wires and hoses growing out of it like the roots and stems of some ominous jungle plant. He glanced up, to note where the wires and hoses were gathered into clusters, then spread out again to lead into massive white boxes in the ceiling overhead. On the floors above, he knew, were labyrinths of complex equipment, arranged by types in separate layers one above the other, with specialized technicians working at each level of the central core of the building. But down here was where it all added up. He glanced around at the blocks of tanks, with an intent technician seated at the head end of each tank in use and alternating his gaze between a monitor screen and a bank of gauges.

Sue Lathrop, wearing the white smock that was customary down here, threaded her way through a block of tanks, then walked swiftly down the aisle toward him. She looked a little pale, and shivered as she reached him.

"This place," she said, in a low

voice, "gives me the creeps. Take my hand, will you?"

He took her hand, which felt very small in his, and looked at her quizzically.

She said, "I just want a little human contact. This place is so horribly impersonal."

"It's functional," said Mike smiling. "Or would you like us to paint everything pink, put murals on the walls, and pipe music in through loudspeakers?"

"No matter what you did, it would still be like having a morgue in the basement."

Mike laughed. Then he took another look around, and he wasn't so sure.

They were walking down the aisle toward a block of twelve tanks with a large placard suspended overhead, and numbered "1". This was the set of tanks Mike intended to use for Johnston's case, and he was glad to see that Martin, the chunky man in charge, was already well along with the work. Four of the tanks were horizontal, with the yellow lights lit that signaled that they were in use. Two other tanks were slowly lowering from vertical to horizontal, and two of the remaining tanks were hidden by the circular white screens that were put in place as the operators got into their suits.

Sue's hand tightened in Mike's. Then she took a deep breath and released her hand.

"Can't go walking around holding hands with the boss," she said. "It just isn't done."

They had reached the No. 1 block of tanks, and Martin looked up to nod to Mike and grin as he saw Sue. "Worked up your courage, again?"

"No," she said, "I just had the silly idea I wanted to see how this case worked out. Now I'm here, I know I'll have nightmare material for a month."

Martin said cheerfully, "There is nothing nightmarish here. Everything just looks like what it is."

"I think that's the trouble."

Mike said, "Maybe if we'd do the place over in Early American, and stick a few fireplaces around here and there—"

"Just the thing," said Martin. "We could have special workmen to trundle in the cherry logs, and we could hide the tanks here in secret passages."

"Just like the House of Seven Gables," said Sue, shivering. "Well, I don't mean to get in the way of business. After all, no one dragged me here."

Mike glanced at Martin. "Where's Johnston now?"

"In his office," said Martin.

"Any trouble on the way back?"

"No. The only unusual feature was that he slowed down well in advance for every stoplight. That brake failure must have made him uneasy."

"Any sign of that blue car?"

"None at all."

"How are things going out at his house?"

"Nothing unusual as yet. We're just getting started out there." He glanced around. "Here, it's just coming onto the big screen."

Mike glanced at the composite screen, that reproduced the scenes of each tank's monitor screen. A section of the composite screen showed a big white villa-type house, set in a broad lawn planted with many shrubs and trees. The screen showed it as from a slowly-moving camera about forty feet above the ground. There was noticeable fuzziness, particularly of distant objects, but aside from that the view was satisfactory. Mike was studying this scene, noting the drive that curved back past the house, and the trees along the drive, when he overheard Martin saying to Sue, "Here's something pretty for you. How do you like this?"

Mike glanced around to see Martin holding out what appeared to be a hummingbird moth. Sue took it, and smiled. "It's awfully pretty. Is that a receptor?"

"One of the newest," said Martin. "Here's one that looks like a bumble bee."

Mike turned back to the view on the composite screen. The house was much closer now, and as Mike looked at it, he saw a man come around the side of the house carrying a set of electric hedge shears. The man's face had a slightly odd look, and after a moment, Mike realized what it was.

"Mart," said Mike.

Martin was saying, "Got them down to the size of large mosquitoes now, but below that, we're licked. There must be some way—" He stopped abruptly. "Yes, Chief?"

"Look at this man."

Martin came over. After a mo-

ment, he said, "I don't see anything."

Sue said suddenly, "I do. Look at the left side of his face."

Just before the man passed out of sight at the lower edge of the screen, it was possible to see that the left side of the man's face was a little pinker than his right. And the pinkness was in the form of an outline around a paler area that ringed his eye. There was a small mole just to the left of his nose.

Martin said "I see it. He's been wearing sunglasses. And he's driven around long enough to get a little sunburn. The left side of his face, on the driver's side of the car, is more exposed to the sun than his right."

Mike said, "I'd like to get a closer look at that house."

"We've got a spare tank with a suit your size, if you'd like to use it."

"Yes, I think I would." He glanced at Sue. "Care to monitor for me?"

"Just like old times," she said with a smile. "Yes, I'll monitor. As long as I don't have to get in it."

Mike pulled a screen around an unused tank, stepped inside, stripped, put on a clear suit liner Martin handed in to him, and then stepped over to the black suit with its color-coded wires and hoses sprouting from it like limbs from an untrimmed tree. The suit hung inside the uptilted tank, and, as usual, Mike had great difficulty getting into it. When he had it on, he could neither see nor hear, and he still had the supreme awkwardness of making sure that it was properly fastened. The multiple cables that branched from the suit

dragged at his every movement, and the sense of confinement brought on a claustrophobic sensation he had forgotten about. But he went through the necessary motions without help, because if trouble ever developed inside the suit, he wanted to be able to get out of it without waiting for help.

When he was satisfied, he said, "Sue?"

"Right here," came a voice at his ears.

"Tilt the tank up, check the fastenings, and then we can start."

He felt himself slowly shifted backward, then his weight and the weight of the suit came to rest heavily on his back and shoulder blades. After a moment, Sue's voice said "Fastenings checked. I'm going to flood the tank and lower the control frame."

"Ready."

Gradually, the pressure on his shoulder blades eased. He heard a very faint rumble, groped with his hands and feet, slipped his hands into two sets of grips, one at each side, and raised his legs so that the slots in the bootheels of the suit slid down over the studs of the control levers.

"O.K.," he said.

"Ready for test?"

"Ready."

A vague brightness appeared before his eyes, seemed to move closer like two separate movie screens approaching on trolleys, then merged, and after an instant of painful disorientation, formed into a faintly

fuzzy view of the tank room. He could see Martin looking at the composite screen, and slipping on a headset. Sue was seated at a monitor screen, glancing from the screen to a set of gauges.

"Clear now," said Mike.

"Right," she said. She turned on her stool, and looked down into the tank, then looked up in the direction from which Mike was now watching.

Aware of a split in his sense of location, Mike pulled his left hand back slowly. The hand control moved back against a noticeable resistance, then the resistance gave way completely, only to reappear as Mike continued to draw back.

Sue said, "First detent. Wing covers open— Second. Wings spread."

Once more the resistance built up and gave way. Mike felt a throb at his shoulders, from the rhythmic pulsation in an hydraulic tube.

"Wings moving. Slow beat," said Sue.

Mike drew back farther, moved his heels by reflex action, and the scene around him shifted, began to fall away, and stabilized. He moved forward, till he was looking at Sue from less than a yard away.

She smiled. "It's the strangest thing to see you moving in that tank, and this little bug obeying your slightest move."

"You could appreciate it better if you tried it," he said. "There's a sense of identification I don't think you can appreciate without experiencing it." He was hanging now about a foot in front of her nose, moving the con-

trols automatically, without conscious awareness.

She shook her head. "No. I'm content to remain ignorant. Incidentally, this receptor looks a lot like a big June bug, and I hope you won't come any closer with it."

"Test for hearing," he said. "I'm not sure how I'm getting this."

She swung the microphone away from her lips. "Hear me now?" The sound came from directly in front of him.

"Yes," he said, and swung back to land neatly on the narrow stand near the tank. "O.K. Switch over to a receptor near Johnston's house."

"Right," she said.

A minute or so later, the large white, villa-type house, was in front of him, and he was using one of the receptors from the specially-equipped car parked up the road by a big, over-spreading tree.

The first part of the check of the house went normally, with Mike and the other operators switching control back and forth as they flew the receptors to trees around the house, and left them clamped in place, to give a view that covered the house, and the four-car garage behind it, from every angle.

Martin's voice cut in to say, "Composite screens II and III on. We now have complete coverage of the outside of the house and grounds. Better plant one or two inside the garage, Aldo, and bring in a sleeper."

"I got one, Mart. In the willow tree just outside."

"Not good enough. If they close those garage doors, you could be shut out in no time, and then all we could do would be to look."

"O.K. I'll fly one in, and clamp it overhead."

"Good boy. Now how about the inside? Terry?"

"Right here, Mart. I've checked the house pretty carefully. It's completely screened in, doors and windows. The chimney looks good, but there's a steel plate blocking the flues to each fireplace, and the only other flue winds up inside an oil burner. It's not very promising, if you see what I mean."

"Have to cut then," said Martin.

"I've got a cutter clamped to an oak tree outside an upstairs window. The tree screens the window from outside, and the room seems to be vacant."

"The window open?"

"Halfway. From the bottom. Third window at the side, from the right front corner of the house."

"Oh, I see. Yes, cut the screen there. We have to get in somehow. O.K., get at it." He hesitated, then said, "Mike?"

"Right here," said Mike, aware that Mart, who had the whole picture on the composite screens, had to run this.

"Better fly up some gp's, sleepers, and grips, so we'll be ready to go in."

"How about the finalists. Do we want any inside?"

"Not yet. They're a little too bulky, and I don't want to commit them yet. Watch out when you bring up the others that you vary your route and cover yourself as much as possible.

We don't want any hornet's nest effect around that car."

Mike grinned. "Right, Mart. I'll watch it."

A few minutes later, Aldo's voice said, "Garage's all set, Mart. Want me to scout around the outside of the house?"

"Good idea. I haven't seen any sign of life in that place yet. Buzz along near the windows, and see if you can see or hear anything."

Several minutes passed, with Terry slowly cutting the strands of the screen, and Mike bringing fresh receptors from the car to the oak by varied routes. Aldo said, "I've got something Mart. I'm back of the kitchen. I think this is the servant's quarters. There's some kind of argument going on here. I don't know what because they're talking to low. Seems to be a man and a woman."

"What are you using?"

"A cutter."

"See if you can get through the screen, and up against the crack where the upper and lower halves of the window join."

"I'm in view through the trees from the next house. Is that all right?"

"It's about eighty feet away, isn't it?"

"Yeah."

"It's worth the risk. We've got to find out what's going on in there."

Gradually, the afternoon wore on. Mike brought up more receptors, and Terry began flying them in.

"Unoccupied room, all right," said Terry. "Empty closet, no shoes under

the bed, nothing on the dresser but a white cloth, a comb, and a hairbrush."

"Good start," said Martin, then asked, "You getting through, Aldo?"

"Gradually. It's slow work."

"They still talking?"

"Yeah. The man sounds as if he's trying to convince the woman of something. Better hook into the recorder."

"It's in. There's nothing much coming through with that cutter on."

"Can't get through without the cutter. Can't do too well with it, for that matter. We're going to have to step up the power of these things."

Martin growled, "What do you think we can fit in a bee-size receptor? If you guys had your way, they'd be giant condors and we'd be out of business."

"Then we need something small enough to slip through."

"We've got prototypes, but for now, you're just going to have to sweat it out with what you've got."

"You can believe it or not," said Aldo, "but I feel like I *am* sweating it out. How do you get tired using a receptor's energy?"

"Nerve strain. And you unconsciously tense your muscles."

Terry's voice cut in. "Something funny here. There's a corridor with—to the right—an empty room, a bath, another empty room and a staircase to the floor below. But to the left, there's a room with the door shut, and a key turned in the lock."

"That's to the left of the room you went into first?"

"Correct."

"On the composite, it looks like that's a corner room with three windows. All the windows are shut, and all the shades are drawn. Mike?"

"Right here."

"Better go in with a grab, and see if you can wrestle that key out of the lock."

Mike dropped in through the cut screen, went through the first room, and approached the door. As he came close, it loomed before him like the side of a thirty-story building. The key looked like an iron bar a third of a foot thick. Mike hovered to one side of the key, and maneuvered up and down to see how it was turned in the lock. He flew up to slide a light-alloy rod, actually thinner than a knitting needle, but that seemed to him the size of an overgrown crowbar, through the metal ring at the end of the key. Then he pulled with all the strength of the receptor's powerful wings. The key resisted, then turned with a scrape in the lock. Mike dropped to the floor, let go the bar, flew up, took hold of the key, drew it carefully out of the lock, and lowered it heavily to the floor.

There was a whirl above him. After a moment, Terry said, "There's a guy on the bed here, Mart. I can see his chest, and his head. He's gagged, wrapped up in a strait jacket, and strapped by the neck to the bedpost. He's got his eyes open, but he's not moving."

"How old is he?"

"Early or middle twenties, I'd say."

"Mike, maybe you could take a look."

Mike hovered, and looked in. He studied the brow and eyes of the man on the bed. "I'd guess that was Johnston's son. There's a strong family resemblance."

"That knocks the old man's theory to pieces. Aldo, are you through yet?"

"Just. If I can bend this back. There."

"Get next to the crack. If we're lucky, we can get a line on this thing. Terry and Mike, get that key back, then start moving in. Sleepers first. This is getting rough faster than we expected."

Mike said, "You want finalists?"

"After you've got everything else in first. Right now we want power on tap. We want a receptor behind every drape and picture frame, and crouched on every molding in the house."

The next twenty minutes went by as they brought in one receptor after another. The only spoken comments from the three operators came from Aldo. "You getting all this?"

"Yeah," said Martin. "But it's a little sketchy. They seem to have settled everything that counts before we got there."

Another quarter hour went past. Mike said, "We've got enough stuff in here to knock out a platoon. Except for the cellar. You've got all this on the composites. Do you see any way down there?"

"There's a dumb-waiter shaft, but all the upstairs dumb-waiter doors are shut. You'll have to get in at the top from the attic."

"Is it worth it?"

"The way this is breaking, I don't think we can overlook it. It'll take a trip up and down through half the house, and the door of the shaft may be shut at the bottom. But we'll have to try it."

"O.K."

They found the door open, and moved into the cellar.

Finally, Terry said, "Now what? We're loaded for bear on all floors of the house."

Martin said, "Aldo's left his receptor clamped to the window, and he's getting the finalists in place. Let me just play back a strip of recording so you'll get the full picture. Listen:

There was a faint hiss, then a woman's voice said tensely, "I don't *like* it, that's all. We didn't plan it this way."

A man's low voice said angrily, "It doesn't *matter*. Nobody will *believe* him. We set it up last night, and the old man fell for it. He's gone out to a private detective outfit outside the city. We *know*, because I followed him. He'll have told them everything. That will back us up when we hang it on the kid. But we've got to do it tonight, before they move in."

"One thing's already gone wrong. If Roger should find out—"

"He can't. The kid's laid out and can't tell him. The rest doesn't matter. When the neighbors hear the fight, rush in, see the old man lying there, and the kid, still on his feet, it will be open and shut. He won't have a chance."

The woman murmured, "Everybody *does* know how they fight."

The man said in a low voice, "It's now or never. All or nothing."

Martin said, as he cut off the recording, "That's the way it's been going. There are all variations on that."

Terry said, "Do we know who the guy tied up upstairs is? Is that Johnston's son?"

"Yes," said Martin. "That's this 'kid' they're talking about."

Aldo said, "How did he wind up strapped to the bed? I don't get that."

Mart said, "I've only heard it half a dozen times. Listen:"

The woman's low voice said venomously, "Yes, you've got it all figured out! How come it's gone sour already?"

The man's voice said tightly, "The kid came home early. So what? Is that going to do him any good?"

"He knows."

"He knows what we're going to do. But not *how*. That's all that counts."

Martin said, "The son apparently walked in unexpectedly, overheard them, and got laid out for his pains."

Aldo said, "Could you figure out for me who this man and woman are?"

"That's easy enough," said Martin. "She's Johnston's charming new wife. She speaks of him as 'Roger.' And you notice the man has to get her to go along with him or it's all off. Here and there, there are some sloppy scenes where he tells her how crazy he is about her. Naturally, when she's going to inherit all of Johnston's money."

"What about his son?"

"How's he going to get it? That's why they're hanging the murder on him. The law won't let a criminal profit by his crime. Johnston's *wife* will inherit the money, and his son will go to the deathhouse. That ties it all up neatly."

Mike said impatiently, "But *how*, Mart? How do they plan to do it?"

"I can't say. They're going to do it tonight. But *how* I don't know. They've apparently got the mechanics of the thing rehearsed so well they just take that for granted."

"Well, we better figure it out, or they're likely to get away with it right under our noses."

Aldo said, "Mart, what about this in the basement under the cellar window at the side of house?"

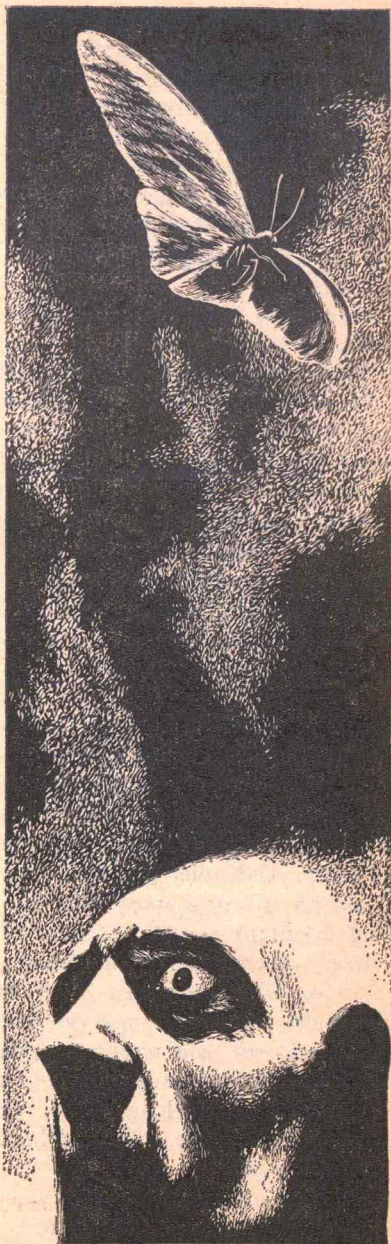
"I see it," said Martin, "but it just looks like a cot with a portable phonograph on it to me."

"What's it doing there?"

Martin hesitated. "Well, why not? You know how people dump stuff in the cellar and the attic."

Mike switched his viewpoint to a receptor in the basement. The cot was like that he'd seen in army camps, with a steel head and foot, flat springs, and a bare mattress. What looked roughly like a portable phonograph sat at the center of the mattress, directly under the cellar window, with a coiled extension cord beside it. Several pillows were piled at the head of the cot, and at the foot. On the ceiling of the cellar, about ten feet from the windows, Mike noticed a bare electric bulb in a socket.

Mike swung the receptor over to



look out the cellar window. Directly outside was a large evergreen with low spreading branches, and just beyond that was the graveled driveway, curving to the garage past more trees and shrubs. About thirty feet back from this window, and around a corner, was the rear door of the house, with a flight of steps leading down to the cellar."

Terry said, "This looks like some kind of a setup, to me."

"Yeah," said Aldo. "But what?"

Martin said, "We'll find out before long. The woman's let herself be persuaded. You guys better practice switching back and forth from one receptor to another. Get the finalists in the trees along the drive, and get a couple in the garage. Something tells me we're only going to have one chance to do this right."

By eight o'clock, Mike, Aldo, and Terry, had rehearsed so many possible maneuvers that all three were worn out. Martin had relief operators on tap, but was afraid to bring them in for fear they wouldn't have time to understand the situation and would just get in the way. The evening began to reach that stage of dimness where nothing is distinct, and Mike was hoping that Johnston would delay a little longer so that they could use the receptors with more freedom in the gloom. But at that moment, his long shiny car swung into the drive, and rolled back toward the garage.

Terry, watching Johnston's wife, said, "Here she goes, like clockwork,

out the front door and across the grass toward the neighbor's house."

Aldo, watching the man, said, "He's at the upstairs window. There, he clipped Johnston's son over the head—not too hard—and now he's getting him off the bed. He's rolled him onto the floor. The belt, strait jacket and gag go into a laundry bag. He straightens the bed up, and tears out into the hall and down the stairs to the first floor carrying the laundry bag. Now he's in the kitchen. He's rushing down the cellar steps. He opens the door of the dumb-waiter shaft, pulls the dumb-waiter up about six feet, leans into the shaft, and stuffs the sack under something at the bottom of the shaft. He looks in with a pocket flash to check it. Now he lowers the dumb-waiter to the bottom."

Mike, watching Johnston, said, "Johnston's car is approaching the garage. Two doors are up, with cars in them, and two down. Johnston apparently wants the left-hand garage door, which is down. He thumbs a button on the dash. The garage door starts up—evidently a radio-controlled electric door. Wait a minute, the door's going shut again. Johnston stops the car and thumbs the button. The door goes up, and comes down again. Johnston's getting out to look at it."

Terry said, "The wife's ringing the bell of the house next door. She glances at her watch, tries to look through the shrubs and trees that separate the two lawns. Now she's ringing the bell again."

Aldo said, "He's through at the elevator shaft now. He shuts the door, runs down to the cot, opens the cellar window, picks up the record player, takes off the cover, and shoves it out the window under the evergreen. Wait a minute, that's no record player. It's a tape recorder."

"What the hell," growled Martin.

Mike said, "Johnston's wrestling with the garage door. He isn't having much luck."

Terry said, "The wife's telling the neighbors how Johnston's son is in a rage at his father, and she's afraid there's going to be a terrible argument. Won't they come over? These arguments the father and son have are just awful and she doesn't know how this one will end. But she thinks if someone else is there, they'll stop, so please, *please*, they've got to help her."

Aldo said, "The man is putting some kind of thin rubber gloves in his pocket. He spreads the pillows on the cot under the window and puts a couple on the floor nearby. He unwinds the extension cord to the recorder, and plugs it in the light socket. Now he's going out the back door."

The man had now come into Mike's range of vision. "Johnston," said Mike, "is still wrestling with the door. The man comes out onto the drive. 'Let me help you with that, sir.' Johnston turns around. 'I'd appreciate it if you'd put the car away. And see about that door-opener. Nothing at all would be better than this.' 'Certainly, sir.' Johnston takes a brief case from the car, and starts up

the drive. The man gets in and starts the motor."

Terry said, "The woman's leading half a dozen people from the next house. One of them starts to run ahead. She grabs him. 'Don't,' she says. 'I'm afraid he's dangerous. We must all get there together. He won't do anything with so many people around.'"

Martin said, "The son is just getting to his feet upstairs. He looks around wildly, yanks the door open and stumbles out into the corridor. He goes back into the room, pulls open the bottom drawer of his dresser, and yanks out a Marine belt. He staggers out into the corridor, puts one hand on the wall, and runs for the staircase."

Aldo said, "The man's started the car engine. Now he's backing the car. He stops and glances back at Johnston."

Mike said, "Johnston has his back to him, walking up the driveway."

Terry said, "The wife is leading the crowd of neighbors through the trees toward the drive near the front of the house—What's that?"

Mike heard it, too. A loud voice burst out from the direction of the evergreen beside the drive, "You can't treat me this way, Father!"

"You good-for-nothing!" shouted Johnston's voice. "If you can't do decent work, you don't deserve a decent wage!"

"You know that's not what I'm talking about!"

Johnston had stopped dead-still, looking around. For an instant, there

was the faint whispering sound of a recorder's tape unwinding, then the son's voice came, very loud. "You can't treat me this way, Father!" There was a pause, and then an incoherent shout: "Take that!"

Aldo said, "He's out of the car! He's got a knife!"

There was the sound of scattering gravel, and Johnston whirled, off-balance.

Martin snapped: "Final it!"

Instantly Mike switched his attention. He rose, then dropped, feeling the spasmodic guiding pulsations of powerful wings as he dove for the figure springing forward in the shadows.

"Got him!" said Aldo. There was a faint glimpse of something small and solid that rebounded like a rubber ball to pass Mike with a whir.

From well up the driveway came a woman's scream. The voice of Johnston's wife carried down the drive, "Oh, I hope we're not too late!"

Johnston's assailant landed on his face in the drive as Mike swerved away. Johnston bent to look at him closely, glanced around, and stepped to one side of the drive, behind a tall shrub.

Terry said, "Don't hit her with the sleeper till she's committed herself, Al."

"Don't worry," said Aldo. "Mike, is he out?"

"Out good," said Mike. He'd landed his sleeper again, switched viewpoint to another receptor, a "finalist" this time, and now hovered behind a

certain spot on Johnston's head. He triggered a weak signal on a particular frequency, and an instant later the response came, to be stored in the complex microminiaturized circuits of the receptor.

"Final it," growled Martin tensely. "Johnston's son is running for the side door of the house. There's no telling what will happen when he gets out."

Mike dropped the receptor, to hover over the fallen assailant. He again sent out the signal, but this time when the response came, he didn't store it, but instead transmitted the signal received from Johnston.

From up the driveway, there was a crunch of gravel, and Johnston's wife screamed, "Oh, we're too late!"

She came running down the drive.

Johnston stepped further back behind the shrub, and watched.

Mike was now well overhead.

In the gloom, Johnston's wife bent briefly at the fallen figure, then screamed, "He's killed Roger! Oh he's killed Roger!" She ran back toward the little crowd, advancing none too eagerly down the driveway, with their flashlights swinging around over the numerous shadowy shrubs to either side.

Just then the side door of the house came open, and Johnston's son, the thick belt in his hand, came out. The crowd was by now opposite the side door.

Johnston's wife screamed, "You murderer! You've killed him!"

Martin growled, "Aldo. Get that woman."

The son was looking around in the gloom. He said in a low furious voice, "Give me that light," and taking the flashlight from one of the unresisting crowd, started down the drive with it.

There was a brief whirl, and Mrs. Johnston was falling. While the crowd was still paralyzed by the sight of Johnston's son, Mike dropped his receptor by the wife, and repeated the process he'd used on the man who'd attacked Johnston.

Martin said, "Aldo. He's coming out of it. Just in case, get a sleeper ready."

The would-be assailant came to his feet, still holding the knife, and blinking in the glare from the son's flashlight.

In the darkness, there was only the steady crunch of gravel, and then the low voice of Johnston's son as he came forward with the belt:

"Now, we'll even things up a little."

"Aldo," snapped Martin. "Hit the son!"

"Not on your life," said Aldo.

"Mike," said Martin.

"I've got a malfunction," said Mike.

Terry said, "That one tried to kill the guy's father, and frame him into the deathhouse as a murderer. Don't ask me to interrupt."

Some moments later, the voice of Johnston shouted, "Don't kill him, Boy! Stop!"

The wail of a police siren traveled down the street and there was a

crunch of gravel as the headlights swung in the drive.

Martin growled, "You fools. This muddies it up so the police won't know who to drag in."

Mike said, "Don't jump to conclusions. Watch."

The police, four of them, were springing out of the car, demanding to know what was going on. Johnston's voice rose over the clamor with the ring of authority.

"Officers! Down here!" Taking his son's flashlight, he flashed it around till he found what he wanted, then angrily pointed out the recorder, still unreeling its tape under the tree. "This thing," he said, "had recorded snatches of argument my son and I have had together. As my second wife here brought neighbors in to hear it, my handyman came at me from behind with a knife. They were going to hang this on my son, who was no doubt tied up inside, but he got free and came out just in time."

Martin growled, "That isn't exactly how it happened."

"No," said Mike, "But don't worry. They'll work out an explanation."

One of the policemen growled, "Guy had a knife all right. Look here. And look at these rubber gloves he's wearing."

Another said, "You know how to run this recorder? I'm afraid I'll erase it."

"I'll show you," said Johnston. A few moments later the recorded argument was playing back.

At this point, Johnston's wife revived, and came down the drive

weeping and crying. "Oh, I'm sorry, Roger. I shouldn't have done it!"

Martin grunted, "Well, that ties it up. Start working the receptors back to the car. Watch out as you bring them by the house lights, and hurry it up."

Mike was grateful it was over. He felt totally worn out. But there was the advantage that now the cellar door was open, apparently so that Johnston's assailant could get back through it quickly after murdering him. This would enable him to yank the recorder back in, quietly shut the window, erase the recording, and then rush out to join in accusing Johnston's son. As it was, the pillows were still spread out, to muffle the sound of a crash, if the recorder had to be shoved through the window hurriedly. But what was now of most interest to Mike was that the back door was still open, which made removal of the receptors from the cellar much easier.

Outside, Johnston's revived and bloody assailant was remorsefully telling his story to the police.

"All in a day's work," grunted Martin. "Next get the receptors out of that garage. We want to be sure they don't get locked in. Then it's home for a hot toddy and a good night's sleep."

A huge dim shape flashed toward and over Mike, swung back, came closer and darted away. Mike dove for the nearest shrubbery.

Aldo's voice growled, "The hell you say, Mart. There are bats cruising around here."

Terry said, "Now what do we do?" "Wait," said Martin disgustedly. "You'll have to go back in short sprints or we'll lose a hundred thousand dollars worth of equipment, and a lot of bats will have bellyaches tomorrow."

"Tough on the bats," snarled Terry. "It'll be black as pitch in another hour."

The job dragged on till about three in the morning when it was over, and Mike had never felt gladder to get out of the tank.

The next day, Sue brought the newspaper in to him, as he and Mart were discussing equipment modifications at No. 1 block of tanks in the subbasement. Sue held up the newspaper to show the big black headlines:

EX-MARINE BEATS KILLER!

"You boys don't get much credit," she said.

Mike said, "Well, we have Johnston's five thousand advance to split with the government, and maybe we ought to bill him for more. I think we earned it."

"More headlines," said Sue, giggling, "**CARSTAIRS CLOBBERS CLIENT!—WANTS CASH!**"

Martin stared at her, then glanced with a smile at Mike. "I haven't seen her in this mood before, Chief. You think it's safe to let this girl monitor for us? It seems to hit her like drink."

"I think she needs some work in the bookkeeping department," said Mike. "Long columns of figures ought to quiet her down."

"You know you wouldn't trust me with long columns of figures," she said, grinning, "Besides, what did you get all those computers for?"

Martin said, "What gets me is, how does she get the courage to come down here? Yesterday, the place made her shiver."

Mike said dryly, "Women are changeable."

"No," she said. "I'm curious. You've made some changes in things, and I want to know about them. What's a 'finalist,' for instance. I take it a 'sleeper' is a receptor fitted with a small hypodermic. But what's a 'finalist'? And exactly why did Johnston's wife and his handyman break down? According to this paper, they've told all and seem filled with remorse."

Mike nodded. "As I told Johnston, once we take care of the attempted murderer, he has had enough to last him for a while."

"But what's the process?"

"Well," said Mike, "the basis of our process is the biophysical method we use in constructing and improving these receptors. But once you have one basic technical advance, you're likely to stumble over others accidentally, and that happened with us. We know, you see, that in some way the brain stores impressions of past events. But these impressions aren't always available on demand. There is a scanning process by which the memory is obtained from the stored record of events."

"Yes, I understand that."

"Well, we've found purely by accident that a particular signal serves to

trigger the remembrance of very recent events. This signal is apparently much stronger than that occurring naturally in the brain itself, as the memory is close to complete. It is possible to detect and amplify the complex signal that accompanies this vivid memory, provided you have sufficiently sensitive equipment."

"A sort of electronic telepathy?" she said.

"Not exactly," said Mike, "because no one else is aware of the thought as yet. The signal accompanying the thought has only been recorded. But it can be transferred provided a second person's recent memory is first triggered, and then while that small section of the brain is sensitized, the stored signal previously taken from another brain is transmitted to it. It's a clumsy procedure, but it works."

"But what happens?" asked Sue. "Does the second person seem to receive a thought from the first person?"

"Oh, no. The second person finds himself suddenly with *two complete sets* of memories. He has his own memories as he plans the other man's death. He has also the memories of the other man, as he approaches the spot, as he hears the footsteps behind him, as he turns, as he sees the knife, as suddenly he realizes he hasn't time to get out of the way—it's all there in full detail, *just as clearly as if he lived it himself.*"

"Oh," said Sue, her eyes widening.

"You know," said Mike, "the impression a narrow escape will make. The man, for instance, who jams his

car to a halt at the cliff-edge, to admire the view, and who suddenly feels the brake pedal go all the way to the floor. That man can get the parking brake on before the car starts to roll, but when he steps out of the car, looks at the pool of brake fluid underneath, then looks down over the edge of the cliff, something happens inside of him. His mind can't help putting that brake fluid and the cliff-edge together. He is likely to wake up in a sweat for some time afterward. It's much the same thing with the would-be killer, who also puts two and two together. The vic-

tim's memory is now his own, seen from within, and experienced just as the victim experienced it. When he thinks of the incident, the murderer can't help identifying with the victim."

Sue shivered. "I don't believe I want to try any murders."

"No," said Mike.

He glanced at the front page photographs in the newspaper she was holding, and pointed out the horror-struck face of Johnston's wife.

"It makes quite a difference," he said, "if the victim turns out to be yourself."

THE END

THE ANALYTICAL LABORATORY

Judging from some of the Brass Tacks letters, this seems to be Guessing Season—especially guessing-who lies behind pen names. Fun, apparently . . . but how about guessing who's going to win this month's reader vote? The authors appreciate deeply—deep in the pocket!—your votes of confidence and appreciation. It nets the first place author each month a 1¢ a word bonus for his story—and the second place wins him ½¢ a word in addition to our standard 3¢ a word rate. Just use a postcard, or include in your letter, the stories listed in order of your preference.

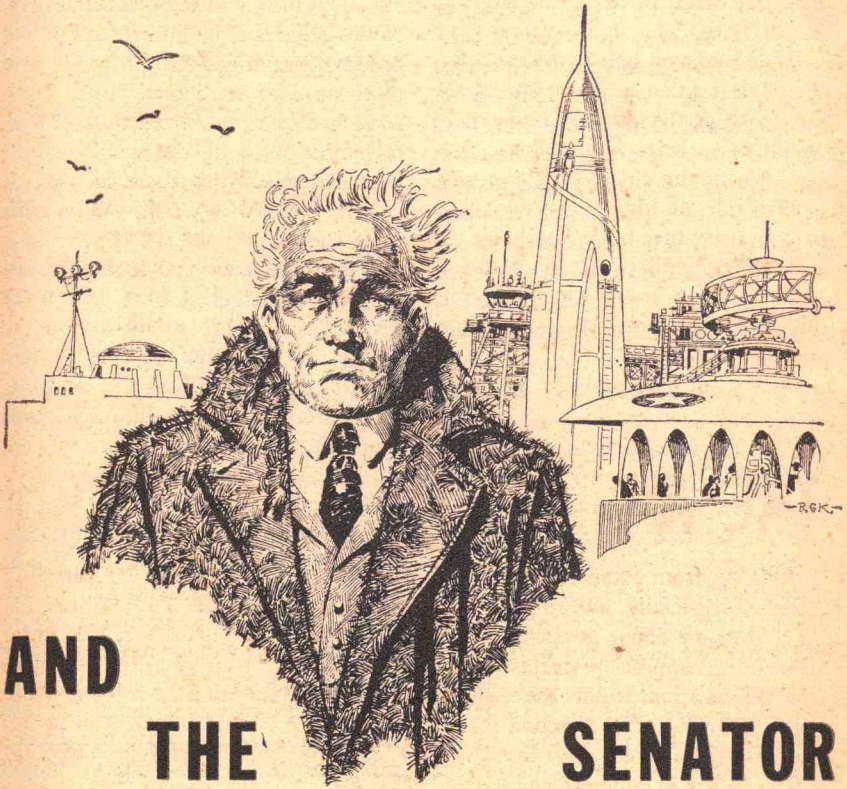
The January and February issues came out thusly:

January

Place	Story	Author	Points
1.	The Highest Treason	Randall Garrett	1.86
2.	Occasion For Disaster (3)	Mark Phillips	2.34
3.	Card Trick	Wally Bupp	2.79
4.	The Green Beret	Tom Purdom	2.91

Continued on page 59

DEATH



AND

THE

SENATOR

By **ARTHUR C. CLARKE**

In some matters, victory and defeat are easily distinguished. But there are some more subtle problems, wherein surrender is a blessing, and a wise man rejects victory . . .

Illustrated by Krenkel

DEATH AND THE SENATOR

33



WASHINGTON had never looked lovelier in the spring; and this was the last spring, thought Senator Steelman bleakly, that he would ever see. Even now, despite all that Dr. Jordan had told him, he could not fully accept the truth. In the past there had always been a way of escape; no defeat had been final. When men had betrayed him, he had discarded them—even ruined them, as a warning to others. But now the betrayal was within himself; already, it seemed, he could feel the labored beating of the heart that would soon be stilled. No point in planning now for the Presidential election of 1976; he might not even live to see the nominations . . .

It was an end of dreams and ambition, and he could not console himself with the knowledge that for all men these must end some day. For him it was too soon; he thought of Cecil Rhodes, who had always been one of his heroes, crying "So much to do—so little time to do it in!" as he died before his fiftieth birthday. He was already older than Rhodes, and had done far less.

The car was taking him away from the Capitol; there was symbolism in that, and he tried not to dwell upon it. Now he was abreast of the New Smithsonian—that vast complex of museums he had never had time to visit, though he had watched it spread along the Mall throughout the years he had been in Washington. How much he had missed, he told himself bitterly, in his relentless pur-

suit of power! The whole universe of art and culture had remained almost closed to him, and that was only part of the price that he had paid. He had become a stranger to his family and to those who were once his friends. Love had been sacrificed on the altar of ambition, and the sacrifice had been in vain. Was there anyone in all the world who would weep at his departure?

Yes, there was. The feeling of utter desolation relaxed its grip upon his soul. As he reached for the phone, he felt ashamed that he had to call the office to get this number, when his mind was cluttered with memories of so many less important things.

(There was the White House, almost dazzling in the spring sunshine. For the first time in his life he did not give it a second glance. Already it belonged to another world—a world that would never concern him again.)

The car circuit had no vision, but he did not need it to sense Irene's mild surprise—and her still milder pleasure.

"Hello, Rence—how are you all?"

"Fine, Dad. When are we going to see you?"

It was the polite formula his daughter always used on the rare occasions when he called. And invariably, except at Christmas or birthdays, his answer was a vague promise to drop around at some indefinite future date.

"I was wondering," he said slowly, almost apologetically, "if I could bor-

row the children for an afternoon. It's a long time since I've taken them out, and I felt like getting away from the office."

"But of course," Irene answered, her voice warming with pleasure. "They'll love it. When would you like them?"

"Tomorrow would be fine. I could call around twelve, and take them to the Zoo or the Smithsonian, or anywhere else they felt like visiting."

Now she was really startled, for she knew well enough that he was one of the busiest men in Washington, with a schedule planned weeks in advance. She would be wondering what had happened; he hoped she would not guess the truth. No reason why she should, for not even his secretary knew of the stabbing pains that had driven him to seek this long-overdue medical check-up.

"That would be wonderful. They were talking about you only yesterday."

His eyes misted, and he was glad that Renee could not see him.

"I'll be there at noon," he said hastily, trying to keep the emotion out of his voice. "My love to you all." He switched off before she could answer, and relaxed against the upholstery with a sigh of relief. Almost upon impulse, without conscious planning, he had taken the first step in the reshaping of his life. Though his own children were lost to him, a bridge across the generations remained intact. If he did nothing else, he must guard and strengthen it in the months that were left.

Taking two lively and inquisitive children through the Natural History Building was not what the doctor would have ordered, but it was what he wanted to do. Joey and Susan had grown so much since their last meeting, and it required both physical and mental alertness to keep up with them. No sooner had they entered the rotunda than they broke away from him, and scampered towards the enormous elephant dominating the marble hall.

"What's that?" cried Joey.

"It's an elephant, stupid," answered Susan with all the crushing superiority of her seven years.

"I know it's an effelant," retorted Joey. "But what's its name?"

Senator Steelman scanned the label, but found no assistance there. This was one occasion when the risky adage "Sometimes wrong, never uncertain" was a safe guide to conduct.

"He was called . . . er . . . Jumbo," he said hastily. "Just look at those tusks!"

"Did he ever get a toothache?"

"Oh no."

"How did he clean his teeth? Ma says that if I don't clean mine—"

Steelman saw where the logic of this was leading, and thought it best to change the subject.

"There's a lot more to see inside. Where do you want to start—birds, snakes, fish, mammals?"

"Snakes!" clamored Susan. "I wanted to keep one in a box, but Daddy said no. Do you think he'd change his mind if you asked him?"

"What's a mammal?" asked Joey,

before Steelman could work out an answer to that.

"Come along," he said firmly. "I'll show you."

As they moved through the halls and galleries, the children darting from one exhibit to another, he felt at peace with the world. There was nothing like a museum for calming the mind, for putting the problems of everyday life in their true perspective. Here, surrounded by the infinite variety and wonder of Nature, he was reminded of truths he had forgotten. He was only one of a million million creatures that shared this planet Earth. The entire human race, with its hopes and fears, its triumphs and its follies, might be no more than an incident in the history of the world. As he stood before the monstrous bones of *Diplodocus*—the children for once awed and silent—he felt the winds of Eternity blowing through his soul. He could no longer take so seriously the gnawing of ambition, the belief that he was the man the nation needed. *What* nation, if it came to that? A mere two centuries ago this summer, the Declaration of Independence had been signed; but this old American had lain in the Utah rocks for a hundred million years—

He was tired when they reached the Hall of Oceanic Life, with its dramatic reminder that Earth still possessed animals greater than any that the past could show. The ninety-foot blue whale plunging into the ocean, and all the other swift hunters of the sea, brought back memo-

ries of hours he had once spent on a tiny, glistening deck with a white sail billowing above him. That was another time when he had known contentment, listening to the swish of water past the prow, and the sighing of the wind through the rigging. He had not sailed for thirty years; this was another of the world's pleasures he had put aside.

"I don't like fish," complained Susan. "When do we get to the snakes?"

"Presently," he said. "But what's the hurry? There's plenty of time."

The words slipped out before he realized it. He checked his step, while the children ran on ahead. Then he smiled, without bitterness. For in a sense, it was true enough. There *was* plenty of time. Each day, each hour could be a universe of experience, if one used it properly. In the last weeks of his life, he would begin to live.

As yet, no one at the office suspected anything. Even his outing with the children had not caused much surprise; he had done such things before, suddenly canceling his appointments and leaving his staff to pick up the pieces. The pattern of his behavior had not yet changed, but in a few days it would be obvious to all his associates that something had happened. He owed it to them—and to the Party—to break the news as soon as possible; there were, however, many personal decisions he had to make first, and which he wished to settle in his own mind before unwinding his affairs.

There was another reason for his hesitancy. During his career, he had seldom lost a fight, and in the cut and thrust of political life he had given quarter to none. Now, facing his ultimate defeat, he dreaded the sympathy and the condolences that his many enemies would hasten to shower upon him. The attitude, he knew, was a foolish one—a remnant of his stubborn pride which was too much a part of his personality to vanish even under the immediate shadow of death.

He carried his secret from committee room to White House to Capitol, and through all the labyrinths of Washington society, for more than two weeks. It was the finest performance of his career, but there was no one to appreciate it. At the end of that time he had completed his plan of action; it remained only to dispatch a few letters he had written in his own hand, and to call his wife.

The office located her, not without difficulty, in Rome. She was still beautiful, he thought, as her features swam on to the screen; she would have made a fine First Lady, and that would have been some compensation for the lost years. As far as he knew, she had looked forward to the prospect; but had he ever really understood what she wanted?

"Hello, Martin," she said, "I was expecting to hear from you. I suppose you want me to come back."

"Are you willing to?" he asked quietly. The gentleness of his voice obviously surprised her.

"I'd be a fool to say no, wouldn't

I? But if they don't elect you, I want to go my own way again. You must agree to that."

"They won't elect me. They won't even nominate me. You're the first to know this, Diana. In six months, I shall be dead."

The directness was brutal, but it had a purpose. That fraction of a second delay while the radio waves flashed up to the communication satellites and back again to Earth had never seemed so long. For once, he had broken through the beautiful mask. Her eyes widened with disbelief, her hand flew to her lips.

"You're joking!"

"About *this*? It's true enough. My heart's worn out. Dr. Jordan told me, a couple of weeks ago. It's my own fault, of course, but let's not go into that."

"So that's why you've been taking out the children: I wondered what had happened."

He might have guessed that Irene would have talked with her mother. It was a sad reflection on Martin Steelman, if so commonplace a fact as showing an interest in his own grandchildren could cause curiosity.

"Yes," he admitted frankly. "I'm afraid I left it a little late. Now I'm trying to make up for lost time. Nothing else seems very important."

In silence, they looked into each other's eyes across the curve of the earth, and across the empty desert of the dividing years. Then Diana answered, a little unsteadily, "I'll start packing right away."

Now that the news was out, he felt a great sense of relief. Even the sympathy of his enemies was not as hard to accept as he had feared. For overnight, indeed, he had no enemies. Men who had not spoken to him in years, except with invective, sent messages whose sincerity could not be doubted. Ancient quarrels evaporated, or turned out to be founded on misunderstandings. It was a pity that one had to die to learn these things.

He also learned that, for a man of affairs, dying was a full-time job. There were successors to appoint, legal and financial mazes to untangle, Committee and State business to wind up. The work of an energetic lifetime could not be terminated suddenly, as one switches off an electric light. It was astonishing how many responsibilities he had acquired, and how difficult it was to divest himself of them. He had never found it easy to delegate power—a fatal flaw, many critics had said, in a man who hoped to be Chief Executive—but now he must do so.

It was as if a great clock was running down, and there was no one to rewind it. As he gave away his books, read and destroyed old letters, closed useless accounts and files, dictated final instructions, and wrote farewell notes, he sometimes felt a sense of complete unreality. There was no pain; he could never have guessed that he did not have years of active life ahead of him. Only a few lines on a cardiogram lay like a roadblock across his future—or like a curse,

written in some strange language the doctors alone could read.

Almost every day now Diana, Irene or her husband brought the children to see him. In the past he had never felt at ease with Bill, but that, he knew, had been his own fault. You could not expect a son-in-law to replace a son, and it was unfair to blame Bill because he had not been cast in the image of Martin Steelman II. Bill was a person in his own right; he had looked after Irene, made her happy, and fathered her children. That he lacked ambition was a flaw—if flaw indeed it was—that the senator could at last forgive.

He could even think, without pain or bitterness, of his own son, who had traveled this road before him and now lay, one cross among many, in the United Nations cemetery at Capetown. He had never visited Martin's grave; in the days when he had the time, white men were not popular in what was left of South Africa. Now he could go if he wished, but he was uncertain if it would be fair to harrow Diana with such a mission. His own memories would not trouble him much longer, but she would be left with hers.

Yet he would like to go, and felt it was his duty. Moreover, it would be a last treat for the children. To them it would be only a holiday in a strange land, without any tinge of sorrow for an uncle they had never known. He had started to make the arrangements when, for the second time within a month, his whole world was turned upside down.

Even now, a dozen or more visitors would be waiting for him each morning when he arrived at his office. Not as many as in the old days, but still a sizable crowd. He had never imagined, however, that Dr. Harkness would be among them.

The sight of that thin, gangling figure made him momentarily break his stride. He felt his cheeks flush, his pulse quicken at the memory of ancient battles across committee-room tables, of angry exchanges that had reverberated along the myriad channels of the ether. Then he relaxed; as far as he was concerned, all that was over.

Harkness rose to his feet, a little awkwardly, as he approached. Senator Steelman knew that initial embarrassment—he had seen it so often in the last few weeks. Everyone he now met was automatically at a disadvantage, always on the alert to avoid the one subject that was taboo.

"Well, Doctor," he said. "This is a surprise—I never expected to see you here."

He could not resist that little jab, and derived some satisfaction at watching it go home. But it was free from bitterness, as the other's smile acknowledged.

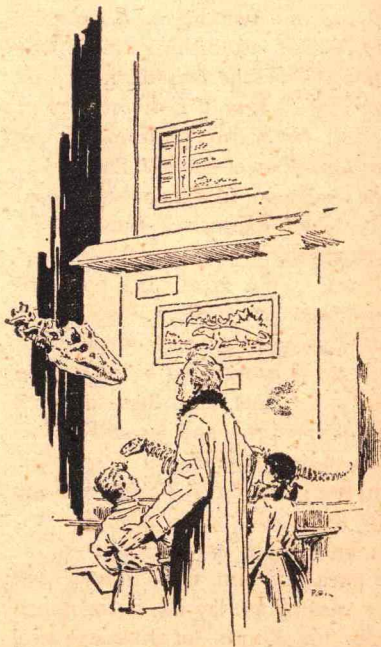
"Senator," replied Harkness, in a voice that was pitched so low that he had to lean forward to hear it. "I've some extremely important information for you. Can we speak alone for a few minutes? It won't take long."

Steelman nodded; he had his own ideas of what was important now, and felt only a mild curiosity as to

why the scientist had come to see him. The man seemed to have changed a good deal since their last encounter, seven years ago. He was much more assured and self-confident, and had lost the nervous mannerisms that had helped to make him such an unconvincing witness.

"Senator," he began, when they were alone in the private office. "I've some news that may be quite a shock to you. I believe that you can be cured."

Steelman slumped heavily in his chair. This was the one thing he had never expected; from the first, he had not encumbered himself with the burden of vain hopes. Only a fool



fought against the inevitable, and he had accepted his fate.

For a moment he could not speak; then he looked up at his old adversary and gasped: "Who told you that? All my doctors—"

"Never mind them; it's not their fault they're ten years behind the times. Look at this."

"What does it mean? I can't read Russian."

"It's the latest issue of the U.S.S.R. *Journal of Space Medicine*. It arrived a few days ago, and we did the usual routine translation. This note here—the one I've marked—refers to some recent work at the Mechnikov Station."

"What's that?"

"You don't *know*? Why, that's their Satellite Hospital, the one they've built just below the Great Radiation Belt."

"Go on," said Steelman, in a voice that was suddenly dry and constricted. "I'd forgotten they'd called it that." He had hoped to end his life in peace, but now the past had come back to haunt him.

"Well, the note itself doesn't say much, but you can read a lot between the lines. It's one of those advance hints that scientists put out before they have time to write a full-fledged paper, so they can claim priority later. The title is: *Therapeutic Effects of Zero Gravity on Circulatory Diseases*. What they've done is to induce heart disease artificially in rabbits and hamsters, and then take them up to the space station. In orbit, of course, nothing has any weight; the

heart and muscles have practically no work to do. And the result is exactly what I tried to tell you, years ago. Even extreme cases can be arrested, and many can be cured."

The tiny, paneled office that had been the center of his world, the scene of so many conferences, the birthplace of so many plans, became suddenly unreal. Memory was much more vivid: he was back again at those hearings, in the fall of 1969, when the National Aeronautics and Space Administration's first decade of activity had been under review—and, frequently, under fire.

He had never been Chairman of the Senate Committee on Astronautics, but he had been its most vocal and effective member. It was here that he had made his reputation as a guardian of the public purse, as a hard-headed man who could not be bamboozled by utopian scientific dreamers. He had done a good job; from that moment, he had never been far from the headlines. It was not that he had any particular feeling for space and science, but he knew a live issue when he saw one. Like a tape recorder unrolling in his mind, it all came back—

"Dr. Harkness, you are Technical Director of the National Aeronautics and Space Administration?"

"That is correct."

"I have here the figures for NASA's expenditure over the period 1959-69; they are quite impressive. At the moment the total is \$22,547,-450,000, and the estimate for Fiscal

69/70 is well over three billions. Perhaps you could give us some indication of the return we can expect from all this."

"I'll be glad to do so, Senator."

That was how it had started, on a firm but not unfriendly note. The hostility had crept in later. That it was unjustified, he had known at the time; any big organization had weaknesses and failures, and one which literally aimed at the stars could never hope for more than partial success. From the beginning, it had been realized that the conquest of space would be at least as costly in lives and treasure as the conquest of the air. In ten years, almost a hundred men had died—on Earth, in space, and upon the barren surface of the Moon. Now that the urgency of the early '60's was over, the public was asking "Why?" Steelman was shrewd enough to see himself as mouthpiece for those questioning voices. His performance had been cold and calculated; it was convenient to have a scapegoat, and Dr. Harkness was unlucky enough to be cast for the role.

"Yes, Doctor, I understand all the benefits we've received from space research in the way of improved communications and weather forecasting, and I'm sure everyone appreciates them. But almost all this work has been done with automatic, unmanned vehicles. What I'm worried about—what many people are worried about—is the mounting expense of the Man-in-Space program, and its very marginal utility. Since

the original Mercury and X-15 projects, more than a decade ago, we've shot billions of dollars into space. And with what result? So that a mere handful of men can spend a few uncomfortable hours outside the atmosphere, achieving nothing that television cameras and automatic equipment couldn't do—much better and cheaper. And the lives that have been lost! None of us will forget those screams we heard coming over the radio, when the X-21 burned up on re-entry. What right have we to send men to such deaths?"

He could still remember the hushed silence in the committee chamber when he had finished. His questions were very reasonable ones, and deserved to be answered. What was unfair was the rhetorical manner in which he had framed them and, above all, the fact that they were aimed at a man who could not answer them effectively. Steelman would not have tried such tactics on a Von Braun or a Rickover; they would have given him at least as good as they received. But Harkness was no orator; if he had deep personal feelings, he kept them to himself. He was a good scientist, an able administrator—and a poor witness. It had been like shooting fish in a barrel. The reporters had loved it; he never knew which of them coined the nickname "Hapless Harkness."

"Now this plan of yours, Doctor, for a fifty-man space laboratory—*how* much did you say it would cost?"

"Just under one and a half billions."

"And the annual maintenance?"

"Not more than \$250,000,000."

"When we consider what's happened to previous estimates, you will forgive us if we look upon these figures with some skepticism. But even assuming that they are right, what will we get for the money?"

"We will be able to establish our first large-scale research station in space. So far, we have had to do our experimenting in cramped quarters aboard unsuitable vehicles, usually when they were engaged on some other mission. A permanent, manned satellite laboratory is essential. Without it, further progress is out of the question. Astobiology can hardly get started—"

"Astro what?"

"Astrobiolgy—the study of living organisms in space. The Russians really started it when they sent up the dog Laika in Sputnik II and they're still ahead of us in this field. But no one's done any serious work on insects or invertebrates—in fact, on any animals except dogs, mice and monkeys."

"I see. Would I be correct in saying that you would like funds for building a zoo in space?"

The laughter in the committee room had helped to kill the project. And it had helped, Senator Steelman now realized, to kill him.

He had only himself to blame, for Dr. Harkness had tried, in his ineffectual way, to outline the benefits which a space laboratory might bring. He had particularly stressed the medical aspects, promising noth-

ing but pointing out the possibilities. Surgeons, he had suggested, would be able to develop new techniques in an environment where the organs had no weight; men might live longer, freed from the wear and tear of gravity, for the strain on heart and muscles would be enormously reduced. Yes, he had mentioned the heart; but that had been of no interest to Senator Steelman—healthy, and ambitious, and anxious to make good copy.

"Why have you come to tell me this?" he said dully. "Couldn't you let me die in peace?"

"That's the point," said Harkness impatiently. "There's no need to give up hope."

"Because the Russians have cured some hamsters and rabbits?"

"They've done much more than that. The paper I showed you only quoted the preliminary results; it's already a year out of date. They don't want to raise false hopes, so they are keeping as quiet as possible."

"How do you know this?"

Harkness looked surprised.

"Why, I called Professor Stanyukovitch, my opposite number. It turned out that he was up on the Mechnikov Station, which proves how important they consider this work. He's an old friend of mine, and I took the liberty of mentioning your case."

The dawn of hope, after its long absence, can be as painful as its departure. Steelman found it hard to breathe and for a dreadful moment he wondered if the final attack had

come. But it was only excitement; the constriction in his chest relaxed, the ringing in his ears faded away, and he heard Dr. Harkness' voice saying: "He wanted to know if you could come to Astrograd right away, so I said I'd ask you. If you can make it, there's a flight from New York at 10:30 tomorrow morning."

Tomorrow he had promised to take the children to the Zoo; it would be the first time he had let them down. The thought gave him a sharp stab of guilt, and it required almost an effort of will to answer: "I can make it."

He saw nothing of Moscow during the few minutes that the big intercontinental ramjet fell down from the stratosphere. The viewscreens were switched off during the descent, for the sight of the ground coming straight up as a ship fell vertically on its sustaining jets was highly disconcerting to passengers.

At Moscow he changed to a comfortable but old-fashioned turboprop, and as he flew eastwards into the night he had his first real opportunity for reflection. It was a very strange question to ask himself, but was he altogether glad that the future was no longer wholly certain? His life, which a few hours ago had seemed so simple, had suddenly become complex again, as it opened out once more into possibilities he had learned to put aside. Dr. Johnson had been right, when he said that nothing settles a man's mind more wonderfully than the knowl-

edge that he will be hanged in the morning. For the converse was certainly true—nothing unsettled it so much as the thought of a reprieve.

He was asleep when they touched down at Astrograd, the Space capital of the U.S.S.R. When the gentle impact of the landing shook him awake, for a moment he could not imagine where he was. Had he dreamed that he was flying halfway round the world in search of life? No; it was not a dream, but it might well be a wild-goose chase.

Twelve hours later, he was still waiting for the answer. The last instrument reading had been taken; the spots of light on the cardiograph display had ceased their fateful dance. The familiar routine of the medical examination and the gentle, competent voices of the doctors and nurses, had done much to relax his mind. And it was very restful in the softly-lit reception room, where the specialists had asked him to wait while they conferred together. Only the Russian magazines, and a few portraits of somewhat hirsute pioneers of Soviet medicine, reminded him that he was no longer in his own country.

He was not the only patient. About a dozen men and women, of all ages, were sitting around the wall, reading magazines and trying to appear at ease. There was no conversation, no attempt to catch anyone's eye. Every soul in this room was in his private limbo, suspended between life and death. Though they were linked together by a common

misfortune, the link did not extend to communication. Each seemed as cut off from the rest of the human race as if he were already speeding through the cosmic gulfs where lay his only hope.

But in the far corner of the room, there was an exception. A young couple—neither could have been more than twenty-five—were huddling together in such desperate misery that at first Steelman found the spectacle annoying. No matter how bad their own problems, he told himself severely, people should be more considerate. They should hide their emotions—especially in a place like this, where they might upset others.

His annoyance quickly turned to pity, for no heart can remain untouched for long at the sight of simple, unselfish love in deep distress. As the minutes dripped away in a silence broken only by the rustling of papers and the scraping of chairs, his pity grew almost to an obsession.

What was their story, he wondered? The boy had sensitive, intelligent features; he might have been an artist, a scientist, a musician—there was no way of telling. The girl was pregnant; she had one of those homely, peasant faces so common among Russian women. She was far from beautiful, but sorrow and love had given her features a luminous sweetness. Steelman found it hard to take his eyes from her—for somehow, though there was not the slightest physical resemblance, she reminded him of Diana. Thirty years ago, as they had walked from the

church together, he had seen that same glow in the eyes of his wife. He had almost forgotten it; was the fault his, or hers, that it had faded so soon?

Without any warning, his chair vibrated beneath him. A swift sudden tremor had swept through the building, as if a giant hammer had smashed against the ground, many miles away. An earthquake? Steelman wondered; then he remembered where he was, and started counting seconds.

He gave up when he reached sixty; presumably the sound-proofing was so good that the slower, airborne noise had not reached him, and only the shock wave through the ground recorded the fact that a thousand tons had just leapt into the sky. Another minute passed before he heard, distant but clear, a sound as of a thunderstorm raging below the edge of the world. It was even more miles away than he had dreamed; what the noise must be like at the launching site was beyond imagination.

Yet that thunder would not trouble him, he knew, when he also rose into the sky; the speeding rocket would leave it far behind. Nor would the thrust of acceleration be able to touch his body, as it rested in its bath of warm water—more comfortable even, than this deeply-padded chair.

The distant rumble was still rolling back from the edge of space when the door of the waiting room opened and the nurse beckoned to him. Though he felt many eyes fol-

lowing him, he did not look back as he walked out to receive his sentence.

The news services tried to contact him all the way back from Moscow, but he refused to accept the calls. "Say I'm sleeping and mustn't be disturbed," he told the stewardess. He wondered who had tipped them off, and felt annoyed at this invasion of his privacy. Yet privacy was something he had avoided for years, and had learned to appreciate only in the last few weeks. He could not blame the reporters and commentators if they assumed that he had reverted to type.

They were waiting for him when the ramjet touched down at Washington. He knew most of them by name, and some were old friends, genuinely glad to hear the news that had raced ahead of him.

"What does it feel like, Senator," said Macauley of the *Times*, "to know you're back in harness? I take it that it's true—the Russians can cure you?"

"They *think* they can," he answered cautiously. "This is a new field of medicine, and no one can promise anything."

"When do you leave for space?"

"Within the week, as soon as I've settled some affairs here."

"And when will you be back—if it works?"

"That's hard to say. Even if everything goes smoothly, I'll be up there at least six months."

Involuntarily, he glanced at the sky. At dawn or sunset—even during

the daytime, if one knew where to look—the Mechnikov Station was a spectacular sight, more brilliant than any of the stars. But there were now so many satellites of which this was true, that only an expert could tell one from another.

"Six months," said a newsman thoughtfully. "That means you'll be out of the picture for '76."

"But nicely in it for 1980," said another.

"And 1984," added a third. There was a general laugh; people were already making jokes about 1984, which had once seemed so far in the future, but would soon be a date no different from any other—it was hoped.

The ears and the microphones were waiting for his reply. As he stood at the foot of the ramp, once more the focus of attention and curiosity, he felt the old excitement stirring in his veins. What a comeback it would be, to return from space a new man! It would give him a glamour that no other candidate could match; there was something Olympian, almost godlike, about the prospect. Already he found himself trying to work it into his election slogans—

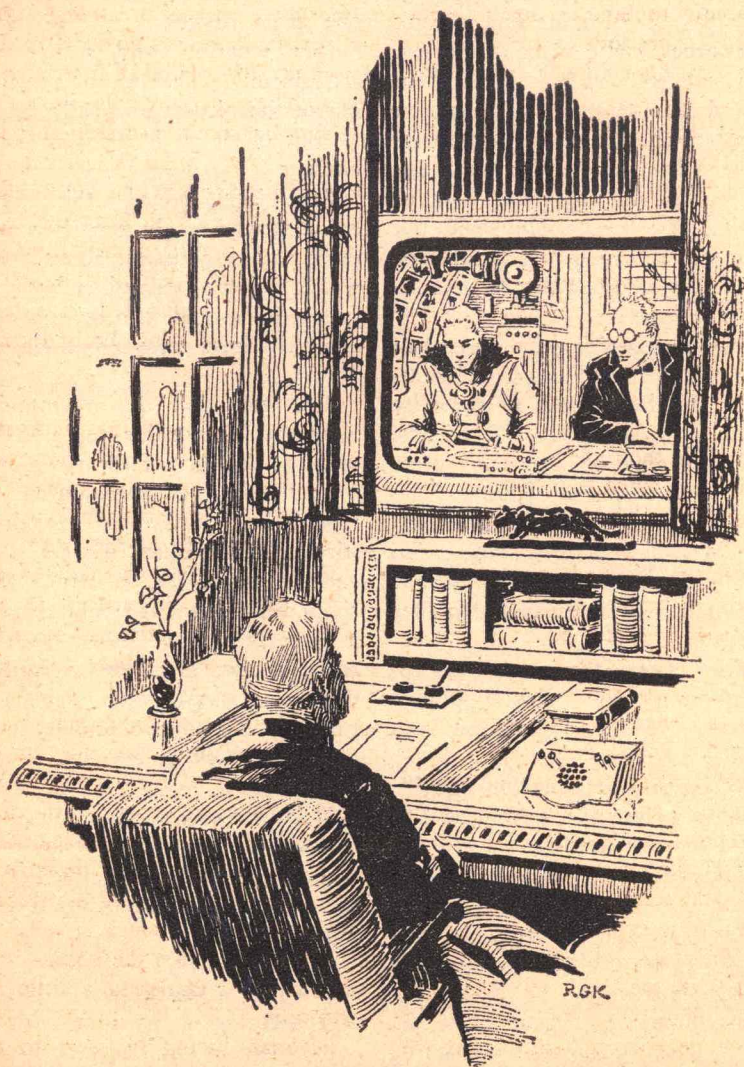
"Give me time to make my plans," he said. "It's going to take me a while to get used to this. But I promise you a statement before I leave Earth."

Before I leave Earth. Now, there was a fine, dramatic phrase. He was still savoring its rhythm with his mind when he saw Diana coming to-

wards him.

Already she had changed, as he himself was changing; in her eyes was a wariness and reserve that had not been there two days ago. It said,

as clearly as any words: "Is it going to happen, all over again?" Though the day was warm, he felt suddenly cold, as if he had caught a chill on those far Siberian plains.



But Joey and Susan were unchanged, as they ran to greet him. He caught them up in his arms, and buried his face in their hair, so that the cameras would not see the tears that had started from his eyes. As they clung to him in the innocent, unselfconscious love of childhood, he knew what his choice would have to be.

They alone had known him when he was free from the itch for power; that was the way they must remember him, if they remembered him at all.

"Your conference call, Mr. Steelman," said his secretary. "I'm routing it on to your private screen."

He swiveled round in his chair and faced the gray panel on the wall. As he did so, it split into two vertical sections. On the right half was a view of an office much like his own, and only a few miles away. But on the left—

Professor Stanyukovitch, lightly dressed in shorts and singlet, was floating in midair a good foot above his seat. He grabbed it when he saw that he had company, pulled himself down, and fastened a webbed belt round his waist. Behind him were ranged banks of communications equipment; and behind those, Steelman knew, was Space.

Dr. Harkness spoke first, from the right-hand screen.

"We were expecting to hear from you, Senator. Professor Stanyukovitch tells me that everything is ready."

"The next supply ship," said the

Russian, "comes up in two days. It will be taking me back to Earth, but I hope to see you before I leave the Station."

His voice was curiously high-pitched, owing to the thin oxyhelium atmosphere he was breathing. Apart from that, there was no sense of distance, no background of interference. Though Stanyukovitch was thousands of miles away, and racing through space at five miles a second, he might have been in the same office. Steelman could even hear the faint whirring of electric motors from the equipment racks behind him.

"Professor," answered Steelman, "there are a few things I'd like to ask before I go."

"Certainly."

Now he could tell that Stanyukovitch was a long way off. There was an appreciable time-lag before his reply arrived; the Station must be above the far side of the Earth.

"When I was at Astrograd, I noticed many other patients at the clinic. I was wondering—on what basis do you select those for treatment?"

This time the pause was much greater than the delay due to the sluggish speed of radio waves. Then Stanyukovitch answered: "Why, those with the best chance of responding."

"But your accommodation must be very limited. You must have many other candidates besides myself."

"I don't quite see the point—" interrupted Dr. Harkness, a little too anxiously.

Stelman swung his eyes to the

right-hand screen. It was quite difficult to recognize, in the man staring back at him, the witness who had squirmed beneath his needling only a few years ago. That experience had tempered Harkness, had given him his baptism in the art of politics. Steelman had taught him much, and he had applied his hard-won knowledge.

His motives had been obvious from the first. Harkness would have been less than human if he did not relish this sweetest of revenges, this triumphant vindication of his faith. And as Space Administration Director, he was well aware that half his budget battles would be over, when all the world knew that a potential President of the United States was in a Russian space hospital—because his own country did not possess one.

"Dr. Harkness," said Steelman gently, "this is *my* affair. I'm still waiting for your answer, Professor—"

Despite the issues involved he was quite enjoying this. The two scientists, of course, were playing for identical stakes. Stanyukovitch had his problems, too; Steelman could guess the discussions that had taken place at Astrograd and Moscow, and the eagerness with which the Soviet astronauts had grasped this opportunity—which it must be admitted, they had richly earned.

It was an ironic situation, unimaginable only a dozen years before. Here were NASA and the USSR Commission of Astronautics working hand in hand, using him as a pawn

for their mutual advantage. He did not resent this, for in their place he would have done the same. But he had no wish to be pawn; he was an individual who still had some control of his own destiny.

"It's quite true," said Stanyukovitch, very reluctantly, "that we can only take a limited number of patients here in Mechnikov. In any case, the station's a research laboratory, not a hospital."

"How many?" asked Steelman relentlessly.

"Well—less than ten," admitted Stanyukovitch, still more unwillingly.

It was an old problem, of course, though he had never imagined that it would apply to him. From the depths of memory there flashed a newspaper item he had come across, long ago. When penicillin had been first discovered, it was so rare that if both Churchill and Roosevelt had been dying for lack of it, only one could have been treated.

Less than ten. He had seen a dozen waiting at Astrograd, and how many were there in the whole world? Once again, as it had done so often in the last few days, the memory of those desolate lovers in the reception room came back to haunt him. Perhaps they were beyond his aid; he would never know.

But one thing he did know. He bore a responsibility which he could not escape. It was true that no man could foresee the future, and the endless consequences of his actions. Yet if it had not been for him, by this time his own country might have

had a space hospital circling beyond the atmosphere. How many American lives were upon his conscience? Could he accept the help he had denied to others? Once he might have done so—but not now.

"Gentlemen," he said, "I can speak frankly with you both, for I know your interests are identical." (His mild irony, he saw, did not escape them.) "I appreciate your help and the trouble you have taken; I am sorry it has been wasted. No—don't protest; this isn't a sudden, quixotic decision on my part. If I were ten years younger, it might be different. Now I feel that this opportunity should be given to someone else—especially in view of my record." He glanced at Dr. Harkness, who gave an embarrassed smile. "I also have other, personal reasons, and there's no chance that I will change my mind. Please don't think me rude or ungrateful, but I don't wish to discuss the matter any further. Thank you again, and good-by."

He broke the circuit; and as the image of the two astonished scientists faded, peace came flooding back into his soul.

Imperceptibly, spring merged into summer. The eagerly awaited Bicentenary celebrations came and went; for the first time in years, he was able to enjoy Independence Day as a private citizen. Now he could sit back and watch the others perform—or he could ignore them, if he wished.

Because the ties of a lifetime were too strong to break, and it would be

his last opportunity of seeing many old friends, he spent hours looking in on both conventions and listening to the commentators. Now that he saw the whole world beneath the light of eternity, his emotions were no longer involved; he understood the issues, and appreciated the arguments, but already he was as detached as an observer from another planet. The tiny, shouting figures on the screen were amusing marionettes, acting out roles in a play that was entertaining, but no longer important—at least, to him.

But it was important to his grandchildren, who would one day move out on to this same stage. He had not forgotten that; they were his share of the future, whatever strange form it might take. And to understand the future, it was necessary to know the past.

He was taking them into that past, as the car swept along Memorial Drive. Diana was at the wheel, with Irene beside her, while he sat with the children, pointing out the familiar sights along the highway. Familiar to him, but not to them; even if they were not old enough to understand all that they were seeing, he hoped they would remember.

Past the marble stillness of Arlington—he thought again of Martin, sleeping on the other side of the world—and up into the hills the car wound its effortless way. Behind them, like a city seen through a mirage, Washington danced and trembled in the summer haze, until the curve of the road hid it from view.

It was quiet at Mount Vernon; there were few visitors so early in the week. As they left the car and walked towards the house, Steelman wondered what the First President of the United States would have thought, could he have seen his home as it was today. He could never have dreamed that it would enter its second century still perfectly preserved, a changeless island in the hurrying river of time.

They walked slowly through the beautifully-proportioned rooms, doing their best to answer the children's endless questions, trying to assimilate the flavor of an infinitely simpler, infinitely more leisurely mode of life. (But had it seemed simple or leisurely to those who lived it?) It was so hard to imagine a world without electricity, without radio, without any power save that of muscle, wind or water. A world where nothing moved faster than a running horse, and most men died within a few miles of the place where they were born.

The heat, the walking, and the incessant questions proved more tiring than Steelman had expected. When they had reached the Music Room, he decided to rest. There were some attractive benches out on the porch, where he could sit in the fresh air and feast his eyes upon the green grass of the lawn.

"Meet me outside," he explained to Diana, "when you've done the kitch-

en and the stables. I'd like to sit down for a while."

"You're sure you're quite all right?" she said anxiously.

"I never felt better, but I don't want to overdo it. Besides, the kids have drained me dry—I can't think of any more answers. You'll have to invent some; the kitchen's your department, anyway."

Diana smiled.

"I was never much good in it, was I? But I'll do my best . . . I don't suppose we'll be more than thirty minutes."

When they had left him, he walked slowly out on to the lawn. Here Washington must have stood, two centuries ago, watching the Potomac wind its way to the sea, thinking of past wars and future problems. And here Martin Steelman, thirty-eighth President of the United States, might have stood a few months hence, had the fates ruled otherwise.

He could not pretend that he had no regrets, but they were very few. Some men could achieve both power and happiness, but that gift was not for him. Sooner or later, his ambition would have consumed him. In the last few weeks he had known contentment, and for that no price was too great.

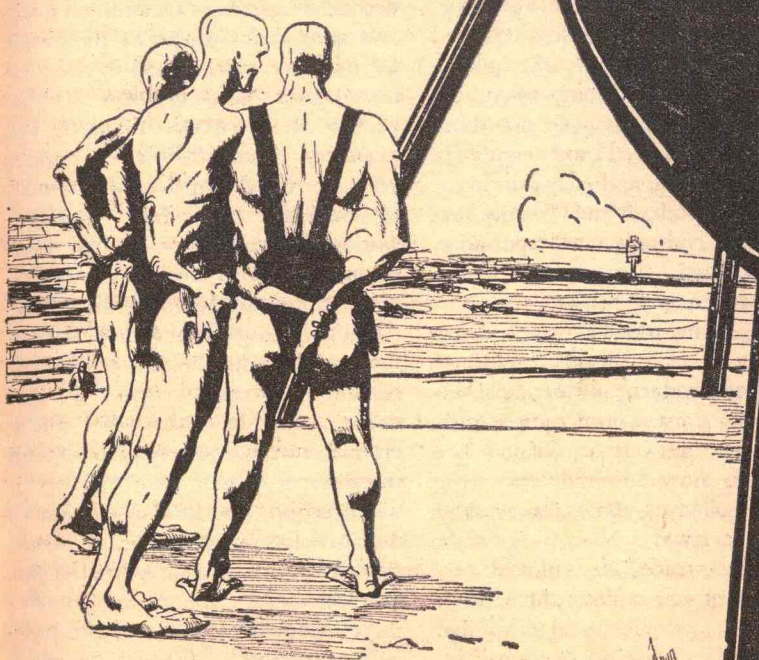
He was still marveling at the narrowness of his escape, when his time ran out and Death fell softly from the summer sky.

THE END

JOIN OUR GANG?

By **STERLING E. LANIER**

They didn't exactly hold a gun at anybody's head; all they offered was help. Of course, they did sort of encourage people to ask for help . . .



Illustrated by Douglas

JOIN OUR GANG?



COMMANDER William Powers, subleader of Survey Group Sirian Combine—1027798 and hence first officer of its ship, the *Benefactor*, stared coldly out of his cabin port. The *Benefactor* was resting on the bedrock of Island Twenty-seven of the world called Mureess by its natives. Like all the other such names, it meant "the world," just as the natives' name for themselves, Falsethsa, meant "the people," or "us," or "the only race." To Commander Powers, fifty years old, with eleven of them in Survey work, the world was Planet Two of a star called something unpronounceable in the nebula of something else equally pointless. He had not bothered to learn the native name of Island Twenty-seven, because his ship had mapped one thousand three hundred and eighty-six islands, all small, and either rocky or swampy or both. Island Twenty-seven, to him, had only one importance, and that was its being the site of the largest city on the planet.

Around the island's seven square miles, a maze of docks, buildings, sheds, breakwaters, and artificial inlets made a maze stretching a mile out to sea in every direction. The gray sea, now covered with fog patches, rolled on the horizon under low-lying cloud. Numerous craft, some small, some large, moved busily about on the water, which in its components was identical with that of Terra, far distant in the Sirius Sector. Crude but workable atomic

motors powered most of them, and there was a high proportion of submarines. Powers thought of Earth's oceans for a moment, but then dismissed the thought. Biological technical data were no specialty he needed. Terra might be suitable for the action formulating in his mind, but a thousand suns of Sirian Combine might prove more useful. The biologists of Grand Base would determine, assisted by data his ship provided, in their monster computers, what was called for. Powers had been trained for different purposes.

He was, as every survey commander was, a battle-hardened warrior. He had fought in two major fleet actions in his day, and had once, as a very junior ensign of the Sirian Grand Fleet, participated in the ultimate horror, the destruction by obliteration of an inhabited planet. For planetary destruction a unanimous vote of the Sirian Grand Council, representing over four thousand worlds, was necessary. It had been given only four times in the long history of the Confederacy. Every intelligent being in the great Union shuddered at the thought of its ever becoming necessary again. Powers stared moodily over the rocky ground toward a group of figures in the distance which were moving in his direction. The final delegation of the Mureess government, a world government, was coming for its last meeting before the *Benefactor* departed into the far reaches of space.

Powers braced himself mentally for a grand effort. He held equiva-

lent rank to that of a Galactic admiral, and it was held for one reason only, because of his real work and its importance. He was a super-psychologist, a trend-analyzer, a salesman, a promoter, a viewer, an expert on alien symbology and the spearhead of the most ruthless intelligence service in the known universe. Long ago, he had transferred from the battle fleet to the inner school at Sirius Prime for the most intensive training ever devised. Now it would be put to the ultimate test.

He heard the air lock open and turned away from the window. He had a long way to walk to the neutral council chamber, for the *Benefactor* was a big ship, despite the fact that only twenty beings comprised the total complement. Down the echoing corridors he paced, brow furrowed in thought. Mazechazz would have his own ideas, he knew, but if they made no impression, he would have to put his oar in. Each being on board, whether he breathed halogen or oxygen, ate uranium or protein, had to be independent in thought and action under certain circumstances. The circumstances were here, here and now in his judgment.

He arrived at the door of the Council chamber, and entered, an impressive sight in flaming orange and blue uniform.

Four members of the Supreme Council of Mureess rose solemnly and inclined their heads in his direction. They were tall bipeds of vaguely reptilian ancestry, most of their

height being body. They stood on short powerful legs, terminating in flippered feet, and their long arms were flanged to the second elbow with a rubbery fin. Only four opposed fingers flexed the hands, but the dome-shaped heads and golden eyes screamed intelligence as loudly as the bodies shouted adaption to an aquatic environment. Around the brown torsos, light but efficient harness supported a variety of instruments in noncorrosive metal sheaths. All of the instruments had been discreetly examined by scanning beams and pronounced harmless before any contact had been allowed.

Across the central table, Sakh Mazechazz, of Lyra 8, leader and captain of the Survey stared red-eyed at his executive officer. Mazechazz resembled the delegation far more than he did his own officer, for he, too, had remotely reptilian forbears. Indeed he still sported a flexible tail and, save for his own orange and blue uniform, ablaze with precious stones, resembled nothing so much as a giant Terrestrial chameleon. The uniforms were no accident. Surveyemen wore anything or nothing as the case called for it, and the Falsethsa admired bright colors, having few of their own and a good color sense. The gleaming jewels on Mazechazz's uniform stressed his superiority in rank to Powers, as they were meant to.

Of the twenty Surveyemen on board the *Benefactor*, Mazechazz and Powers were the only two who most resembled, in that order, the oxygen-

breathing natives of Mureess. That automatically made them captain and executive officer of the *Benefactor*. The native population saw only the captain and executive officer of the ship, and only the council chamber. On a world of ammonia breathers, Mazechazz and Powers would have been invisible in their own part of the ship providing advice only to the Skorak of Marga 10, Lambdem, and perhaps Nyur of Antares-bi-12. If a suspicious native saw an entity with whom he could feel a remote relationship giving orders to a weird-looking, far more, alien creature, a feeling of confidence might appear.

Since Mazechazz came from a planet of super-heated desert and scrub resembling the Karoo of South Africa, the resemblance could have been bettered, but it was well within the allowable limits set forth in the Inner Mandate. And in Galactic Psychology, every trick counted. For persuasion was the chief weapon of the Sirian Combine. Outright force was absolutely forbidden, save by the aforesaid vote of the council. Every weapon in the book of persuasion was used to bring intelligent races into the Combine, and persuasion is a thing of infinite variety.

As these thoughts flashed through Powers' mind, he seated himself in a plain chair and adjusted the Universal Speaker to his mouth. Beside him, on a more elaborate chair, tailored to fit his tail, Mazechazz did the same, while the four Falsethsa seated themselves on low stools and took

similar instruments from the oblong table which separated them from the two Surveymen. Deep in the bowels of the ship, a giant translator switched on, to simultaneously translate and record the mutually alien tongues as they were spoken. Adjustable extensions on the speakers brought the sound to the bone of the skull. For different life forms, different instruments would have been necessary and were provided for.

Mazechazz, as "captain," opened the proceedings.

"Since this is our last session with you, we hope some fresh proposals have occurred to your honorable council during your absence," hummed the speaker through Powers' skull.

He who was designated First among the council of Mureess answered.

"We have no new proposals, nor indeed had we ever any. Trade would be welcome, but we vitally need nothing you or your Combine have described, captain. We have all the minerals we need and the Great Mother—he meant the sea—provides food. We will soon go into space ourselves and meet as equals with you. We cannot tolerate what you call an 'observer,' who seems to us a spy, and not subject to our laws by your own definition. That is all we have to say."

That does it, thought Powers glumly. The cold—and entirely accurate—description of a Planetary representative of the Sirian Combine was the final clincher. The intensely

proud and chauvinistic Falsethsa would tolerate no interference.

Mazechazz gave no indication that he had heard. He tried again.

"In addition to trade and education, general advancement of the populace," murmured the mike, "have you considered defense?" He paused. "Not all races who travel in space are friendly. A few are starkly inimical, hating all other forms of life. Could you defend yourselves, Honorable Sirs, against such?"

It was obvious from the speed of the answer that the Council of Mureess had considered, if not anticipated this question. The second member spoke, an obvious pre-assignment.

"In all our long history, you are our first contact with star travelers. Yet we are not defenseless. The Great Mother contains not only food, fish and plants which we harvest, but many strong and terrible beasts. Very few are left to disturb us. In addition, the implications of your ship have not escaped us, and our scientists are even now adapting some of our atomic devices used in mining to other ends." The voice contained a faint hint of pride as it ended. We got guns, too, buddy, it said, and we ain't pushovers.

The First of the Council spoke again. "Let me be plain, Respected Star-farers. It seems obvious to us that you have learned most of what we represent as a council, if not all. We are the heads of the Great Clans and we will not change. It hardly seems likely that you represent a society based on heredity if you in-

clude the diverse and nameless breeds of creature you have shown us on your screens. We do not want such an amalgam on our world causing unrest and disturbances of public order. Still less do we desire authoritarian interference with the ordered life we have developed. Your requests are one and severally refused. There will be no 'observer.' Trade, regulated by us, will be welcome. Otherwise, should you choose not to be bound by our laws, we must respectfully and finally bid you farewell. When at some future date, we develop ships such as yours, we may reconsider." The speaker paused, looked at his three confreres, who nodded silently. The First stared arrogantly at Mazechazz, and continued.

"Finally, we have decided to place a ban on further landings by aliens unless you are now prepared to negotiate a trade agreement on our terms!"

Powers thought frantically, his face motionless. This was defeat, stark and unequivocal. The parable he had in mind seemed indicated now or never. He turned to Sakh Mazechazz, and spoke.

"May I have your permission to address the Honored Council, Noble Captain?" he asked.

"Speak, First Officer," said the Lyran, his gular pouches throbbing. His ruby eyes, to his associate, looked pained, as well they might.

"Let me pose a question, Honored Sirs," said Powers. "Suppose

that in your early history of creating your orderly realm you had discovered on one of your islands a race of Falsethsa as advanced and regulated as yourselves who wished nothing to do with you?" He could feel the alerted tension of the four as the golden eyes glowed at him.

"The implications of your question are obvious," the First of the Council spoke, as coldly as ever. "Do you threaten us with force from your Combine devoted to peace?" The flat voice of the translator hummed with acquired and impossible violence which Powers knew to be subjective.

The First continued. "We would resist to the ultimate, down to the least of our young and the most helpless female weed cultivator! Do your worst!"

Powers sat back. He had done his best. The hereditary dictatorship of a united world had spoken. No democratic minority had ever raised its head here. The society of Mureess was stratified in a way ancient India never thought of being, down to refuse collectors of a thousand generations of dishonorable standing. Ancient Japan had been as rigidly exclusionist but there *had* been a progressive element there. Here there was nothing. Nothing that is, except a united world of coldly calculating and very advanced entities about to erupt into space with Heaven knew what weapons and a murderous arrogance and race pride to bolster them.

He thought of the dead orb called Sebelia, rolling around its worthless

sun, an object of nausea to all life: And he had helped. Well, the boys in Biology had the ball now. He forced himself to listen to the First of Council as he bade Mazechazz a courteous farewell.

"Depart in harmony and peace, Honorable Star-farers. May your Great Mother be benign, when you return to give your high council our message on the far-distant worlds you have shown us in the sky."

The Council departed, leaving Powers and Mazechazz staring at each other in the council chamber, their gaudy uniforms looking a little dull and drab.

"Well, Sakh," said Powers, his ruddy face a little flushed, "we can't be perfect. They don't know about spacewarps and instantaneous communicators. Plan II has nothing to do with us."

"Beyond our recommendation, you mean," said the Lyran flatly. "We have failed, William. This means death for thousands of innocent beings, perhaps more. Their world population is about eighty million, you know."

There was silence in the room until Powers broke it again.

"Would you have Sebelia, Sakh," he asked gently, "or Ruller I, Bellevan's world, or Labath?" There was no answer to this and he knew it. There was only one alternative to a dead, burned-out, empty planet. Mureess was in the wrong stage of development, and it would have to be brought in line. The Sirian Combine had to, and would remove any intelli-

gent unknown menace from a position from which it could threaten its Master plan of integrated peace. As they left the chamber, Powers said a silent prayer and touched the tiny Crescent and Star embroidered on his shirt pocket. At least, he thought, the planted ultra-wave communicators would be there when the Falsethsa needed them. He looked out of a corridor port at the gray and rolling sea. The Great Mother, he thought bitterly, benevolent and overflowing!

Traleres-124, female gardener, aged thirty-two cycles, hummed in a minor key as she harvested weed of the solstice crop, twelve miles off the northern islands. A rest period was due in the next cycle day, and she and her mate were ahead of quota which should make the supervisor give them a good holiday.

The tall weed swayed gently against her and several small fish darted past in fright. As the first heavy beat of the water struck against her slim body, she looked up. Frozen with horror, she released her container, but in forty feet of water, the monster caught her before she had moved a hundred yards.

As it fed, horribly, other grim shapes, attracted by the blood moved in from the distant murk of deeper water.

Savathake-er rode his one-man torpedo alertly as he probed the southern bay of Ramasarett. He was a scientist-12 and also a hereditary

hunter. If the giant fish, long since eliminated from the rest of the seas, were breeding in some secret area of the far and desolate southern rocks, it was his business to know it. No fish could catch his high-powered torpedo, while his electric spears packed a lethal jolt. Probably, he thought, a rumor of the poor fisher folk who worked the southern fringe areas. What else could you expect from such types, who had never even learned to read in a thousand cycles. Nevertheless, as he patrolled the sunken rocks, he was alert, scanning the water on all sides constantly for the great shape he sought, his skin alert for the first strange vibration. By neglecting the broken bottom, brown with laminaria and kelp, he missed the great, mottled tentacle which plucked him off his torpedo in a flash of movement, leaving the riderless craft to cruise aimlessly away into the distance.

"Your highness," said the Supervisor Supreme, "we are helpless. We have never used metal nets, because we have never had to. Our fiber nets they slash to ribbons. They attack every species of food-fish from the Ursaa to the Krad. The breeding rate is fantastic, and now my equal who controls the mines says they are attacking the miners despite all the protection he can give them. They are not large, but in millions—"

"Cease your outcries," said the First in Council, wearily, "and remove that animal from my writing desk. I have seen many pictures of it

since they first appeared five cycles ago. It still looks alien and repulsive."

They stared in silence at the shape that any high-school biology student of distant Terra could have identified in his sleep.

At length, the First in Council dismissed the Supervisor of Fisheries and headed thoughtfully for an inner room of his palace. He knew at last the meaning of the strange metal communicating devices, discovered and confiscated after the star ship had departed, six cycles before. It was a simple machine to operate, and he guessed food could be sent incredibly quickly to his starving planet. Just as quickly as other things, he thought grimly. And we have to beg. Hah. Admission to the great peace-loving Combine, may the crabs devour them.

But he knew that he would send and that they would come.

"I was comparing the two reports, my friend," said Mazechazz, "but I am not so familiar with your planetary ecology as I should be. When Mureess applied for admission to the Combine, I requested a copy of their secret directive from Biology, but I had never seen the older report until you gave it to me just now. Can you explain the names to me, if I read them off?"

"Go ahead," said Powers, sipping his sherbet noisily. He seldom wondered what alcohol would feel like any longer. Most Old Believers had tried it when young and disliked it.

"I've already looked up the names I didn't know," he said, "so start the Mureessan list first."

"Great White Shark, or Man-eater," read Mazechazz. "He sounds obvious and nasty."

"He is," said Powers. He put down his glass. "Remember, as usual, the birth rate has been at least tripled. An increased metabolism means increased food consumption, and no shark on Terra was ever full. This brute runs forty feet when allowed, in size, that is. A giant carnivorous fish, very tough."

"Number two is Architeuthis, or Giant Squid," continued the Lyran. "Is that a fish? Sorry, but on my world, well, fish are curiosities."

"It's an eyed, carnivorous mollusk with enormous arms, ten of them and it reaches eighty feet long at least. Swims well, too."

There was a moment of silence, then Mazechazz continued. "Smooth dogfish."

"A tiny shark," said Powers, "about three and a half feet in size. They school in thousands on Terra and eat anything that swims. Just a blind agile appetite. They have a high *normal* breeding rate."

"Finally we have a Baleran Salamander, so you're free of one curse, anyway. Balera, I believe, is hellishly wet, although I don't know much about it."

Powers rose and stretched. "He's a little fellow with six legs and a leathery hide. A nuisance on Balera, which is the equivalent of a Terran swamp. He eats every vegetable

known, dry or fresh, and, being only two inches long is hard to see. He doesn't bite, just eats things and breeds. There must be millions by now, on each island of Mureess. Then the eggs get carried about. They're tough and adhesive. You can guess what their warehouses looked like."

"At least two million starved before the Council gave in," resumed the Lyran sadly. "But they gave in all the way and abolished caste privilege before the first relief ship even arrived. They'll be full members shortly. And this older report?"

"Read the names," said Powers. He was staring out of the Club window at the stars. "They fed us our own dirt, because we hadn't eliminated all our competitors. Disease means microorganisms, so you choose the largest animal possible with efficiency, that is. Just read the list. My grandparents died, you know, but it had to be done, or we'd have destroyed ourselves. The Combine was a far greater blessing to us than it ever was to Mureess, I can

assure you of that!"

He listened in silence as the Lyran read.

"Desmodus, the vampire bat,
Rattus Norvegicus, the common
rat,
Mus Domesticus, the common
mouse,
The Common Locust,
Sylvilagus, the Cottontail Rabbit,
Passer Domesticus, the House
Sparrow,
Sturnus Vulgarus, the European
Starling."

Powers sat down and stared at his friend. "Terran life by comparison with many other worlds is terribly tough because we have so many different environments, I suppose. Hence its use on Mureess. Of course, the Combine increased breeding rates again, but adapting that bat to stand cold was the last straw," he said. "The rest of them were all ready and waiting, but the bat was tropical. We'll start with him. Desmodus is a small flying mammal about . . .

THE END

Continued from page 32

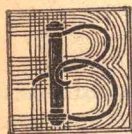
February

1. The Weakling	Everett B. Cole	2.55
2. Freedom	Mack Reynolds	2.60
3. Occasion for Disaster (4)	Mark Phillips	3.06
4. The Ghost Fleet	Christopher Anvil	3.42
5. The Plague	Teddy Keller	3.67

The Editor.

GONE FISHING

By JAMES H. SCHMITZ



BARNEY CHARD, thirty-seven—financier, entrepreneur, occasional blackmailer, occasional con man, and very competent in all these activities—stood on a rickety wooden lake dock, squinting against the late afternoon sun, and waiting for his current business prospect to give up the pretense of being interested in trying to catch fish.

The prospect, who stood a few yards farther up the dock, rod in one hand, was named Dr. Oliver B. McAllen. He was a retired physicist, though less retired than was generally assumed. A dozen years ago he had rated as one of the country's top men in his line. And, while dressed like an aging tramp in what he had referred to as fishing togs, he was at the moment potentially the country's wealthiest citizen. There was a clandestine invention he'd fathered which he called the McAllen Tube. The Tube was the reason Barney Chard had come to see McAllen.

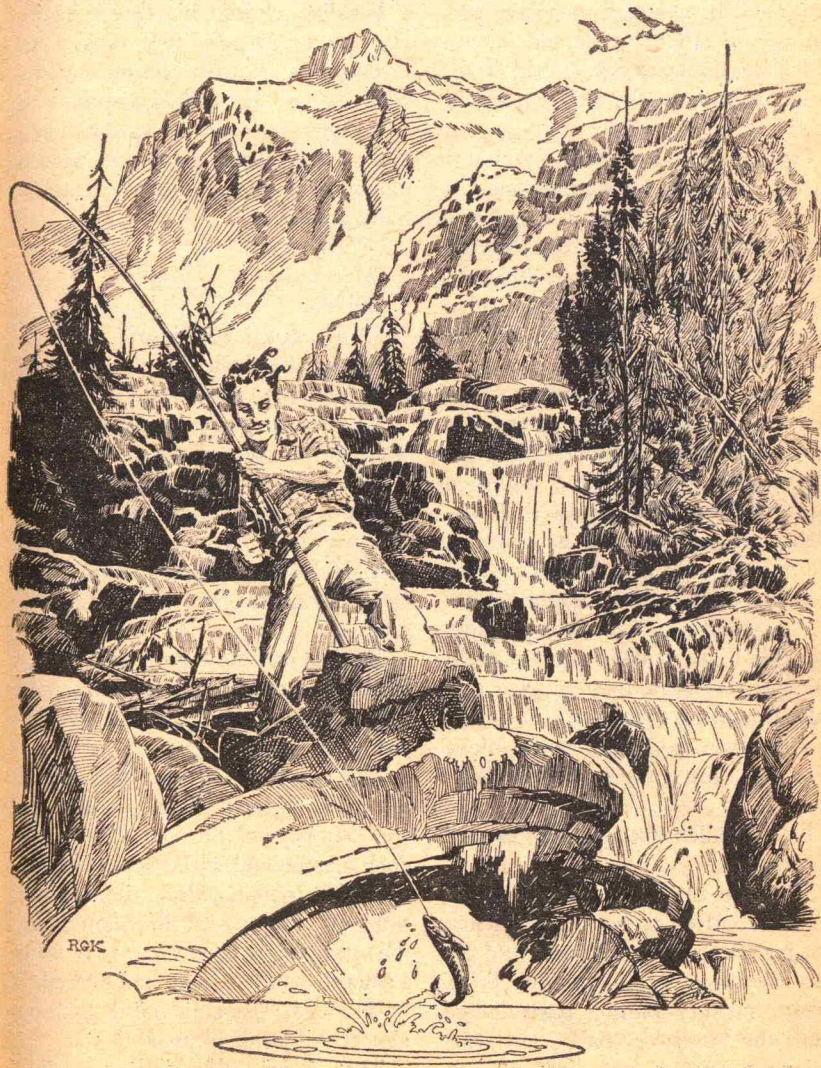
Gently raising and lowering the fishing rod, and blinking out over

the quiet water, Dr. McAllen looked preoccupied with disturbing speculations not connected with his sport. The man had a secrecy bug. The invention, Barney thought, had turned out to be bigger than the inventor. McAllen was afraid of the Tube, and in the forefront of his reflections must be the inescapable fact that the secret of the McAllen Tube could no longer be kept without Barney Chard's cooperation. Barney had evidence of its existence, and didn't really need the evidence. A few hints dropped here and there would have made McAllen's twelve years of elaborate precaution quite meaningless.

Ergo, McAllen must be pondering now, how could one persuade Mr. Chard to remain silent?

But there was a second consideration Barney had planted in the old scientist's mind. Mr. Chard, that knowledgeable man of the world, excluded not at all by chance the impression of great quantities of available cash. His manner, the conservatively tailored business suit, the priceless chip of a platinum watch . . . and McAllen needed cash badly. He'd

There is no predictable correlation between intelligence and ethics, nor is ruthlessness necessarily an evil thing. And there is nothing like enforced, uninterrupted contemplation to learn to distinguish one from another . . .



Illustrated by Krenkel

been fairly wealthy himself at one time; but since he had refrained from exploiting the Tube's commercial possibilities, his continuing work with it was exhausting his capital. At least that could be assumed to be the reason for McAllen's impoverishment, which was a matter Barney had established. In months the old man would be living on beans.

Ergo again, McAllen's thoughts must be running, how might one not merely coax Mr. Chard into silence, but actually get him to come through with some much-needed financial support? What inducement, aside from the Tube, could be offered someone in his position?

Barney grinned inwardly as he snapped the end of his cigarette out on the amber-tinted water. The mark always sells himself, and McAllen was well along in the process. Polite silence was all that was necessary at the moment. He lit a fresh cigarette, feeling a mild curiosity about the little lake's location. Wisconsin, Minnesota, Michigan seemed equally probable guesses. What mattered was that half an hour ago McAllen's Tube had brought them both here in a wink of time from his home in California.

Dr. McAllen thoughtfully cleared his throat.

"Ever do any fishing, Mr. Chard?" he asked. After getting over his first shock at Barney's revelations, he'd begun speaking again in the brisk, abrupt manner Barney remembered from the last times he'd heard McAllen's voice.

"No," Barney admitted smiling. "Never quite got around to it."

"Always been too busy, eh?"

"With this and that," Barney agreed.

McAllen cleared his throat again. He was a roly-poly little man; over seventy now but still healthy-looking, with an apple-cheeked, sunburred face. Over a pair of steel-rimmed glasses his faded blue eyes peered musingly at Barney. "Around thirty-five, aren't you?"

"Thirty-seven."

"Married?"

"Divorced."

"Any particular hobbies?"

Barney laughed. "I play a little golf. Not very seriously."

McAllen clicked his tongue. "Well, what do you do for fun?"

"Oh . . . I'd say I enjoy almost anything I get involved in." Barney, still smiling, felt a touch of wariness. He'd been expecting questions from McAllen, but not quite this kind.

"Mainly making money, eh? Well," McAllen conceded, "that's not a bad hobby. Practical, too. I . . . whup! Just a moment."

The tip of the slender rod in his left hand dipped slightly, and sixty feet out beyond the end of the old dock a green and white bobber began twitching about. Then the bobber suddenly disappeared. McAllen lifted the rod tip a foot or two with a smooth, swift motion, and paused.

"Hooked!" he announced, looking almost childishly pleased.

The fish on the far end of the line

didn't seem to put up much of a struggle, but the old man reeled it in slowly and carefully, giving out line from time to time, then taking it back. He seemed completely absorbed. Not until the fish had been worked close to the dock was there a brief minor commotion near the surface. Then McAllen was down on one knee, holding the rod high with one hand, reaching out for his catch with the other. Barney had a glimpse of an unimpressive green and silver disk, reddish froggy eyes. "Very nice crappie!" McAllen informed him with a broad smile. "Now—" He placed the rod on the dock, reached down with his other hand. The fish's tail slapped the water; it turned sideways, was gone.

"Lost it!" Barney commented, surprised.

"Huh?" McAllen looked around. "Well, no, young man—I *turned* him loose. He wasn't hooked bad. Crappies have delicate lips, but I use a barbless hook. Gives them better than a fighting chance." He stood up with the rod, dusting the knees of his baggy slacks. "Get all the eating fish I want anyway," he added.

"You really enjoy that sport, don't you?" Barney said curiously.

McAllen advised him with the seriousness of the true devotee to try it some time. "It gets to you. It can get to be a way of living. I've been fishing since I was knee-high. Three years ago I figured I'd become good enough to write a book on the subject. I got more arguments over that

book—sunder arguments too, I'd say—than about any paper I've published in physics." He looked at Barney a moment, still seriously, and went on. "I told you wetting a line would calm me down after that upset you gave me. Well, it has—fishing is as good a form of therapy as I know about. Now I've been doing some thinking. I'd be interested . . . well, I'd like to talk some more about the Tube with you, Mr. Chard. And perhaps about other things too."

"Very gratifying to hear that, doctor," Barney said gravely. "I did regret having to upset you, you know."

McAllen shrugged. "No harm done. It's given me some ideas. We'll talk right here." He indicated the weather-beaten little cabin on the bank behind Barney. "I'm not entirely sure about the California place. That's one reason I suggested this trip."

"You feel your houseman there mightn't be entirely reliable?"

"Fredericks unreliable? Heavens, no! He knows about the Tube, of course, but Fredericks *expects* me to invent things. It wouldn't occur to him to talk to an outsider. He's been with me for almost forty years."

"He was," remarked Barney, "listening in on the early part of our conversation today."

"Well, he'll do that," McAllen agreed. "He's very curious about anyone who comes to see me. But otherwise . . . no, it's just that in these days of sophisticated listening devices one shouldn't ever feel too sure of not being overheard."

"True enough." Barney glanced up

at the cabin. "What makes you so sure of it here, doctor?"

"No reason why anyone would go to the trouble," McAllen said. "The property isn't in my name. And the nearest neighbor lives across the lake. I never come here except by the Tube so I don't attract any attention."

He led the way along the dock. Barney Chard followed, eyes reflectively on the back of McAllen's sunburned neck and the wisps of unclipped white hair sticking out beneath his beaked fishing cap. Barney had learned to estimate accurately the capacity for physical violence in people he dealt with. He would have offered long odds that neither Dr. McAllen nor Fredericks, the elderly colored man of all work, had the capacity. But Barney's right hand, slid idly into the pocket of his well-tailored coat, was resting on a twenty-five caliber revolver. This was, after all, a very unusual situation. The human factors in themselves were predictable. Human factors were Barney's specialty. But here they were involved with something unknown—the McAllen Tube.

When it was a question of his personal safety, Barney Chard preferred to take no chances at all.

From the top of the worn wooden steps leading up to the cabin, he glanced back at the lake. It occurred to him there should have been at least a suggestion of unreality about that placid body of water, and the sun low and red in the west beyond it. Not that he felt any-

thing of the kind. But less than an hour ago they had been sitting in McAllen's home in Southern California, and beyond the olive-green window shades it had been bright daylight.

"But I can't . . . I really can't imagine," Dr. McAllen had just finished bumbling, his round face a study of controlled dismay on the other side of the desk, "whatever could have brought you to these . . . these extraordinary conclusions, young man."

Barney had smiled reassuringly, leaning back in his chair. "Well, indirectly, sir, as the pictures indicate, we might say it was your interest in fishing. You see, I happened to notice you on Mallorca last month . . ."

By itself, the chance encounter on the island had seemed only moderately interesting. Barney was sitting behind the wheel of an ancient automobile, near a private home in which a business negotiation of some consequence was being conducted. The business under discussion happened to be Barney's, but it would have been inexpedient for him to attend the meeting in person. Waiting for his associates to wind up the matter, he was passing time by studying an old man who was fishing from a small boat offshore, a hundred yards or so below the road. After a while the old fellow brought the boat in, appeared a few minutes later along the empty lane carrying his tackle and an apparently empty gunny

sack, and trudged unheedingly past the automobile and its occupant. As he went by, Barney had a sudden sense of recognition. Then, in a flash, his mind jumped back twelve years.

Dr. Oliver B. McAllen. Twelve years ago the name had been an important one in McAllen's field; then it was not so much forgotten as deliberately buried. Working under government contract at one of the big universities, McAllen had been suddenly and quietly retired. Barney, who had a financial interest in one of the contracts, had made inquiries; he was likely to be out of money if McAllen had been taken from the job. Eventually he was informed, in strict confidence, that Dr. McAllen had flipped. Under the delusion of having made a discovery of tremendous importance, he had persuaded the authorities to arrange a demonstration. When the demonstration ended in complete failure, McAllen angrily accused some of his most eminent colleagues of having sabotaged his invention, and withdrew from the university. To protect a once great scientist's name, the matter was being hushed up.

So Mallorca was where the addled old physicist had elected to end his days—not a bad choice either, Barney had thought, gazing after the retreating figure. Pleasant island in a beautiful sea—he remembered having heard about McAllen's passion for angling.

A day later, the Mallorca business profitably concluded, Barney flew back to Los Angeles. That eve-

ning he entertained a pair of tanned and shapely ladies whose idea of high fun was to drink all night and go deep-sea fishing at dawn. Barney shuddered inwardly at the latter notion, but promised to see the sporting characters to the Sweetwater Beach Municipal Pier in time to catch a party boat, and did so. One of the girls, he noticed not without satisfaction—he had become a little tired of the two before morning—appeared to turn a delicate green as she settled herself into the gently swaying half-day boat beside the wharf. Barney waved them an amiable farewell and was about to go when he noticed a plump old man sitting in the stern of the boat among other anglers, rigging up his tackle. Barney checked sharply, and blinked. He was looking at Oliver B. McAllen again.

It was almost a minute before he felt sure of it this time. Not that it was impossible for McAllen to be sitting in that boat, but it did seem extremely unlikely. McAllen didn't look in the least like a man who could afford nowadays to commute by air between the Mediterranean and California. And Barney felt something else trouble him obscurely as he stared down at the old scientist; a notion of some kind was stirring about in the back corridors of his mind, but refused to be drawn to view just then.

He grew aware of what it was while he watched the party boat head out to sea a few minutes later,

smiled at what seemed an impossibly fanciful concoction of his unconscious, and started towards the pier's parking lot. But when he had reached his car, climbed in, turned on the ignition, and lit a cigarette, the notion was still with him and Barney was no longer smiling. Fanciful it was, extremely so. Impossible, in the strict sense, it was not. The longer he played it around, the more he began to wonder whether his notion mightn't hold water after all. If there was anything to it, he had run into one of the biggest deals in history.

Later Barney realized he would still have let the matter drop there if it hadn't been for other things, having nothing to do with Dr. McAllen. He was between operations at present. His time wasn't occupied. Furthermore he'd been aware lately that ordinary operations had begun to feel flat. The kick of putting over a deal, even on some other hard, bright character of his own class, unaccountably was fading. Barney Chard was somewhat frightened because the operator game was the only one he'd ever found interesting; the other role of well-heeled playboy wasn't much more than a manner of killing time. At thirty-seven he was realizing he was bored with life. He didn't like the prospect.

Now here was something which might again provide him with some genuine excitement. It could be simply his imagination working overtime, but it wasn't going to do any harm to find out. Mind humming

with pleased though still highly skeptical speculations, Barney went back to the boat station and inquired when the party boat was due to return.

He was waiting for it, well out of sight, as it came chugging up to the wharf some hours later. He had never had anything to do directly with Dr. McAllen, so the old man wouldn't recognize him. But he didn't want to be spotted by his two amazons who might feel refreshed enough by now to be ready for another tour of the town.

He needn't have worried. The ladies barely made it to the top of the stairs; they phoned for a cab and were presently whisked away. Dr. McAllen meanwhile also had made a telephone call, and settled down not far from Barney to wait. A small gray car, five or six years old but of polished and well-tended appearance, trundled presently up the pier, came into the turnaround at the boat station, and stopped. A thin old Negro, with hair as white as the doctor's, held the door open for McAllen. The car moved unhurriedly off with them.

The automobile's license number produced Dr. McAllen's California address for Barney a short while later. The physicist lived in Sweetwater Beach, fifteen minutes' drive from the pier, in an old Spanish-type house back in the hills. The chauffeur's name was John Emanuel Fredericks; he had been working for McAllen for an unknown length of time. No one else lived there.

Barney didn't bother with further details about the Sweetwater Beach establishment at the moment. The agencies he usually employed to dig up background information were reasonably trustworthy, but he wanted to attract no more attention than was necessary to his interest in Dr. McAllen.

That evening he took a plane to New York.

Physicist Frank Elby was a few years older than Barney, an acquaintance since their university days. Elby was ambitious, capable, slightly dishonest; on occasion he provided Barney with contraband information for which he was generously paid.

Over lunch Barney broached a business matter which would be financially rewarding to both of them, and should not burden Elby's conscience unduly. Elby reflected, and agreed. The talk became more general. Presently Barney remarked, "Ran into an old acquaintance of ours the other day. Remember Dr. McAllen?"

"Oliver B. McAllen? Naturally. Haven't heard about him in years. What's he doing?"

Barney said he had only seen the old man, hadn't spoken to him. But he was sure it was McAllen.

"Where was this?" Elby asked.

"Sweetwater Beach. Small town down the Coast."

Elby nodded. "It must have been McAllen. That's where he had his home."

"He was looking hale and hearty. They didn't actually institutionalize him at the time of his retirement, did they?"

"Oh, no. No reason for it. Except on the one subject of that cockeyed invention of his, he behaved perfectly normally. Besides he would have hired a lawyer and fought any such move. He had plenty of money. And nobody wanted publicity. McAllen was a pretty likable old boy."

"The university never considered taking him back?"

Elby laughed. "Well, hardly! After all, man—a matter transmitter!"

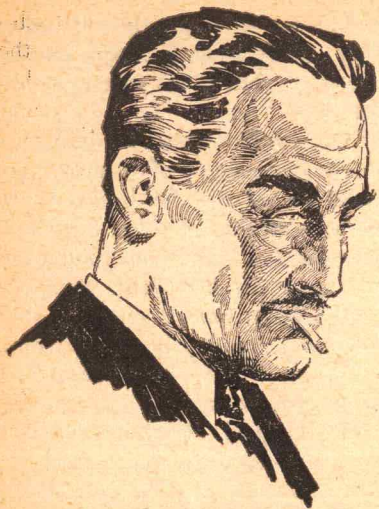
Barney felt an almost electric thrill of pleasure. Right on the nose, Brother Chard! Right on the nose.

He smiled. "Was that what it was supposed to be? I never was told all the details."

Elby said that for the few who were informed of the details it had been a seven-day circus. McAllen's reputation was such that more people, particularly on his staff, had been ready to believe him than were ready to admit it later. "When he'd left—you know, he never even bothered to take that 'transmitter' along—the thing was taken apart and checked over as carefully as if somebody thought it might still suddenly start working. But it was an absolute Goldberg, of course. The old man had simply gone off his rocker."

"Hadn't there been any indication of it before?"

"Not that I know of. Except that he'd been dropping hints about his gadget for several months before he



showed it to anyone," Elby said indifferently. The talk turned to other things.

The rest was routine, not difficult to carry out. A small cottage on Mallorca, near the waterfront, was found to be in McAllen's name. McAllen's liquid assets were established to have dwindled to something less than those of John Emanuel Fredericks, who patronized the same local bank as his employer. There had been frequent withdrawals of large, irregular sums throughout the past years. The withdrawals were not explained by McAllen's frugal personal habits; even his fishing excursions showed an obvious concern for expense. The retention of the Mediterranean retreat, modest though it was, must have a reason beyond simple self-indulgence.

Barney arranged for the rental of

a bungalow in the outskirts of Sweet-water beach, which lay uphill from the old house in which McAllen and Fredericks lived, and provided a good view of the residence and its street entry. He didn't go near the place himself. Operatives of a Los Angeles detective agency went on constant watch in the bungalow, with orders to photograph the two old men in the other house and any visitors at every appearance, and to record the exact times the pictures were taken. At the end of each day the photographs were delivered to an address from where they promptly reached Barney's hands.

A European agency was independently covering the Mallorca cottage in the same manner.

Nearly four weeks passed before Barney obtained the exact results he wanted. He called off the watch at both points, and next day came up the walk to McAllen's home and rang the doorbell. John Fredericks appeared, studied Barney's card and Barney with an air of mild disapproval, and informed him that Dr. McAllen did not receive visitors.

"So I've been told," Barney acknowledged pleasantly. "Please be so good as to give the doctor this."

Fredericks' white eyebrows lifted by the barest trifle as he looked at the sealed envelope Barney was holding out. After a moment's hesitation he took it, instructed Barney to wait, and closed the door firmly.

Listening to Fredericks' footsteps receding into the house, Barney lit a cigarette, and was pleased to find

that his hands were as steady as if he had been on the most ordinary of calls. The envelope contained two sets of photographs, dated and indicating the time of day. The date was the same for both sets; the recorded time showed the pictures had been taken within fifteen minutes of one another. The central subject in each case was Dr. McAllen, sometimes accompanied by Fredericks. One set of photographs had been obtained on Mallorca, the other in Sweet-water Beach at McAllen's house.

Barring rocket assists, the two old men had been documented as the fastest moving human beings in all of history.

Several minutes passed before Fredericks reappeared. With a face which was now completely without expression, he invited Barney to enter, and conducted him to McAllen's study. The scientist had the photographs spread out on a desk before him. He gestured at them.

"Just what—if anything—is this supposed to mean, sir?" he demanded in an unsteady voice.

Barney hesitated aware that Fredericks had remained in the hall just beyond the study. But Fredericks obviously was in McAllen's confidence. His eavesdropping could do no harm.

"It means this, doctor—" Barney began, amiably enough; and he proceeded to tell McAllen precisely what the photographs meant. McAllen broke in protestingly two or three times, then let Barney conclude his account of the steps he

had taken to verify his farfetched hunch on the pier without further comment. After a few minutes Barney heard Fredericks' steps moving away, and then a door closing softly somewhere, and he shifted his position a trifle so that his right side was now toward the hall door. The little revolver was in the right-hand coat pocket. Even then Barney had no real concern that McAllen or Fredericks would attempt to resort to violence; but when people are acutely disturbed—and McAllen at least was—almost anything can happen.

When Barney finished, McAllen stared down at the photographs again, shook his head, and looked over at Barney.

"If you don't mind," he said, blinking behind his glasses, "I should



like to think about this for a minute or two."

"Of course, doctor," Barney said politely. McAllen settled back in the chair, removed his glasses and half closed his eyes. Barney let his gaze rove. The furnishings of the house were what he had expected—well-tended, old, declining here and there to the downright shabby. The only reasonably new piece in the study was a radio-phonograph. The walls of the study and of the section of a living room he could see through a small archway were lined with crammed bookshelves. At the far end of the living room was a curious collection of clocks in various types and sizes, mainly antiques, but also some odd metallic pieces with modernistic faces. Vacancies in the rows indicated Fredericks might have begun to dispose discreetly of the more valuable items on his employer's behalf.

McAllen cleared his throat finally, opened his eyes, and settled the spectacles back on his nose.

"Mr. Chard," he inquired, "have you had scientific training?"

"No."

"Then," said McAllen, "the question remains of what your interest in the matter is. Perhaps you'd like to explain just why you put yourself to such considerable expense to intrude on my personal affairs—"

Barney hesitated perceptibly. "Doctor," he said, "there is something tantalizing about an enigma. I'm fortunate in having the financial means to gratify my curiosity when it's excited to the extent it was here."

McAllen nodded. "I can understand curiosity. Was that your only motive?"

Barney gave him his most disarming grin. "Frankly no. I've mentioned I'm a businessman—"

"Ah!" McAllen said, frowning.

"Don't misunderstand me. One of my first thoughts admittedly was that here were millions waiting to be picked up. But the investigation soon made a number of things clear to me."

"What were they?"

"Essentially, that you had so sound a reason for keeping your invention a secret that to do it you were willing to ruin yourself financially, and to efface yourself as a human being and as a scientist."

"I don't feel," McAllen observed mildly, "that I really have effaced myself, either as a human being or as a scientist."

"No, but as far as the public was concerned you did both."

McAllen smiled briefly. "That stratagem was very effective—until now. Very well, Mr. Chard. You understand clearly that under no circumstances would I agree to the commercialization of . . . well, of my matter transmitter?"

Barney nodded. "Of course."

"And you're still interested?"

"Very much so."

McAllen was silent a few seconds, biting reflectively at his lower lip. "Very well," he said again. "You were speaking of my predilection for fishing. Perhaps you'd care to accompany me on a brief fishing trip?"

"Now?" Barney asked.

"Yes, now. I believe you understand what I mean . . . I see you do. Then, if you'll excuse me for a few minutes—"

Barney couldn't have said exactly what he expected to be shown. His imaginings had run in the direction of a camouflaged vault beneath McAllen's house—some massively-walled place with machinery that powered the matter transmitter purring along the walls . . . and perhaps something in the style of a plastic diving bell as the specific instrument of transportation.

The actual experience was quite different. McAllen returned shortly, having changed into the familiar outdoor clothing—apparently he had been literal about going on a fishing trip. Barney accompanied the old physicist into the living room, and watched him open a small but very sturdy wall safe. Immediately behind the safe door, an instrument panel had been built in the opening.

Peering over the spectacles, McAllen made careful adjustments on two sets of small dials, and closed and locked the safe again.

"Now, if you'll follow me, Mr. Chard—" He crossed the room to a door, opened it, and went out. Barney followed him into a small room with rustic furnishings and painted wooden walls. There was a single, heavily curtained window; the room was rather dim.

"Well," McAllen announced, "here we are."

It took a moment for that to sink in. Then, his scalp prickling eerily, Barney realized he was standing farther from the wall than he had thought. He looked around, and discovered there was no door behind him now, either open or closed.

He managed a shaky grin. "So that's how your matter transmitter works!"

"Well," McAllen said thoughtfully, "of course it isn't really a matter transmitter. I call it the McAllen Tube. Even an educated layman must realize that one can't simply disassemble a living body at one point, reassemble it at another, and expect life to resume. And there are other considerations—"

"Where are we?" Barney asked. "On Mallorca?"

"No. We haven't left the continent—just the state. Look out the window and see for yourself."

McAllen turned to a built-in closet, and Barney drew back the window hangings. Outside was a grassy slope, uncut and yellowed by the summer sun. The slope dropped sharply to a quiet lakefront framed by dark pines. There was no one in sight, but a small wooden dock ran out into the lake. At the far end of the dock an old rowboat lay tethered. And—quite obviously—it was no longer the middle of a bright afternoon; the air was beginning to dim, to shift towards evening.

Barney turned to find McAllen's mild, speculative eyes on him, and saw the old man had put a tackle box and fishing rod on the table.

"Your disclosures disturbed me more than you may have realized," McAllen remarked by way of explanation. His lips twitched in the shadow of a smile. "At such times I find nothing quite so soothing as to drop a line into water for a while. I've some thinking to do, too. So let's get down to the dock. There ought to be a little bait left in the minnow pail."

When they returned to the cabin some time later, McAllen was in a pensive mood. He started a pot of coffee in the small kitchen, then quickly cleaned the tackle and put it away. Barney sat at the table, smoking and watching him, but made no attempt at conversation.

McAllen poured the coffee, produced sugar and powdered milk, and settled down opposite Barney. He said abruptly, "Have you had any suspicions about the reason for the secretive mumbo jumbo?"

"Yes," Barney said, "I've had suspicions. But it wasn't until *that* happened"—he waved his hand at the wall out of which they appeared to have stepped—"that I came to a definite conclusion."

"Eh?" McAllen's eyes narrowed suddenly. "What was the conclusion?"

"That you've invented something that's really a little too good."

"Too good?" said McAllen. "Hm-m-m. Go on."

"It doesn't take much power to operate the thing, does it?"

"Not," said McAllen dryly, "if

you're talking about the kind of power one pays for."

"I am. Can the McAllen Tube be extended to any point on Earth?"

"I should think so."

"And you financed the building of this model yourself. Not very expensive. If the secret leaked out, I'd never know who was going to materialize in my home at any time, would I? Or with what intentions?"

"That," McAllen nodded, "is about the size of it."

Barney crushed out his cigarette, lit a fresh one, blew out a thin streamer of smoke. "Under the circumstances," he remarked, "it's unfortunate you can't get the thing shut off again, isn't it?"

McAllen was silent for some seconds. "So you've guessed that, too," he said finally. "What mistake did I make?"

"None that I know of," Barney said. "But you're doing everything you can to keep the world from learning about the McAllen Tube. At the same time you've kept it in operation—which made it just a question of time before somebody else noticed something was going on, as I did. Your plans for the thing appear to have gone wrong."

McAllen was nodding glumly. "They have," he said. "They have, Mr. Chard. Not irreparably wrong, but still—" He paused. "The first time I activated the apparatus," he said, "I directed it only at two points. Both of them within structures which were and are my property. It was fortunate I did so."

"That was this cabin and the place on Mallorca?"

"Yes. The main operational sections of the Tube are concealed about my California home. But certain controls have to be installed at any exit point to make it possible to return. It wouldn't be easy to keep those hidden in any public place.

"It wasn't until I compared the actual performance of the Tube with my theoretical calculations that I discovered there was an unforeseen factor involved. To make it short, I could not—to use your phrasing—shut the Tube off again. But that would certainly involve some extremely disastrous phenomena at three different points of our globe."

"Explosions?" Barney asked.

"Weee-ll," McAllen said judiciously, "implosions might come a little closer to describing the effect. The exact term isn't contained in our vocabulary, and I'd prefer it *not* to show up there, at least in my lifetime. But you see my dilemma, don't you? If I asked for help, I revealed the existence of the Tube. Once its existence was known, the research that produced it could be duplicated. As you concluded, it isn't really too difficult a device to construct. And even with the present problem solved, the McAllen Tube is just a little too dangerous a thing to be at large in our world today."

"You feel the problem can be solved?"

"Oh, yes." McAllen took off his glasses and rubbed his eyes. "That part of it's only a matter of time.

At first I thought I'd have everything worked out within three or four years. Unfortunately I badly underestimated the expense of some of the required experimentation. That's what's delayed everything."

"I see. I had been wondering," Barney admitted, "why a man with something like this on his mind would be putting in *quite* so much time fishing."

McAllen grinned. "Enforced idleness. It's been very irritating really, Mr. Chard. I've been obliged to proceed in the most inexpensive manner possible, and that meant—very slowly."

Barney said, "If it weren't for that question of funds, how long would it take to wind up the operation?"

"A year—perhaps two years." McAllen shrugged. "It's difficult to be too exact, but it certainly wouldn't be longer than two."

"And what would be the financial tab?"

McAllen hesitated. "A million is the bottom figure, I'm afraid. It should run closer to a million and a half."

"Doctor," Barney said, "let me make you a proposition."

McAllen looked at him. "Are you thinking of financing the experiments, Mr. Chard?"

"In return," Barney said, "for a consideration."

"What's that?" McAllen's expression grew wary.

"When you retired," Barney told him, "I dropped a nice piece of

money as a consequence. It was the first beating I'd taken, and it hurt. I'd like to pick that money up again. All right. We're agreed it can't be done on the McAllen Tube. The Tube wouldn't help make the world a safer place for Barney Chard. But the Tube isn't any more remarkable than the mind that created it. Now I know a company which could be top of the heap in electronics precision work—one-shot specialties is what they go in for—if it had your mind as technical advisor. I can buy a controlling interest in that company tomorrow, doctor. And you can have the million and a half paid off in not much more time than you expect to take to get your monster back under control and shut down. Three years of your technical assistance, and we're clear."

McAllen's face reddened slowly. "I've considered hiring out, of course," he said. "Many times. I need the money very badly. But aren't you overlooking something?"

"What?"

"I went to considerable pains," said McAllen, "to establish myself as a lunatic. It was distasteful, but it seemed necessary to discourage anyone from making too close an investigation of some of my more recent lines of research. If it became known now that I was again in charge of a responsible project—"

Barney shook his head. "No problem, doctor. We'd be drawing on outside talent for help in specific matters—very easy to cover up any leads to you personally. I've handled

that general sort of thing before."

McAllen frowned thoughtfully. "I see. But I'd have— There wouldn't be so much work that—"

"No," Barney said. "I guarantee that you'll have all the time you want for your own problem." He smiled. "Considering what you told me, I'd like to hear that one's been solved myself!"

McAllen grinned briefly. "I can imagine. Very well. Ah . . . when can you let me have the money, Mr. Chard?"

The sun was setting beyond the little lake as Barney drew the shades over the cabin window again. Dr. McAllen was half inside the built-in closet at the moment, fitting a pair of toggle switches to the concealed return device in there.

"Here we go," he said suddenly.

Three feet from the wall of the room the shadowy suggestion of another wall, and of an open door, became visible.

Barney said dubiously, "We came out of *that*?"

McAllen looked at him, sad, "The appearance is different on the exit side. But the Tube's open now— Here, I'll show you."

He went up to the apparition of a door, abruptly seemed to melt into it. Barney held his breath, and followed. Again there was no sensory reaction to passing through the Tube. As his foot came down on something solid in the shadowiness into which he stepped, the living room in Sweetwater Beach sprang

into sudden existence about him.

"Seems a little odd from that end, the first time through, doesn't it?" McAllen remarked.

Barney let out his breath.

"If I'd been the one who invented the Tube," he said honestly, "I'd never have had the nerve to try it."

McAllen grinned. "Tell you the truth, I did need a drink or two the first time. But it's dead-safe if you know just what you're doing."

Which was not, Barney felt, too reassuring. He looked back. The door through which they had come was the one by which they had left. But beyond it now lay a section of the entrance hall of the Sweetwater Beach house.

"Don't let that fool you," said McAllen, following his gaze. "If you tried to go out into the hall at the moment, you'd find yourself right back in the cabin. Light rays passing through the Tube can be shunted off and on." He went over to the door, closed and locked it, dropping the key in his pocket. "I keep it locked. I don't often have visitors, but if I had one while the door was open it could be embarrassing."

"What about the other end?" Barney asked. "The door appeared in the cabin when you turned those switches. What happens now? Suppose someone breaks into the cabin and starts prowling around—is the door still there?"

McAllen shook his head. "Not unless that someone happened to break in within the next half-minute." He considered. "Let's put it this way,

The Tube's permanently centered on its two exit points, but the effect ordinarily is dissipated over half a mile of the neighborhood at the other end. For practical purposes there is no useful effect. When I'm going to go through, I bring the exit end down to a focus point . . . does that make sense? Very well. It remains focused for around sixty or ninety seconds, depending on how I set it; then it expands again." He nodded at the locked door. "In the cabin, that's disappeared by now. Walk through the space where it's been, and you'll notice nothing unusual. Clear?"

Barney hesitated. "And if that door were still open here, and somebody attempted to step through after the exit end had expanded—"

"Well," McAllen said, moving over to a wall buzzer and pressing it, "that's what I meant when I said it could be embarrassing. He'd get expanded too—disastrously. Could you use a drink, Mr. Chard? I know I want one."

The drinks, served by Fredericks, were based on a rather rough grade of bourbon, but Barney welcomed them. There was an almost sick fascination in what was a certainty now: he was going to get the Tube. That tremendous device was his for the taking. He was well inside McAllen's guard; only carelessness could arouse the old man's suspicions again, and Barney was not going to be careless. No need to hurry any thing. He would play the reserved

role he had selected for himself, leave developments up to the fact that McAllen had carried the burden of his secret for twelve years, with no more satisfactory confidant than Fredericks to trust with it. Having told Barney so much, McAllen wanted to tell more. He would have needed very little encouragement to go on talking about it now.

Barney offered no encouragement. Instead, he gave McAllen a cautiously worded reminder that it was not inconceivable they had an audience here, at which McAllen reluctantly subsided. There was, however, one fairly important question Barney still wanted answered today. The nature of the answer would tell him the manner in which McAllen should now be handled.

He waited until he was on his feet and ready to leave before presenting it. McAllen's plump cheeks were flushed from the two highballs he had put away; in somewhat awkward phrases he had been expressing his gratitude for Barney's generous help, and his relief that because of it the work on the Tube now could be brought to an end.

"Just one thing about that still bothers me a little, doctor," Barney said candidly.

McAllen looked concerned. "What's that, Mr. Chard?"

"Well . . . you're in good health, I'd say," Barney smiled. "But suppose something did happen to you before you succeeded in shutting the McAllen Tube down." He inclined his head toward the locked door.

"That thing would still be around waiting for somebody to open it and step through . . ."

McAllen's expression of concern vanished. He dug a forefinger cheerfully into Barney's ribs. "Young man, you needn't worry. I've been aware of the possibility, of course, and believe me I'm keeping *very* careful notes and instructions. Safe deposit boxes . . . we'll talk about that tomorrow, eh? Somewhere else? Had a man in mind, as a matter of fact, but we can make better arrangements now. You see, it's really so ridiculously *easy* at this stage."

Barney cleared his throat. "Some other physicist—?"

"*Any* capable physicist," McAllen said decidedly. "Just a matter, you see of how reliable he is." He winked at Barney. "Talk about that tomorrow too—or one of these days."

Barney stood looking down, with a kind of detached surprise, at a man who had just pronounced sentence of death casually on himself, and on an old friend. For the first time in Barney's career, the question of deliberate murder not only entered an operation, but had become in an instant and unavoidable part of it. Frank Elby, ambitious and money-hungry, could take over where McAllen left off. Elby was highly capable, and Elby could be controlled. McAllen could not. He could only be tricked; and, if necessary, killed.

It was necessary, of course. If McAllen lived until he knew how to shut the Tube down safely, he simply would shut it down, destroy the de-

vice and his notes on it. A man who had gone to such extreme lengths to safeguard the secret was not going to be talked out of his conviction that the McAllen Tube was a menace to the world. Fredericks, the morose eavesdropper, had to be silenced with his employer to assure Barney of his undisputed possession of the Tube.

Could he still let the thing go, let McAllen live? He couldn't, Barney decided. He'd dealt himself a hand in a new game, and a big one—a fantastic, staggering game when one considered the possibilities in the Tube. It meant new interest, it meant life for him. It wasn't in his nature to pull out. The part about McAllen was cold necessity. A very ugly necessity, but McAllen—pleasantly burbling something as they walked down the short hall to the front door—already seemed a little unreal, a roly-poly, muttering, fading small ghost.

In the doorway Barney exchanged a few words—he couldn't have repeated them an instant later—with the ghost, became briefly aware of a remarkably firm hand clasp, and started down the cement walk to the street. Evening had come to California at last; a few houses across the street made dim silhouettes against the hills, some of the windows lit. He felt, Barney realized, curiously tired and depressed. A few steps behind him, he heard McAllen quietly closing the door to his home.

The walk, the garden, the street, the houses and hills beyond, van-

ished in a soundlessly violent explosion of white light around Barney Chard.

His eyes might have been open for several seconds before he became entirely aware of the fact. He was on his back looking up at the low raftered ceiling of a room. The light was artificial, subdued; it gave the impression of nighttime outdoors.

Memory suddenly blazed up. "Tricked!" came the first thought. Outsmarted. Outfoxed. And by— Then that went lost in a brief, in-



tense burst of relief at the realization he was still alive, apparently unhurt. Barney turned sharply over on his side—bed underneath, he discovered—and stared around.

The room was low, wide. Something undefinably odd— He catalogued it quickly. Redwood walls, Navaho rugs on the floor, bookcases, unlit fireplace, chairs, table, desk with a typewriter and reading lamp. Across the room a tall dark grandfather clock with a bright metal disk instead of a clock-face stood against the wall. From it came a soft, low thudding as deliberate as the heart-beat of some big animal. It was the twin of one of the clocks he had seen in McAllen's living room.

The room was McAllen's, of course. Almost luxurious by comparison with his home, but wholly typical of the man. And now Barney became aware of its unusual feature; there were no windows. There was one door, so far to his right he had to twist his head around to see it. It stood half open; beyond it a few feet of a narrow passage lay within his range of vision, lighted in the same soft manner as the room. No sound came from there.

Had he been left alone? And what had happened? He wasn't in McAllen's home or in that fishing shack at the lake. The Tube might have picked him up—somehow—in front of McAllen's house, transported him to the Mallorca place. Or he might be in a locked hideaway McAllen had built beneath the Sweetwater Beach house.

Two things were unpleasantly obvious. His investigations hadn't revealed all of McAllen's secrets. And the old man hadn't really been fooled by Barney Chard's smooth approach. Not, at any rate, to the extent of deciding to trust him.

Hot chagrin at the manner in which McAllen had handed the role of dupe back to him flooded Barney for a moment. He swung his legs over the side of the bed and stood up. His coat had been hung neatly over the back of a chair a few feet away; his shoes stood next to the bed. Otherwise he was fully clothed. Nothing in the pockets of the coat appeared to have been touched; billfold, cigarette case, lighter, even the gun, were in place; the gun, almost startlingly, was still loaded. Barney thrust the revolver thoughtfully into his trousers pocket. His wrist watch seemed to be the only item missing.

He glanced about the room again, then at the half-open door and the stretch of narrow hallway beyond. McAllen must have noticed the gun. The fact that he hadn't bothered to take it away, or at least to unload it, might have been reassuring under different circumstances. Here, it could have a very disagreeable meaning. Barney went quietly to the door, stood listening a few seconds, became convinced there was no one within hearing range, and moved on down the hall.

In less than two minutes he returned to the room, with the first slow welling of panic inside him. He

had found a bathroom, a small kitchen and pantry, a storage room twice as wide and long as the rest of the place combined, crammed with packaged and crated articles, and with an attached freezer. If it was mainly stored food, as Barney thought, and if there was adequate ventilation and independent power, as seemed to be the case, then McAllen had constructed a superbly self-sufficient hideout. A man might live comfortably enough for years without emerging from it.

There was only one thing wrong with the setup from Barney's point of view. The thing he'd been afraid of. Nowhere was there an indication of a window or of an exit door.

The McAllen Tube, of course, might make such ordinary conveniences unnecessary. And if the Tube was the only way in or out, then McAllen incidentally had provided himself with an escape-proof jail for anyone he preferred to keep confined. The place might very well have been built several hundred feet underground. A rather expensive proposition but, aside from that, quite feasible.

Barney felt his breath begin to quicken, and told himself to relax. Wherever he was, he shouldn't be here long. McAllen presently would be getting in contact with him. And then—

His glance touched the desk across the room, and now he noticed his missing wrist watch on it. He went over, picked it up, and discovered that the long white envelope on

which the watch had been placed was addressed to him.

For a moment he stared at the envelope. Then, his fingers shaking a little, he tore open the envelope and pulled out the typewritten sheets within.

The letterhead, he saw without surprise, was OLIVER B. MCALLEN.

The letter read:

Dear Mr. Chard:

An unfortunate series of circumstances, combined with certain character traits in yourself, make it necessary to inconvenience you in a rather serious manner.

To explain: The information I gave you regarding the McAllen Tube and my own position was not entirely correct. It is not the intractable instrument I presented it as being—it can be "shut off" again quite readily and without any attendant difficulties. Further, the decision to conceal its existence was not reached by myself alone. For years we—that is, Mr. Fredericks, who holds a degree in engineering and was largely responsible for the actual construction of the Tube—and I, have been members of an association of which I cannot tell you too much. But I may say that it acts, among other things, as the present custodian of some of the more dangerous products of human science, and will continue to do so until a more stable period permits their safe release.

To keep developments such as the McAllen Tube out of irresponsible hands is no easy task these days, but a variety of effective devices are employed to that end. In this instance, you happened upon a "rigged" situation, which had been designed to draw action from another man, an intelligent and unscrupulous individual who lately had indicated a disturbing interest in events connected with the semipublic fiasco of my "matter transmitter" some years ago. The chances of another person becoming aware of the temporal incongruities which were being brought to this man's attention were regarded as so remote that they need be given no practical consideration. Nevertheless, the unexpected happened: you became interested. The promptness with which you acted on your chance observations shows a bold and imaginative manner of thinking on which you may be genuinely congratulated.

However, a perhaps less commendable motivation was also indicated. While I appeared to stall on coming to decisions you may have regarded as inevitable, your background was being investigated by the association. The investigation confirmed that you fall within a personality category of which we have the greatest reason to be wary.

Considering the extent of what you had surmised and learned, falsified though the picture was,

this presented a serious problem. It was made more acute by the fact that the association is embarking on a "five-year-plan" of some importance. Publicity during this period would be more than ordinarily undesirable. It will therefore be necessary to see to it that you have no opportunity to tell what you know before the plan is concluded. I am sure you can see it would be most unwise to accept your simple word on the matter. Your freedom of movement and of communication must remain drastically restricted until this five-year period is over.

Within the next two weeks, as shown by the clock in your quarters, it will have become impossible for me or for any member of the association to contact you again before the day of your release. I tell you this so that you will not nourish vain hopes of changing the situation in your favor, but will adjust as rapidly as you can to the fact that you must spend the next five years by yourself. What ameliorations of this basic condition appeared possible have been provided.

It is likely that you will already have tried to find a way out of the cabin in which you were left. The manner of doing this will become apparent to you exactly twenty-four hours after I conclude and seal this letter. It seemed best to advise you of some details of your confinement before letting you discover that you have been given

as much limited freedom as circumstances allowed.

Sincerely yours,

OLIVER B. MCALLEN

Barney dropped the letter on the desk, stared down at it, his mouth open. His face had flushed red. "Why, he's crazy!" he said aloud at last. "He's crazier than—" He straightened, looked uneasily about the room again.

Whether a maniac McAllen made a more desirable jailer than a secret association engaged in keeping dangerous scientific developments under cover could be considered an open question. The most hopeful thought was that Dr. McAllen was indulging an unsuspected and nasty sense of humor.

Unfortunately, there wasn't the slightest reason to believe it. McAllen was wise to him. The situation was no gag—and neither was it necessarily what McAllen wanted him to think. Unless his watch had been reset, he had been knocked out by whatever hit him for roughly five hours—or seventeen, he amended. But he would have been hungry if it had been the longer period; and he wasn't.

Five hours then. Five hours wouldn't have given them time to prepare the "cabin" as it was prepared: for someone's indefinite stay. At a guess, McAllen had constructed it as a secure personal retreat in the event of something like a nuclear holocaust. But, in that case, why vacate it now for Barney Chard?

Too many questions, he thought. Better just keep looking around.

The blank metal face on the grandfather clock swung back to reveal a group of four dials, each graduated in a different manner, only one of them immediately familiar. Barney studied the other three for some seconds; then their meaning suddenly came clear. The big clock had just finished softly talking away the fourth hour of the first day of the first month of Year One. There were five figures on the Year Dial.

He stared at it. A five-year period of—something seemed to be the key to the entire setup.

Barney shook his head. Key it might be, but not one he could read without additional data. He snapped the cover disk shut on the unpleasantly suggestive dials, and began to go mentally over McAllen's letter.

The business that in twenty-four hours—twenty now—the manner of leaving the cabin would become "apparent" to him—that seemed to dispose of the possibility of being buried underground here. McAllen would hardly have provided him with a personal model of the Tube; he must be speaking of an ordinary door opening on the immediate environment, equipped with a time lock.

In that case, where was the door?

Barney made a second, far more careful search. Three hours later, he concluded it. He'd still found no trace of an exit. But the paneling in any of the rooms might slide aside

to reveal one at the indicated time, or a section of the floor might swing back above a trap door. There was no point in attempting to press the search any further. After all, he only had to wait.

On the side, he'd made other discoveries. After opening a number of crates in the storage room, and checking contents of the freezer, he could assume that there was in fact more than enough food here to sustain one man for five years. Assuming the water supply held out—there was no way of checking on it; the source of the water like that of the power and the ventilation lay outside the area which was accessible to him—but if the water could be depended on, he wouldn't go hungry or thirsty. Even tobacco and liquor were present in comparably liberal quantities. The liquor he'd seen was all good; almost at random he had selected a bottle of cognac and brought it and a glass to the main room with him. The thought of food wasn't attractive at the moment. But he could use a drink.

He half filled the glass, emptied it with a few swallows, refilled it and took it over to one of the armchairs. He began to feel more relaxed almost at once. But the truth was, he acknowledged, settling back in the chair, that the situation was threatening to unnerve him completely. Everything he'd seen implied McAllen's letter came close to stating the facts; what wasn't said became more alarming by a suggestion of deliberate vagueness. Until that melodramatically

camouflaged door was disclosed—seventeen hours from now—he'd be better off if he didn't try to ponder the thing out.

And the best way to do that might be to take a solid load on rapidly, and then sleep away as much of the intervening time as possible.

He wasn't ordinarily a hard drinker, but he'd started on the second bottle before the cabin began to blur on him. Afterwards, he didn't remember making it over to the bed.

Barney woke up ravenous and without a trace of hangover. Making a mental adjustment to his surroundings took no more time than opening his eyes; he'd been dreaming Dr. McAllen had dropped him into a snake pit and was sadistically dangling a rope twelve feet above his head, inviting him to climb out. To find himself still in the softly lit cabin was—for a few seconds, at any rate—a relief.

The relief faded as he sat up and looked at his watch. Still over an hour to go before McAllen's idiotic door became "apparent." Barney swore and headed for the bathroom to freshen up.

There was an electric shaver there, the end of its cord vanishing into the wall. Barney used it as meticulously as if he were embarking on a day of normal activities, prepared a breakfast in the kitchen and took it to the main room. He ate unhurriedly, absorbed in his thoughts, now and then glancing about the room. After a few

Continued on page 146

SCIENCE FICTION

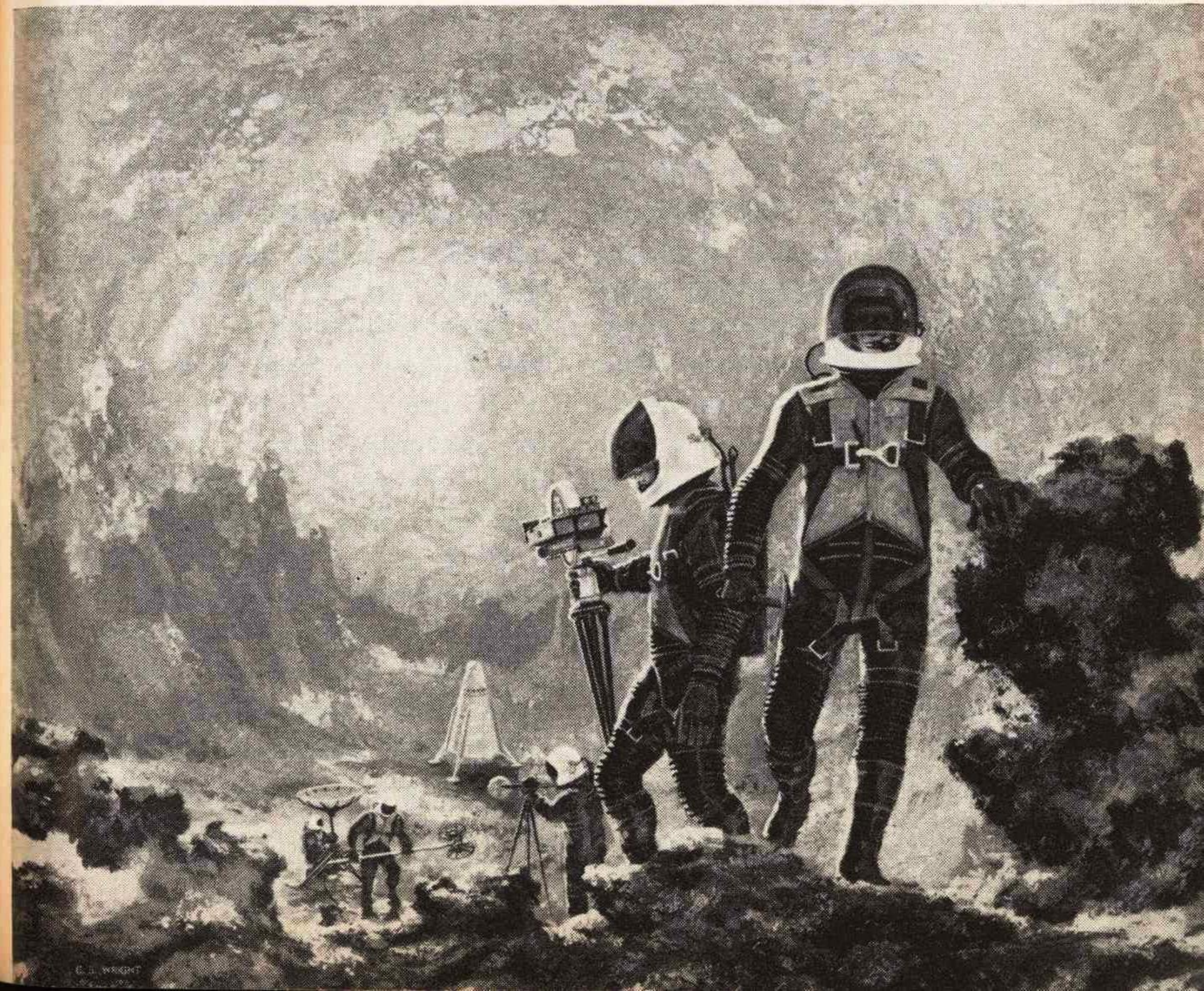
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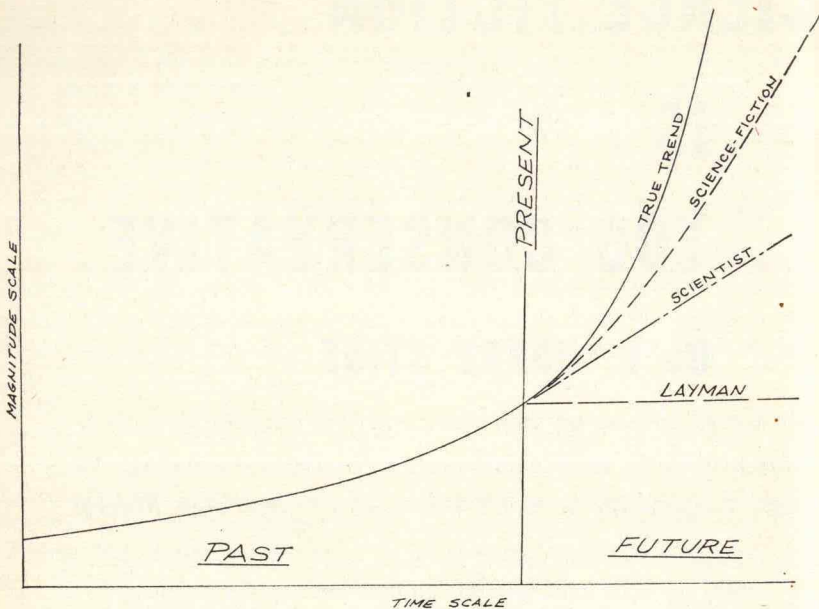
TOO CONSERVATIVE

By **G. HARRY STINE**

As history catches up with science fiction, it has almost invariably proven the science-fictioneers were wrong, far wrong. We have consistently been far more conservative than history!

Science-fiction illustration? No, just part of an engineering study on lunar landings done by the Northrop Corporation.





HOW PEOPLE PREDICT THE FUTURE



SCIENCE fiction is in serious trouble: As a genre of literature, it is suffering from too much success on the one hand

and not enough imagination on the other. Although it has been quite accurate on occasion in predicting the impact of science and technology on human culture, it has completely missed the boat regarding the time factor involved in the conception and development of new areas of science and technology. Science fiction is now running out of rocket fuel because of lack of imagination

on the part of writers and editors and because of a loss of the "sense of wonder" on the part of readers.

Every serious s-f fan is more or less familiar with the general history of science fiction and of its success in predicting certain consequences of the advance of technology. Witness Heinlein's "Solution Unsatisfactory" written in 1939 and facing us now. Or Del Rey's "Nerves," or the classic, oft-quoted Cartmill-Campbell description of an A-bomb in 1943. The embroilment of s-f in astronautics long before that word was coined is also well-known.

In fact, science fiction has been so very successful in its consideration of space flights that it must bear part of the responsibility for the present space race. Although Oberth, Goddard, Hohmann, and others formulated the concepts of present-day space flights, it was the science fiction writers who were the press agents for it. Our lack of a decent space system designed around human beings is a direct consequence of the s-f writers and editors who firmly planted the concept of the "blast off" in the minds of the young people who grew up to become today's rocket engineers. I am as guilty as the rest. Instead of sitting around designing rocket-powered artillery shells in great detail, computing trajectories and acceleration profiles on tablecloths, and detailing to the nth degree the rocket-powered spaceships we envisioned, we should have had the imagination to consider other space-flight systems, too, and design them in careful detail as well. It was too easy for us to get all of our technical background material from Willy Ley or to doubletalk our way around the essential details of a field drive.

Because s-f has been so very successful in the areas of nuclear energy and astronautics, it has lost these areas as happy speculating grounds. Large corporations now hire people to speculate about the future of astronautics, nuclear energy, biophysics, and other fields in order that management can engage in some degree of planning. Many s-f writers have

discovered that they have had the rug jerked right out from under them in these areas. And they may suddenly discover that their failure to keep up with the march of technology has made them *contemporary* writers.

Many of the new s-f writers, seeing that the revered masters of s-f have been so successful in the fields of physical science, have attempted to emulate them by taking on the areas of psychology, sociology, psi, psychobiology, et cetera. But the old masters could at least run a slide rule and comprehend the pages of a physics book. From recent stories, it appears that some of the new blood never bothered to study the basics of the science they have based their story on and have, instead, relied on the Sunday supplements for information. No wonder that science fiction has again become second-class literature!

Science fiction is really speculative fiction based upon the new force in human affairs, technology. It has ceased to be virile and exciting because it no longer uses speculation based on future trends in science and technology. It does not consider the future in a reasonable manner.

My full-time legitimate business involves the promotion of scientific innovation, management of scientific research, and synthesis. I don't run a laboratory; I sit with a pencil and paper, I read constantly, and I travel to find out what Dr. Knowsall happens to be doing in a remote corner of his lab. In order to find out what

is likely to be significant to my company in the future, I must identify a new area of science or technology early . . . preferably *before* it becomes a real new area and before everyone else knows about it, too. If a new area makes sense in a number of ways, and if everybody else thinks that you are stark raving mad to consider it, it is exactly what the doctor ordered. It's not an easy job; just when you think you have things well under control, the program planned nicely, and the future well in hand, through the door walks someone with something new. And you have to start all over again.

Old training as an s-f writer taught me the value of future trend curves. In order to write a story about the future, one had to have some notion of what the future held in store and in what approximate time period it was likely to take place. This sort of crystal ball gazing is quite useful in research management, particularly when you must sell a screwball concept to management. Trend curves were probably first considered as a serious aid to research management by the Air Force Office of Scientific Research in 1953.

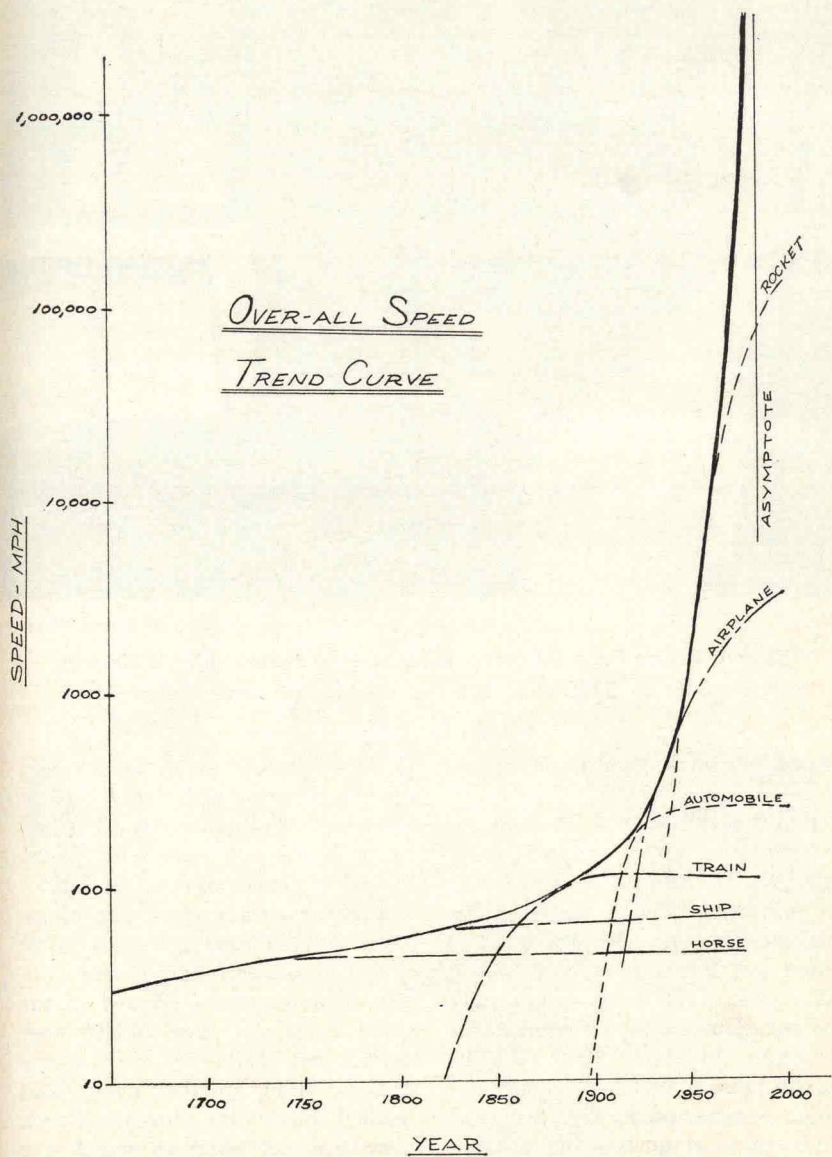
Trend recognition was used by many of the masters of s-f twenty years ago, probably without full knowledge of the principles involved. But it worked, and it produced wonderful science fiction. If you understood science, it was not difficult to set a story in the future, extrapolate a scientific trend, and build your plot around your characters' reactions to

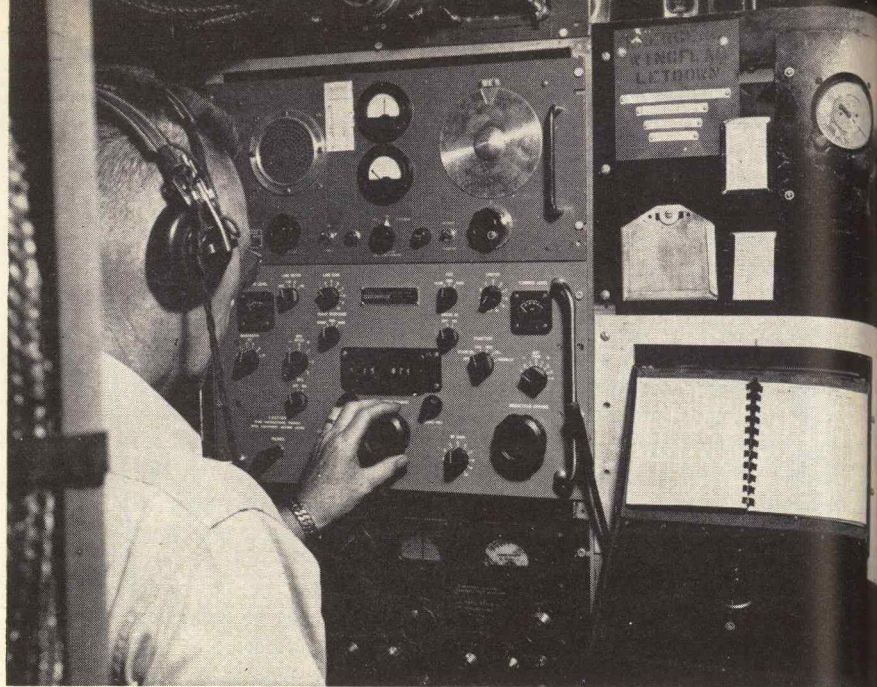
the situations created thereby. Wells and Gernsback were champions at this, but it was given true rigor by Heinlein in his Future History series. *This* was the s-f we loved!

In a recent session of the refurbished Manaña Literary Society—where s-f writers talk about the stories they are going to write *manaña*—the discussion arose as to which s-f writer had probably predicted the future with greatest accuracy. Williamson? Heinlein? Gernsback? Wells? Kuttner? Asimov? Clarke? Sturgeon? It was Heinlein himself who finally spoke up, "Obviously, it's Doc Smith in his *Lensman* yarns. It's the impossible that usually becomes fact, even the most wildly impossible. So it has to be Doc Smith."

Heinlein is a student of trend curves and, as a good writer should, he does his homework and keeps up with the technical, social, political, and economic trends of the times, matching them against his own versions of trend extrapolation. Most writers and editors do this intuitively . . . and they are always wrong! They continue to underestimate the slope, the rate-of-change of slope, and the time scale of trend curves, to say nothing of simply misunderstanding what the trend extrapolations are telling them.

A trend curve is a simple thing to plot. It isn't hard to construct one. It is difficult to do the necessary research to begin with and to interpret the results when you are finished. For a better understanding of this matter of trend extrapolation, let us consider





U. S. Army Photo

The drawing on Page 89 (Astounding Science Fiction, July 1950) was supposed to be 2100-plus. But this photograph was August 1955!

one of the simplest and most obvious of trend curves: speed.

If we plot the time in years on the abscissa while plotting the speed achieved by manned devices (and/or unmanned devices, too) on the ordinate, we get the simplest and purest sort of trend curve. In 30,000 B.C., a man could make 4 mph walking and about 10 mph running. Plot the point. In about 2000 B.C., he rides a horse at about 30 mph maximum; another point. Get the idea? Then come ships, starting at zero mph for simple rafts in umpteen-hundred B.C. and progressing to

about 40 mph in 1800. Then comes the train, starting with the 10 mph of Stevenson's locomotive in 1830 and rising to the 128 mph achieved by the *Pennsylvania Special* in 1905.

There is already something of interest at this point: each time a new concept of transportation showed up, the speed curve for that device rose sharply and finally leveled off as the practical limit for that device was reached. But, at the same time, each new quantum jump in speed was produced by a new device based on a new concept. This, then, gives the in-

egrated curve a continually increasing slope.

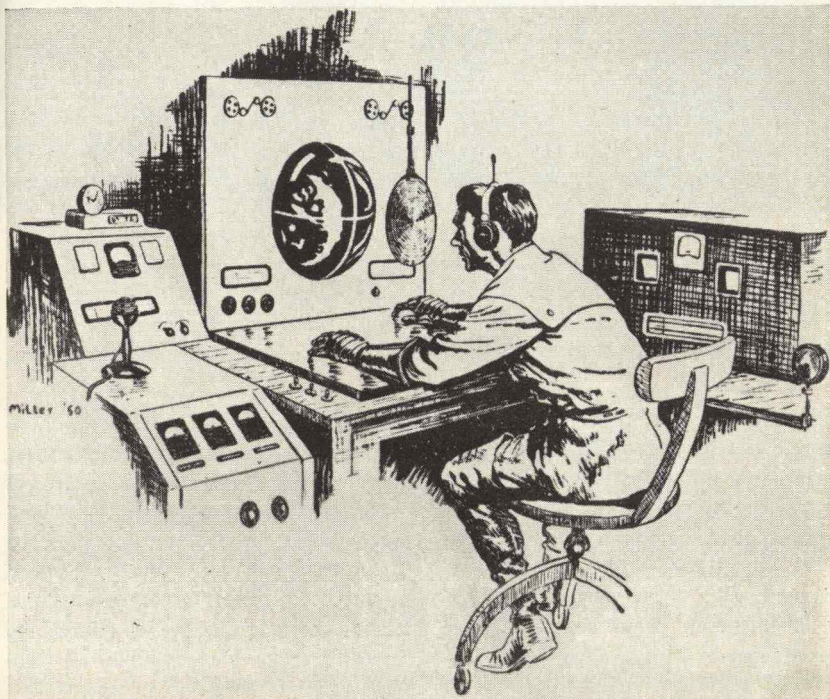
Back to our buttons: The airplane shows up in 1903 flying at a graceful 30 mph. From that point on, speed begins to increase with great rapidity: 200 mph in the 1920's, 500 mph in the late 1930's, Mach 1 in 1947; Mach 2 in 1952. But there the speed of the airplane begins to flatten out. But along comes the ballistic vehicle!

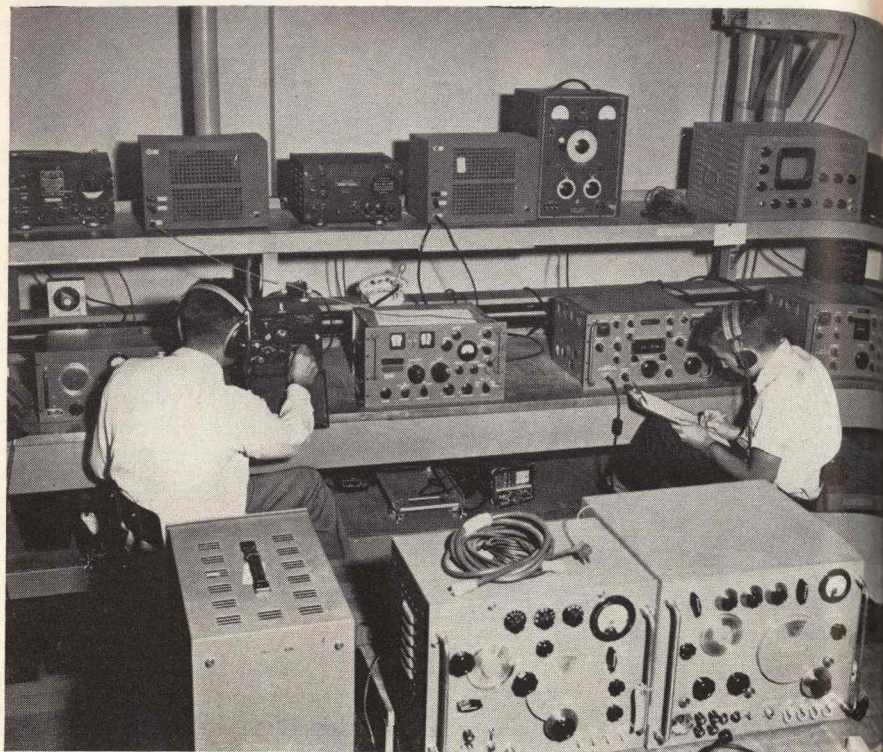
At this point, the curves for unmanned vehicles have not only achieved orbital velocity, but escape velocity as well. Manned vehicles should achieve orbital velocity in

1961. Shortly thereafter, much sooner than anyone believes possible, manned vehicles will achieve escape velocity.

This speed trend curve was drawn up by members of the Air Force Office of Scientific Research in 1953 to convince people that space flight was indeed becoming a reality and that the Air Force should get moving. With this curve, USAF officers were able to predict, in 1953, that orbital velocity would be achieved late in 1957 and escape velocity shortly thereafter. Obviously, they were crazy . . . or were they?

Now having a typical trend curve





U. S. Army Photo

The story illustrated by the drawing on page 91 supposedly took place many years in the future. It was published in 1947. Yet, less than ten years later, the electronic equipment of the drawing was already "old hat" in electronics labs such as the one shown in this photo.

to play with, let's analyze it. Note the shape of the curve. By using linear scales on both the speed and time axes, the curve would appear to be practically flat until a few years ago; and the curve would appear to be exponential. O.K., this means we must transfer it to semilog paper, graph paper with a linear time scale but a logarithmic speed scale; on this

type of graph paper, a true exponential function becomes a straight line. But a trend curve on semilog paper is *still* an upward-turning exponential! So we must therefore transfer it to a curve with a log scale on speed and a reverse-log scale for time. Even at that, the trend curve *still* turns upward in an exponential fashion!

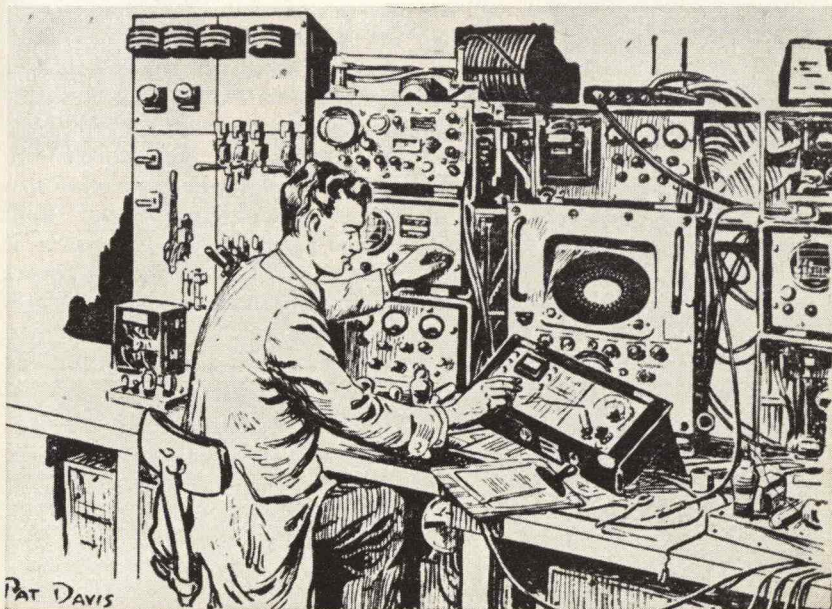
What does this mean? Just that things are happening much faster than we believe. Most laymen are content to predict the future in terms of a trend curve that levels off from the present ever onward. Scientists, on the other hand, are a bit more radical; they tend to predict the future trend with a curve of constant slope from now on.

A layman can't really predict the future at all; he has no understanding of the forces that are in motion because of accumulated knowledge. Scientists will grudgingly try to predict the future using an extremely conservative estimate—one that has always been wrong. Using a linear trend curve, scientists in 1930 were predicting a controlled nuclear reac-

tion *not before* 2000 A.D. Obviously too conservative, because a controlled nuclear reaction was achieved ten years later.

Science fiction writers, myself included, were using a straight exponential trend curve, also a conservative one, and predicted generally that space flight might be achieved around 1975, and that we might land on the Moon or travel to Mars around the turn of the century.

The laymen and scientists have already shown that they are conservative when it comes to predicting the future. And it may come as a shock to learn that the science-fictioneers are also being far too conservative as well! As Sprague de Camp said, "It does not pay a prophet to be too



specific." If you are a real prophet and understand trend curves, you can probably have your prediction hit very close; you will be considered absolutely out of your mind when you make the prophecy. If you miss, you're a louse. If you hit it, you were "lucky" or a mystic. Or you had an inside track.

You will have trouble selling a story based on such an impossible prediction. "It won't happen that way," if I may use the words of a science-fiction editor who bounced one such yarn of mine based solidly on the super-exponential trend curve.

If you really understand trend curves, you can extrapolate them into the future and discover some baffling things. The speed trend curve alone predicts that manned vehicles will be able to achieve near-infinite speeds by 1982, and I would not want to bet that I have been too conservative in extrapolating the curve! It may be sooner. But the curve becomes asymptotic by 1982.

The trouble with a trend curve is that it may tell you quite accurately what to expect, but it doesn't tell you how it is going to happen. I have no idea *how* we are going to achieve near-infinite speeds—or near-infinite acceleration. The curve simply goes asymptotic.

If this is really the case, a true scientific breakthrough of major importance must be in the offing in the next twenty years. The breakthrough itself will probably be within the next few years. It takes time to go

from theory and experimental hardware to practical engineering devices, although the trend curves show that this time cycle is getting shorter all the time, too. We can't know how long the development cycle will be because we have no idea what the concept or theory entails at this time. But, with cybernetic computers, improved management techniques, and the benefit of centuries of accumulated knowledge and technique, you can bet that the development cycle will be much shorter than it was for the airplane or even the ballistic missile.

What does this mean to us as human beings and, especially, as science-fiction editors, writers, readers, and fans? Answer: plenty of entertaining speculation. Suppose we get a new space drive within the next few years. What will be the consequences? What will be the impact of this upon the world political situation if it is discovered in America? In Russia? In Switzerland? In Spain? What is going to happen to a space exploration program built around rocket engines? Suppose it is a true antigravity machine; what's going to happen to the chief helicopter designer at Offwego Aircraft.

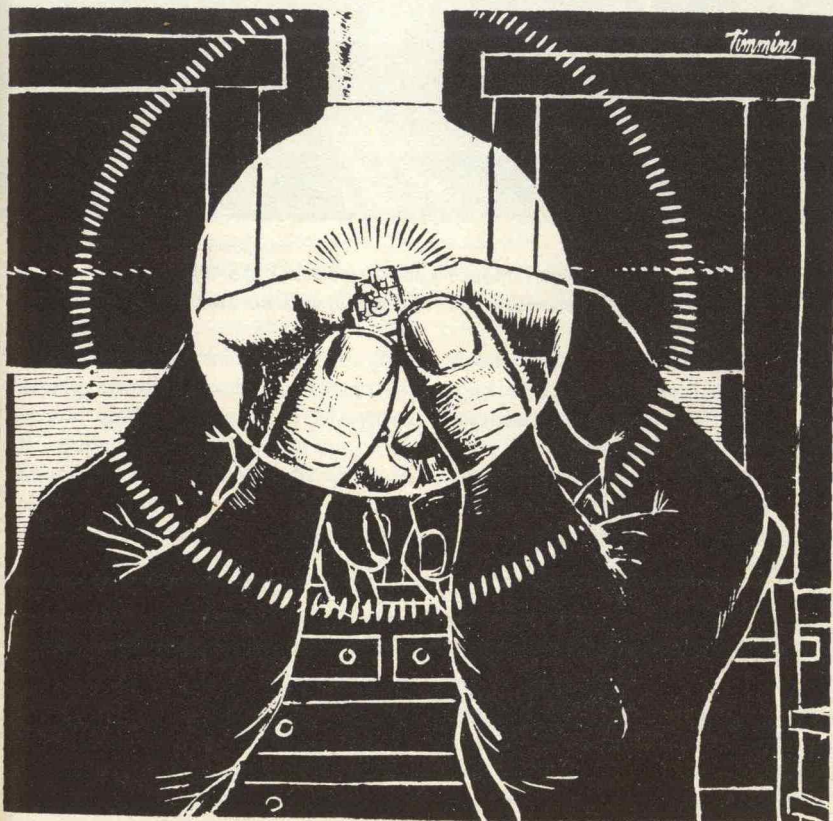
This is downright serious stuff, not fantasy, because the trend curve says that something is going to happen. Consideration of all the varied aspects of this is a proper, legitimate, and professed job for science fiction. It is the only medium of communication by which this can truly be considered in advance. Get busy; some-

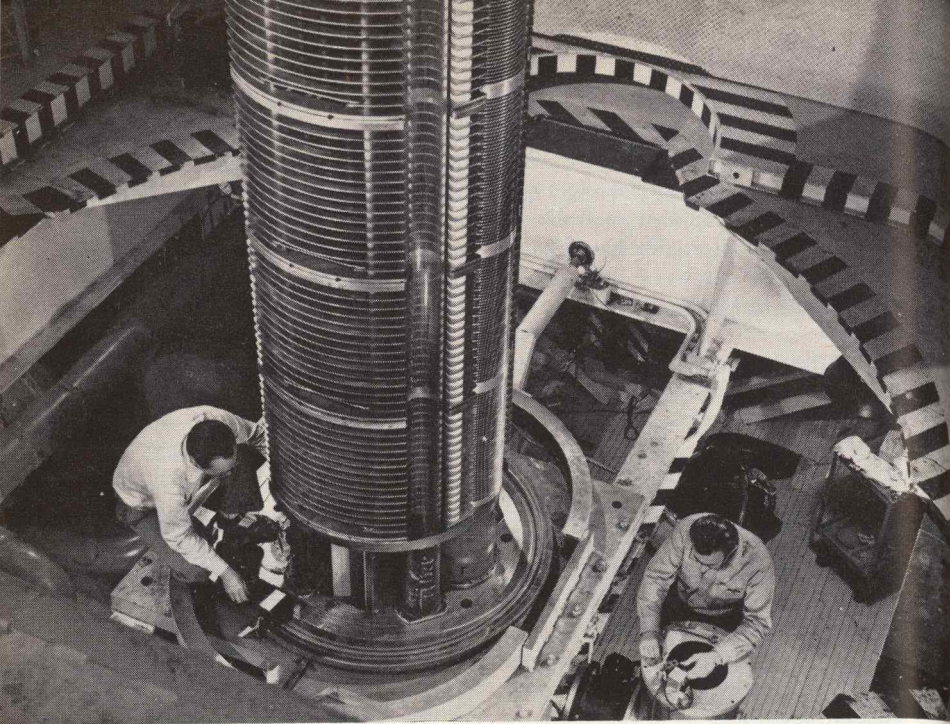
thing's going to happen damned soon to keep the speed curve rising.

The speed curve isn't the only one that is going up fast. All trend curves are now rising rapidly, and all of them go asymptotic before 2000 A.D. Here are a few of them, plus some things to think about:

1. Life expectancy is increasing, and this trend curve indicates that anyone born after the year 2000 A.D. lives forever, barring accidents. Recent Russian biological work indicates how this may be achieved, but regardless of the method what are the implications? Should my grandson

This Martian invention, a subminiaturized circuit, was predicted in a story in a 1948 issue of this magazine. It was predicted for the year 1972. In reality, Earthmen were making electronic circuits much smaller than this in 1955! In fact, when the original story was written, all the techniques and devices required to make subminiature circuits were already in existence.





Los Alamos Scientific Laboratory

Venus Equilateral? Nope! Los Alamos in 1955. Photo shows the seven megavolt Van de Graaff accelerator.

buy life insurance or accident insurance? In fact, what is going to happen to the life-insurance business? How will all of this affect the practice of medicine, and how will the medical arts be changed as a result of the knowledge that permits longevity? Heinlein has tackled one aspect of this in "Methuselah's Children," but what are some of the other aspects of the problem? If a man can live for a thousand years, does this make interstellar travel at sub-light speeds practical? And how much can a man learn in a thousand years?

2. Population is rising rapidly, and

early in the Twenty-first Century there isn't enough room on the planet Earth for everybody. This curve shows no more signs of leveling off than the other trend curves do, so we cannot take the easy way out via starvation, birth control, or mass destruction, because those things are apparently not in the cards when other trend curves are also considered. Can we export people to other worlds fast enough? Isaac Asimov says we can't, and Dandridge M. Cole says we can . . . and both can back up their arguments with calculations. Or is this curve, in connection

with other curves, simply telling us to expect an event of major cosmic significance in the next fifty years? If so, what?

3. Historical cycles are getting shorter. Rome rose and fell in about eight centuries, the lifetimes of many men. The British Empire came apart in a matter of years, not centuries. A cultural cycle today is about twenty years long. Soon, we can expect to see several major cultural changes in one life span. This is probably due to the improvement of rapid communication and transportation devices. All right: what are the effects of this upon the individual human being? How adaptable must a man be to withstand this? What sort of a successful human being is likely to result from adaptation to rapid cultural change?

4. The trend curve for controllable energy is rising rapidly. The richest baron of feudal times did not control the same amount of energy in his human serfs and slaves as you have at your command beneath the hood of your automobile. The advent of controlled nuclear energy has boosted that curve even more. It is highly probable that controlled fusion has been achieved in the laboratory and will become commercial within a matter of years, thereby kicking the curve up to an even higher level. By 1981, this trend curve shows that a single man will have available under his control the amount of energy *equivalent to that generated by the entire sun*. To use an energy source, you must have an

energy sink; you must have some place to dissipate the energy in performing work. What are we going to do with this much energy? How are we going to use it? How will this alter our way of life? What can we do then that we can't do now because we don't have the energy sources? Unless a man has the proper training, we presently deny him the use of certain forms of packaged high energy such as explosives, nuclear reactors, and high-speed vehicles; what kind of training must a man have before he is allowed to use the energy of a star?

5. The number of circuits in cybernetic devices is increasing on the familiar trend curve. The human brain has an estimated four billion neural circuits. By 1970, computer engineers may have achieved the same number of circuits in a digital computer; they may do this by building one large computer or by slaving many smaller computers together by data links as they have already started to do. The speed of digital computers is quite high, and they are getting faster all the time. What are the logical consequences of this? Will these machines think? Will they repair themselves? Will we finally achieve the ability with these machines to handle problems with extremely large numbers of variables, problems which cannot presently be solved? What problems? Will these machines be used in the manner of Ken Crossen's SOCIAC, or will we put them to work as tools to help us solve the riddles of biochemistry and psychology? By building complex

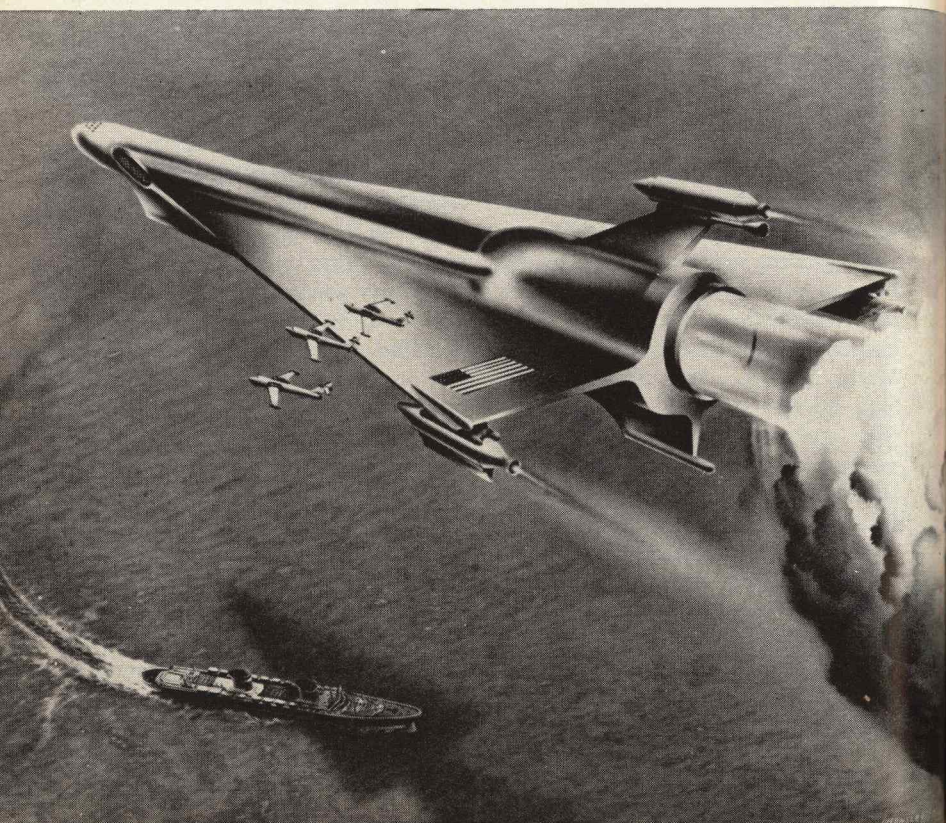
machines of this type, will we gain a better understanding of our own mental processes, and, if so, what are the consequences? Assume that mankind will not allow itself to be replaced by its own machines, and then consider what steps mankind must take to achieve a dynamic, viable solution to this problem.

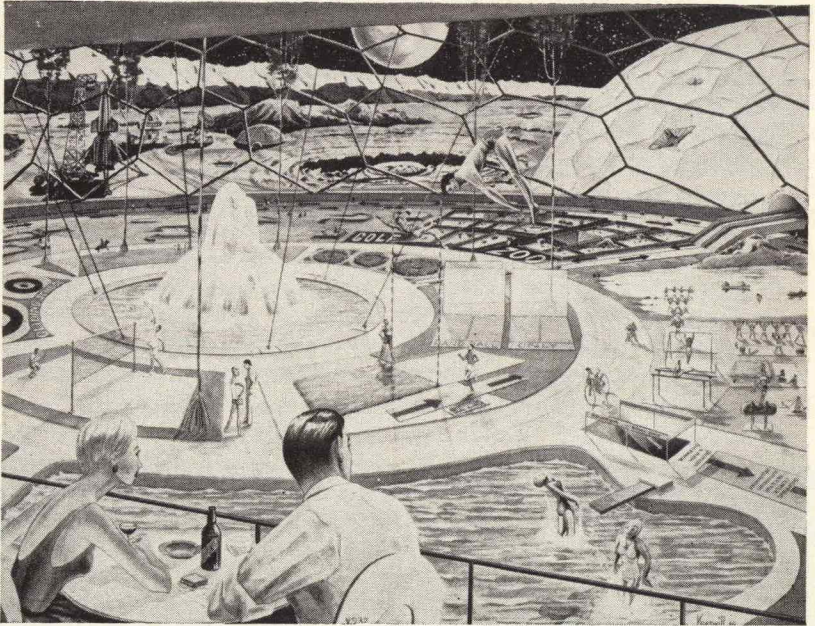
6. The amount of knowledge that must be assimilated by our young

people before they are equipped to earn a livelihood is also increasing on the super-exponential trend curve along with the curve representing the total accumulated knowledge of the human race. People used to spend only a few years in school learning the three R's. Now, they must spend at least twelve years in school . . . or sixteen and more if they desire to enter a profession. Question: Must we, therefore, spend

This is not a cover painting for a science-fiction magazine, but an illustration from a Martin Company report on possible space vehicles for the 1975 time period. And based on conservative engineering data, too! Looks like someone has jerked the rug out from under modern, unimaginative science fiction again!

Martin Company Photo





Martin Company Photo

The lunar colony . . . a drawing from a report on colonization done by the Martin Company in 1959. American free enterprise has become imaginative and conceptual in its thinking while science fiction plods its weary, well-worn squirrel cage of old ideas.

more and more of our lives in school, or have we already reached the point where we must both study and work during our entire lives if we are to keep up with our own field of endeavor? What must we do to our educational system to cope with this? This is more serious than the growing shortage of classroom space and teachers, because there will always be a shortage of these two items from now on; we can't catch up. But the amount we must learn continues to increase. What sort of an educational

system can be designed to cope with this?

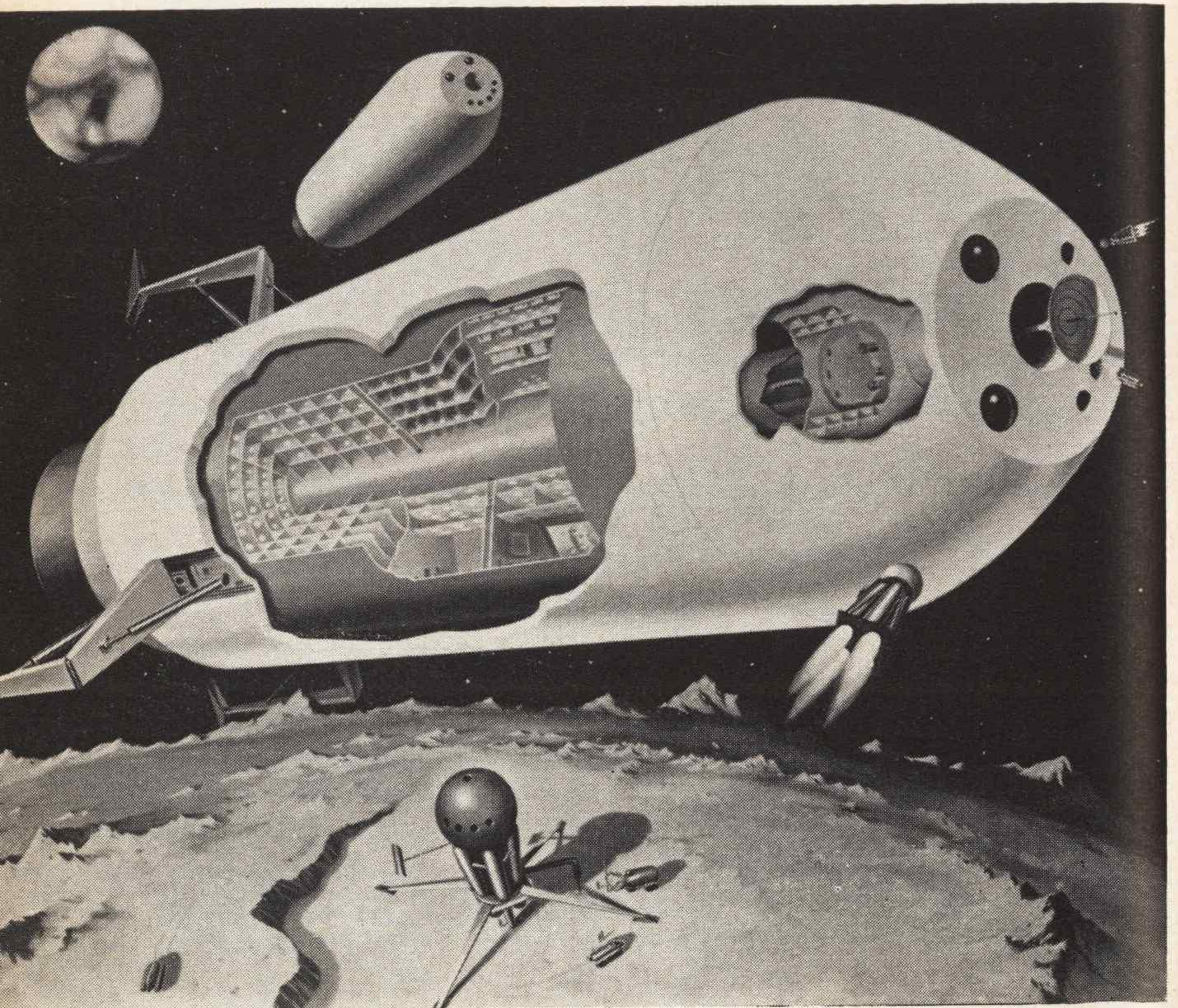
All of these trend areas have been touched lightly in some cases by science fiction, mostly in a cursory and incomplete fashion, and mostly by extrapolating a single curve to its ultimate limit without consideration of the other curves. In writing such stories, the authors have allowed one factor to advance while everything else stood still. This isn't the case. *All* the trends are upward, not just one of them, and any yarn based on a

single curve without consideration of the others results in an unrealistic extrapolation toward a nonviable future state of affairs. But writers continue to make this mistake, and competent scientists and managers make the same one when they attempt to chart

the future on the basis of extrapolation. In research management or science-fiction writing, one must consider every possible factor, weighing each as to its importance and recognizing that there is a time scale involved, too.

The best new concepts and ideas of the future are no longer coming from science fiction, but from American industry. This drawing, from a 1961 General Electric scientist's paper, shows a 10,000-man space vehicle. Dan Cole's recent concept and study of "macro-life"—from which this drawing was taken—provides all by itself the basis for entirely new realms of speculation for science fiction. But science-fiction writers have paid no attention.

General Electric Photo



In other words, one says to himself that Gadget A is not possible until Metal B is developed. When Gadget A becomes a reality, Device C results. It is then possible to cross-fertilize the technology of this with the data now in existence in Science K. We come up with an instrument that will be useful at that time in thrialine research over there, possibly leading to . . . In other words, a multi-dimensional array. Organized brainstorming, or cerebral popcorn.

Science fiction, where it has considered future trends and future cultures, has been both unimaginative and conservative. In relation to reality, that is. The predictions of s-f are an order of magnitude better than those of professional scientists, but are still several orders of magnitude below reality. Things are going to happen much faster than we think, and they are going to have much wider implications than we have considered. We need only look at the last twenty-five years. And we need to realize that we will see just as much change in the next ten years.

If we have the courage to admit this to ourselves, it means that it is time to think, time to argue, time to speculate, and time to philosophize. If the trend curves can tell us that all this—and more—is going to happen,

we should try to do a little engineering and planning in advance so that they don't happen willy-nilly, so that we can have some control over making them happen the way we want them to. We can and must plan for the future world in the same manner that a successful business plans for the inevitable retirement of a bond issue on a certain future date.

Science fiction is the obvious and logical medium in which to do this. Science fiction is truly speculative fiction. It has been fairly successful in the past, but its true Golden Age is yet to come if it again realizes that the future is starting to happen right now. There is plenty left to speculate about because the well hasn't gone dry. On the contrary, grab yourself a bucket because it is raining soup.

The future isn't all death and destruction. We live in a better world than our fathers did, Our children will live in an even better world if we apply our minds to the problem right now.

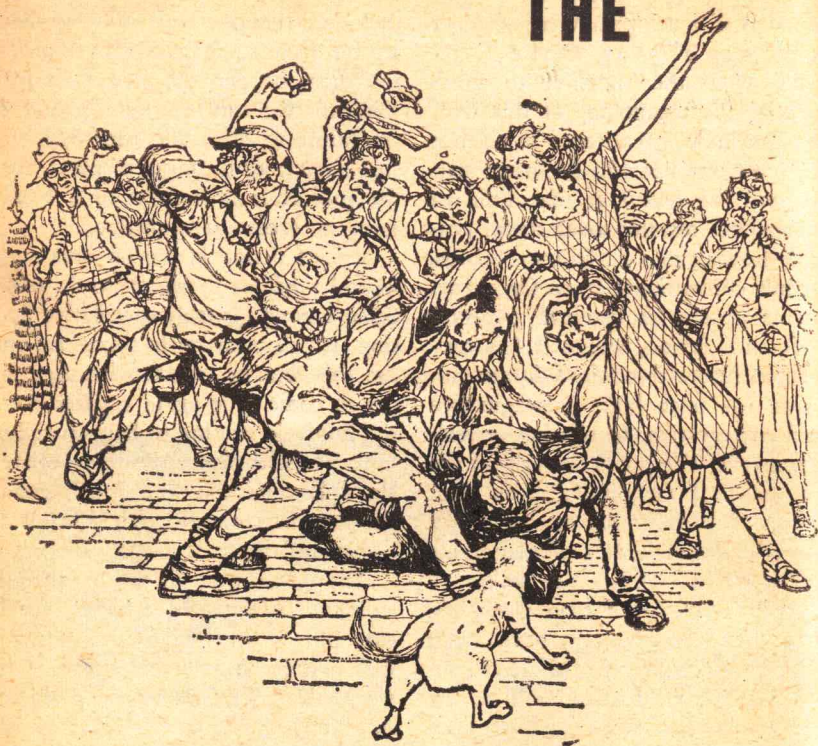
Science fiction has led us to our present world. It can lead us to tomorrow in a surer fashion if it stops being conservative, unimaginative, doomsday literature.

Enjoy yourself; your wildest expectations will probably be far short of the mark.

THE END



THE



FISHERMAN

By **CLIFFORD D. SIMAK**

Part Two of Four Parts. Men have many times been logical—but seldom rational. When Science failed them in one great promise, their reaction to a fallen cultural hero was logical—and predictably violent in its irrationality!

Illustrated by van Dongen

SYNOPSIS

There finally came a time—in 1975 or thereabouts—when Man was ready to admit that he was barred from space. Man was too frail for space. He died either of the primary radiations hurled out by the sun or of the secondaries to which the metal of his ship gave birth.

So science failed in one of its greatest challenges and the stars are farther now than they had ever been.

But there was a group of stubborn men who would not admit defeat. If Man could not use technology to reach the stars, there was another way; if Man could not go to space in body, he could go in mind. Paranormal kinetics was the answer—they were sure it was the answer. But they got no help. They got only scorn and laughter.

Until one country with a heart, Mexico, gave them a base for their laboratories, gave them money to continue with their research. They then succeeded and opened the road to outer space.

They had called their research Project Fishhook because it was a fishing into space. And in northern Mexico, after their success, grew up a mighty center which was known as Fishhook. From it men went out to the stars in mind, taking with them the equipment with which they explored and exploited the planets which they found. Streaming back to Fishhook came new materials and new ideas and new techniques. Inside of Fishhook's sprawling laboratories, factories and research centers

these materials and ideas and techniques are examined and evaluated for human application. The saleable items which result are marketed in a worldwide chain of Fishhook-operated retail centers which are known as Trading Posts. The Trading Posts cut into normal retail trade, eliminate many earth-manufactured items, steadily strangle business.

Fishhook is operated by paranormal people, of which there are many. With the demonstration that paranormal kinetics does work, many people have found in themselves an unsuspected paranormal capacity which they never would have looked for in that old world where science was the god and any belief in paranormality was just plain foolishness.

Because of economic pressures, because of envy, because of superstitious fear, Fishhook is widely hated. But the world can't get along without it; it is an established fact which the people must accept. So Fishhook becomes, in effect, the capital of the world, although it has no actual status as such.

Hatred of Fishhook extends to the paranormals, called parries, who are outside of Fishhook. Unwise, faddish uses of this new mental power in the early stages of its development has led to misunderstanding, with many people regarding paranormal kinetics as magic, in its medieval aspect. Once again people are afraid of the dark. Hex signs are painted on gate and gable to ward off goblin, witch and werewolf. The people hunt down the hated parries. In this they are

urged on by a new crop of puritanical performers.

The story opens about a century after the establishment of Fishhook as a going concern.

Shepherd Blaine, an explorer for Fishhook, finds on a planet circling a far sun a sprawling intelligence which he dubs the Pinkness. Blaine's time is short, for the explorers, under standard operating procedure, are automatically returned to Earth after thirty hours.

The Pinkness, a telepath, has time only to say one thing to Blaine: "Hi, pal. I trade with you my mind!" Which is exactly what it does—perhaps in lieu of handshake.

Back in Fishhook, Blaine realizes that he is two persons, himself and the personality of the Pinkness. And realizes, as well, that he cannot stay in Fishhook. Three years before, a friend of his, Godfrey Stone, had phoned to warn him that if he ever should go alien he must take it on the lam. That is the last he has heard from Stone. He knows Stone well enough, however, to realize it was no idle warning.

Blaine has half an hour to clear out of Fishhook, for that is the length of time it takes to process the data from the sensor which he had taken into space with him. But as he is about to leave the building, he is asked in for a drink by his friend Kirby Rand, who also happens to be chief of Fishhook security. Finally breaking away, with only minutes left in which to find a hiding place, he is picked up by playboy Freddy

Bates and taken to a party, Blaine going because he is certain Fishhook would never think to look for him at a party.

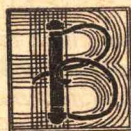
But there he is warned by Harriet Quimby, mysterious newspaper reporter, that Fishhook knows where he is. She offers to spirit him away. Through the agency of the pinkness in his mind, which speeds up Blaine's metabolism, so that he moves much faster than normal, Blaine gets away.

He and Harriet escape across the border into the United States, there are spotted as parries and are rescued from a mob by the sheriff of a border town, who chases Harriet out of town and throws Blaine into jail.

Blaine senses that he is marked for death, that the mob will be back that night. He is visited by Father Flanagan, the parish priest, who says he has never met a parry and is curious as to whether paranormal abilities are no more than another dimension of the whole man or whether they are evil. He asks Blaine if he is a warlock. After the priest leaves, Blaine stands at the window of his cell, waiting for the mob to come.

Part 2

X



L AINE stood at the window and watched them gather in the dusk—not quickly, but slowly; not boisterously, but quietly, almost nonchalantly, as if they might

be coming into town for a program at the schoolhouse or a meeting of the grange or some other normal and entirely routine function.

He could hear the sheriff stirring quietly about in the office across the corridor and he wondered if the sheriff knew—although assuredly he did, for he had lived in this town long enough to know what it was apt to do.

Blaine reached up and grasped the metal bars and out beyond the bars, somewhere in the unkempt trees on the courthouse lawn a bird was singing his last song of evening before cuddling on a branch for the night.

And as he stood there watching, the pinkness crept out of its corner and floated in his mind, expanding until it filled his mind.

I have come to be with you, it seemed to say. I am done with hiding. I know about you now. I have explored every nook and cranny of you and I know the kind of thing you are. And through you, the kind of world you're in—and the kind of world I'm in, for it is my world now.

No more foolishness, asked that part of the strange duality that continued to be Blaine.

No more foolishness, said the other. No more screaming, no more running, no more trying to get out.

Except there was no death. There was no such thing as death, for the ending of a life was inexplicable. It simply could not happen, although dimly, far back in memory, there seemed there had been others it might have happened to.

Blaine left the window and went back to sit down on the bunk and he was remembering now. But the memories were dim and they came from far away and from very long ago and one could not be sure at once if they were truly memories or if they were no more than quaint imagining.

For there were many planets and many different peoples and a host of strange ideas and there were jumbled bits of cosmic information that lay all helter-skelter like a pile of ten billion heaped-up jack-straws.

"How are you feeling?" asked the sheriff, who had come so quietly across the corridor that Blaine had not heard him coming.

Blaine jerked up his head. "Why, all right, I suppose. I have just been watching your friends out across the street."

The sheriff chuckled thinly. "No need to fear," he said. "They haven't got the guts to even cross the street. If they do, I'll go out and talk with them."

"Even if they know that I am Fish-hook?"

"That's one thing," the sheriff said, "that they wouldn't know."

"You told the priest."

"That's different," said the sheriff. "I had to tell Father."

"And he would tell no one?"

"Why should he?" asked the sheriff.

And there was no answer; it was one of those questions which could not be answered.

"And you sent a message."

"But not to Fishhook. To a friend who'll send it on to Fishhook."

"It was wasted effort," Blaine told him. "You should not have bothered. Fishhook knows where I am."

For they'd have hounders on the trail by now; they would have picked up the trail many hours ago. There had been but one chance for him to have escaped—to have traveled rapidly and very much alone.

They might be in this very town tonight, he thought, and a surge of hope flowed through him. For Fishhook would scarcely let a posse do him in.

Blaine got up from the bunk and crossed over to the window.

"You better get out there now," he told the sheriff. "They're already across the street."

For they had to hurry, naturally. They must get what they had to do done quickly before the fall of deeper night. When darkness fell in all obscurity they must be snug inside their homes, with the doors double-locked and barred, with the shutters fastened, with the drapes drawn tight, with the hex sign bravely hanging at every opening. For then, and only then, would they be safe from the hideous forces that prowled the outer darkness, from banshee and werewolf, from vampire, goblin, sprite.

He heard the sheriff turning and going back across the corridor, back into the office. Metal scraped as a gun was taken from a rack and there was a hollow clicking as the sheriff

broke the breech and fed shells into the barrels.

The mob moved like a dark and flowing blanket and it came in utter silence aside from the shuffling of its feet.

Blaine watched it, fascinated, as if it were a thing that stood apart from him, as if it were a circumstance which concerned him not at all. And that was strange, he told himself, knowing it was strange, for the mob was coming for him.

But it made no difference, for there was no death. Death was something that made no sense at all and nothing to be thought of. It was a foolish wastefulness and not to be tolerated.

And who was it that said that?

For he knew that there was death—that there must be death if there were evolution, that death was one of the mechanisms what biologically spelled progress and advancement for evolutionary species.

You, he said to the thing within his mind—a thing that was a thing no longer, but was a part of him—it is your idea. *Death is something that you can't accept.*

But something that in all truth must surely be accepted. For it was an actuality, it was an ever-presence, it was something that everything must live with through the shortness of its life.

There was death and it was close—much too close for comfort or denial. It was in the mumble of the mob just outside the building, the mob that now had passed from sight

and quit its shuffling, that even now was massed outside the courthouse entrance, arguing with the sheriff. For the sheriff's booming voice came clearly through the outer door, calling upon those outside to break up and go back to their homes.

"All that this will get you," yelled the sheriff, "is a belly full of shot."

But they yelled back at him and the sheriff yelled again and it went back and forth for quite a little while. Blaine stood at the inner bars and waited and fear seeped into him, slowly at first, then faster, like an evil tide racing through his blood.

Then the sheriff was coming through the door and there were three men with him—angry men and frightened, but so purposeful and grim their fright was covered up.

The sheriff came across the office and into the corridor, with the shot gun hanging limply from his hand. The other three strode close upon his heels.

The sheriff stopped just outside the bars and looked at Blaine, trying to conceal the sheepishness he wore.

"I am sorry, Blaine," he said, "but I just can't do it. These folks are friends of mine. I was raised with a lot of them. I can't bear to shoot them down."

"Of course you can't," said Blaine, "you yellow-bellied coward."

"I'll have to let them take you. I can't do a thing about it."

"Give me them keys," snarled one of the three. "Let's get him out!"

"They're hanging on the nail beside the door," the sheriff said.

He glanced at Blaine.

"There's nothing I can do," he said.

"You can go off and shoot yourself," said Blaine. "I'd highly recommend it."

The man came with the key and the sheriff stepped aside.

Blaine said to the man opening the door. "There is one thing I want understood. I walk out of here alone."

"Huh!" said the man.

"I said I want to walk alone. I will not be dragged."

"You'll come the way we want you," growled the man.

"It's a small thing," the sheriff urged. "It wouldn't hurt to let him."

The man swung the cell door open. "All right, come on," he said.

Blaine stepped out into the corridor and the three men closed in, one on either side of him, the other one behind. They did not raise a hand to touch him. The man with the keys flung them to the floor. They made a clashing sound that filled the corridor, that set Blaine's teeth on edge.

It was happening, thought Blaine. Incredible as it seemed, it was happening to him.

"Get on, you stinking parry," said the man behind him and punched him in the back.

"You wanted to walk," said another. "Leave us see you walk."

Blaine walked, steadily and straight, concentrating on each step to make sure he did not stumble. For he must not stumble; he must do nothing to disgrace himself.

Hope still lived, he told himself. There still was a chance that someone from Fishhook might be out there, set to snatch him from them. Or that Harriet had gotten help and was coming back or was already here. Although that, he told himself, was quite unlikely. She'd not had time enough and she could not have known the urgency involved.

He marched with steady stride across the sheriff's office and down the hall to the outer door, the three men who were with him pressing close against him.

Someone was holding the outer door, with a gesture of mock politeness, so he could pass through.

He hesitated for an instant, terror sweeping over him. For if he passed

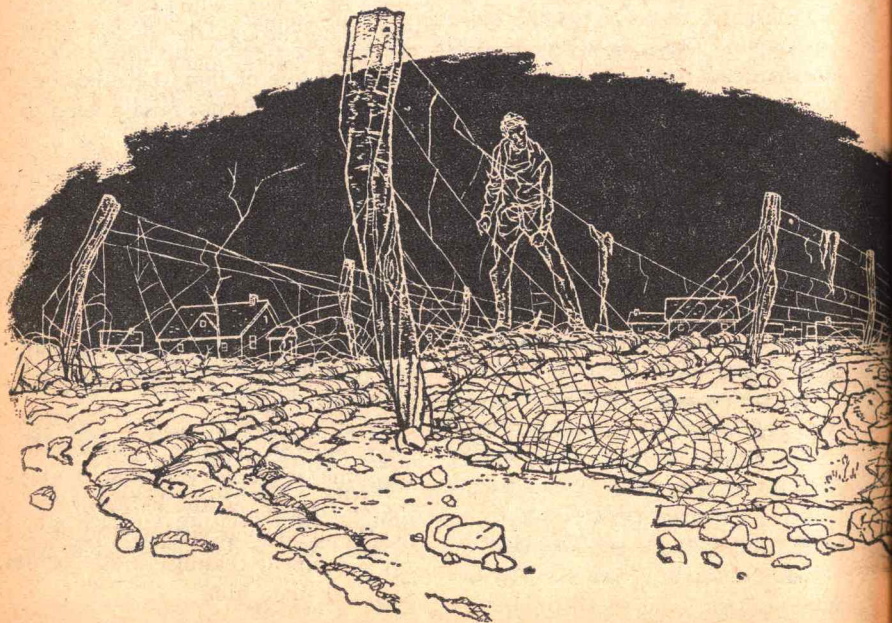
that door, if he stood upon the steps outside, if he faced the waiting mob, then all hope was gone.

"Go on, you filthy parry," growled the man behind him. "They are waiting out there for you."

The man put a hand behind his shoulder blades and shoved. Blaine staggered for a step or two, then was walking straight again.

And now he was across the doorway, now he faced the crowd!

An animal sound came boiling up from it—a sound of intermingled hate and terror, like the howling of a pack of wolves on a bloody trail, like the snarling of the tiger that is tired out of waiting, with something in it, too, of the whimper of the cornered animal, hunted to its death.



And these, thought Blaine, with a queer detached corner of his mind, *were* the hunted animals—the people on the run. Here was the terror and the hate and envy of the initiate, here the frustration of those who had been left out, here the intolerance and the smuggerly of those who refused to understand, the rearguard of an old order holding the narrow pass against the outflankers of the future.

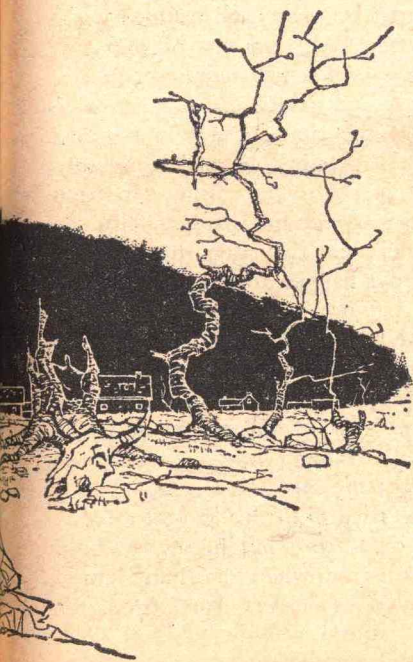
They would kill him as they had killed others, as they would kill many more, but their fate was already settled, the battle already had been won.

Someone pushed him from behind and he went skidding down the smooth stone steps. He slipped and fell and rolled and the mob closed in upon him. There were many hands upon him, there were fingers grinding into muscles, there was the hot foul breath and the odor of their mouths blowing in his face.

The many hands jerked him to his feet and pushed him back and forth. Someone punched him in the belly and another slapped him hard across the face and out of the bull-roaring of the crowd came one bellowing voice: "Go on, you stinking parry, teleport yourself! That's all you have to do. Just teleport yourself."

And that was most fitting mockery—for there were very few indeed who could teleport themselves. There were the fliers who could move themselves through the air like birds and there were many others, like Blaine, who could teleport small objects, and others, also like Blaine, who could teleport their minds over many light-years, but with the help of weird machines. But the true self-teleport, who could snap their bodies from one location to another in the fraction of an instant, were extremely hard to come by.

The crowd took up the mocking chant: "Teleport yourself! Teleport! Teleport! Teleport yourself, you dirty, stinking parry!" Laughing all the time at their cleverness, smirking all the time at the indignity thus heaped upon their victim. And never for a moment ceasing to use hands and feet upon him.



There was a warmth running down his chin and one lip felt puffed and swollen and there was a saltness in his mouth. His belly ached and his ribs were sore and the feet and fists still kept punching in.

Then another bellowing voice roared above the din: "Cut that out! Leave the man alone!"

The crowd fell back, but they still ringed him in and Blaine, standing in the center of the human circle, looked around it and in the last faint light of dusk saw the rat eyes gleaming, the flaked saliva on the lips, sensed the hate that rose and rolled toward him like a body smell.

The circle parted and two men came through—one a small and fussy man who might have been a book-keeper or a clerk, and the other a massive bruiser with a face that looked as if it were a place where chickens scratched in their search for grubs and worms. The big man had a rope coiled on one arm and from his hand he dangled one end of the rope fashioned very neatly into a hangman's noose.

The two of them stopped in front of Blaine and the small man turned slightly to face one segment of the circle.

"Gents," he said, in a voice that any funeral director would have been proud to own, "we must conduct ourselves with a certain decency and dignity. We have nothing personal against this man, only against the system and the abomination of which he is a part."

"You tell 'em, Buster!" yelled an enthusiastic voice from the crowd.

The man with the funeral director's voice held up a hand for silence.

"It is a sad and solemn duty," he said unctuously, "that we must perform, but it is a duty. Let us proceed with it in a seemly fashion."

"Yeah," yelled the enthusiast, "let us get it done with. Let's hang the dirty parry!"

The big man came close to Blaine and lifted up the noose. He dropped it almost gently over Blaine's head so that it rested on his shoulders. Then he slowly tightened it until it was snug about the neck.

The rope was new and prickly and it burned like a red-hot iron and the numbness that had settled into Blaine's body ran out of him like water and left him standing cold and empty and naked before all eternity.

All the time, even while it had been happening, he had clung subconsciously to the firm conviction that it could not happen—that he couldn't die this way; that it could and did happen to many other people, but not to Shepherd Blaine.

And now death was only minutes distant; the instrument of death already put in place. These men—these men he did not know, these men he'd never know—were about to take his life.

He tried to lift his hands to snatch the rope away, but his arms would not stir from where they hung limply from his shoulders. He gulped, for there already was the sense of slow, painful strangulation.

And they hadn't even begun to hang him yet!

The coldness of his empty self grew colder with the chill of overwhelming fear—fear that took him in its fist and held him stiff and rigid while it froze him solid. The blood, it seemed, stopped running in his veins and he seemed to have no body and the ice piled up and up inside his brain until he thought his skull would burst.

And from some far nether region of that brain came the fleeting realization that he no longer was a man, but mere frightened animal. Too cold, still too proud to whimper, too frozen in his terror to move a single muscle—only kept from screaming because his frozen tongue and throat could no longer function.

But if he could not scream aloud, he screamed inside himself. And the scream built up and up, a mounting tension that could find no way to effect release. And he knew that if no release were found in another instant he would blow apart from the sheer pressure of the tension.

There was a split second—not of blackout, but of unawareness—and then he stood alone and all tension was gone and he was cold no longer.

He stood on the crumbling brick of the ancient walk that led up to the courthouse entrance and the rope was still about his neck, but there was no one in the courthouse square.

He was all alone in an empty town!

XI

There was less of dusk and more of light and there was a quietness that was unimaginable.

There was no grass.

There were no trees.

There were no men, nor any sign of men.

The courthouse lawn, or what had been the lawn, stretched naked down to the asphalt street. There was no grass upon the lawn. It was soil and pebble. Not dried-out grass or killed-out grass, just not any grass at all. As if there had never been such a thing as grass. As if grass never had existed.

With the rope still trailing from his neck, Blaine slowly pivoted to look in all directions. And in all directions it was the self-same scene. The courthouse still stood starkly against the last light of the day. The street was still and empty, with cars parked at the curb. The store fronts lined the street, their windows staring blindly.

There was one tree—lone and dead—standing at the corner beside the barber shop.

And no men anywhere. No birds or song of birds. No dogs. No cats. Nor an insect humming. Perhaps, thought Blaine, not even a bacteria or a microbe.

Cautiously, almost as if afraid by doing so he might break the spell, Blaine put up his hands and loosened the rope. He slipped it over his head and tossed it to the ground. He massaged his neck carefully with one hand, for the neck still stung. There

were little prickles in it, where tiny pieces of the fiber had broken off and still stuck in the skin.

He took a tentative step and found that he could walk, although his body still was sore from the beating it had taken. He walked out into the street and stood in the middle of it and looked up and down its length. It was deserted so far as he could see.

The sun had set and dark was not far off and that meant, he told himself, that he had come back just a little time.

And stood astounded, frozen in the middle of the street, that he should have known.

For he did know! Without a doubt he knew exactly what he had accomplished. Although, he thought, he must have done it without a conscious effort, almost instinctively, a sort of conditioned reflex action to escape the danger.

It was something that he had no way of knowing how to do, that a short minute earlier he would have sworn would be impossible that he do. It was something that no human had ever done before, that no human would have ever dreamed of trying.

For he had moved through time. He had gone into the past a half an hour or so.

He stood in the street, attempting to recall how he might have done it, but all he could remember was the mounting terror that had come rolling, wave on wave, to drown him. There was one answer only: He had done it as a matter of deep-seated knowledge which he had not been

aware of having and had accomplished it only as a final, desperate, instinctive effort—as one might, without thinking, throw up an arm to ward off an unexpected blow.

As a human it would have been beyond his capability, but it would not, undoubtedly, have been impossible for the alien mind. As a human being he did not have the instinct, did not have even the beginning of the necessary know-how. It was an ability even outside the pale of paranormal action. There was no question of it: The only way he could have snapped himself through time was by the agency and through the courtesy of the alien mind.

But the alien mind, it seemed, had left him; it was no longer with him. He hunted it and called it and there was no trace and there was no answer.

He turned to face the north and began to walk, keeping to the center of the street, marching through this ghost town of the past.

The graveyard of the past, he thought. No life anywhere. Just the dead, bare stone and brick, the lifeless clay and wood.

And where had gone the life?

Why must the past be dead?

And what had happened to that mind the alien on the distant star had exchanged with him?

He sought for it again and he could not find it, but he did find traces of it; he found the spoor of it, tiny, muddy footprints that went across his brain; he found bits and pieces that it had left behind—

strange, chaotic memories and straws of exotic, disconnected information that floated like flecks of jetsam in a frothy tide.

He did not find it, but he found the answer to its going—the instinctive answer that suddenly was there. The mind had not gone and left him. It had, rather, finally, become a part of him. In the forge of fright and terror, in the chemistry of danger, there had been a psychologic factor that had welded the two of them together.

And yet he still was human. Therefore, he told himself, the answer must be false. But it kept on persisting. There was no reason to it and there was no logic—for if he had two minds, if he were half human and half alien, there would be a difference. A difference he would notice.

The business part of the street had dwindled to shabby residences and up ahead of him he could see where the village ended—this village which half an hour ago—or a half an hour ahead?—had been most intent upon the killing of him.

He halted for a moment and looked back and he could see the courthouse cupola and remembered that he'd left everything he owned back there, locked in the sheriff's desk. He hesitated a moment, wondering if he should go back. It was a terrible thing to be without a dollar to his name, with all his pockets empty.

If he went back, he thought, he

could steal a car. If there were none with the keys left in the lock, he could short-circuit the ignition. He should have thought of it before, he told himself. The cars were standing there, waiting to be taken.

He turned and started back. He took two steps, then wheeled about again.

He didn't dare to go back. For he was safely out. There was nothing that could persuade him—money or car or anything—to go back into the village.

The light was waning and he headed northward, settling down to rolling up some distance—not running, but walking fast, with long, loose strides that ate up the very road.

He passed out of the village and came into the country and here there was an even greater loneliness, an even greater barrenness. A few dead cottonwoods lined the stream that ran down the valley and ghostly fenceposts stood in ragged rows—but the land was naked, without a weed, without a blade of grass. And the wind had a crying in it as it swept across the wasteland.

The darkness deepened and the moon came up, a blotch-faced mirror with the silver cracked and blackened, to cast a pallid light upon the arid stretch of earth.

He reached a rough plank bridge that crossed the tiny stream and stopped to rest a second and glance back along his trail. Nothing moved; there was nothing following. The village was some miles behind and

up on the hill above the stream stood the ramshackle bones of some forgotten farm—a barn, what looked like a hog pen, several dilapidated outhouses and the house itself.

Blaine stood and sucked the air into his lungs and it seemed to him that the very air itself was dead. It had no sparkle in it. There was no smell in it and hardly any taste.

He reached out a hand to rest it on the bridge and his hand went through the plank. It reached the plank and went into the plank and through it and there was nothing there. There wasn't any plank; there wasn't any bridge.

He tried again. For, he told himself, he might have missed it, he might have reached out for it and fallen short of it and only imagined his hand going through the plank. Moonlight, he reminded himself, is tricky stuff to see by.

So this time he was very careful.

His hand still went through the plank.

He backed away from the bridge for a step or two, for it suddenly had become a thing—not of menace, perhaps—but a thing of which one must be very careful. It was nothing to depend on. It was a fantasy and delusion; it was a ghost that stood spraddled on the road. If he had walked out on it, he told himself, or tried to walk upon it, he would have been tumbled down into the stream bed.

And the dead trees and the fence posts—were they delusions, too?

He stood stock-still as the thought

came to him: Was it all delusion? For an illogical moment he did not dare to stir, scarcely dared to breath, for any disturbance he might make might send this frail and unreal place crashing down into the dust of dreary nothingness.

But the ground was solid underneath his feet, or it seemed quite solid. He pressed one foot hard against it and the ground still held. Cautiously he lowered himself to his knees and felt the ground with spread-out hand, kneading his fingers against it as if to test its consistency, running his fingers through the dust down to the hardness of the earth.

This was foolishness, he told himself, angry with himself—for he had walked this road and it had not shattered beneath the impact of his footsteps; it had held up beneath him.

But even so this was a place where one could not be sure; this was a place where there seemed to be no rules. Or at least a place where you were forced to figure out the rules, like: *Roads are real, but bridges aren't.*

Although it wasn't that, at all. It was something else. It would all basically have to do with the fact there was no life within this world.

This was the past and it was the dead past; there were only corpses in it—and perhaps not even corpses, but the shadows of those corpses. For the dead trees and the fence posts and the bridges and the buildings on the hill all would classify as shadows. There was no life here; the life was

up ahead. Life must occupy but a single point in time and as time moved forward, life moved with it. And so was gone, thought Blaine, any dream that Man might have ever held of visiting the past and living in the action and the thought and viewpoint of men who'd long been dust. For the living past did not exist, nor did the human past except in the records of the past. The present was the only valid point for life—life kept moving on, keeping pace with present, and once it had passed all traces of it or its existences were carefully erased.

There were certain basic things, perhaps—the very earth, itself—which existed through every point in time, holding a sort of limited eternity to provide a solid matrix. And the dead—the dead and fabricated—stayed in the past as ghosts. The fence posts and the wire strung on them, the dead trees, the farm buildings and the bridge were shadows of the present persisting in the past. Persisting, perhaps, reluctantly, because since they had no life they could not move along. They were bound in time and stretched through time and they were long, long shadows.

He was, he realized with a shock, the only living thing existing in this moment on this earth.

He rose from his knees and dusted off his hands. He stood looking at the bridge and in the brightness of the moonlight there seemed nothing wrong with it. And yet he knew the wrongness of it.

Trapped, he thought. If he did not know how to get out of here, then surely he was trapped—and he did not know.

There was nothing in all of human experience which gave him any chance or any hope to know.

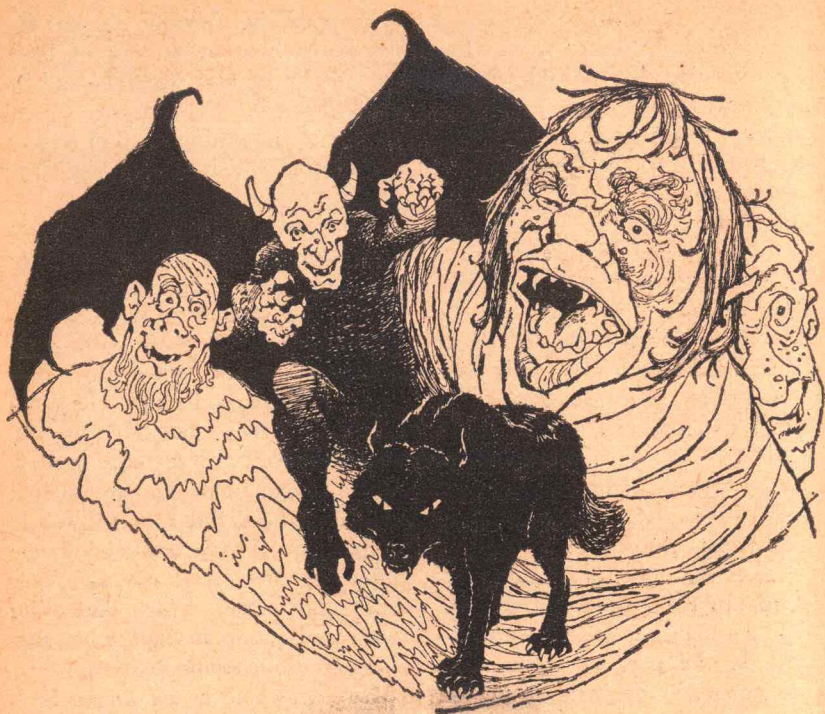
He stood silent in the road, wondering how human he could be, how much humanity there still might be left to him. And if he were not entirely human, if there still were alienness, then he had a chance.

He felt human, he told himself—yet how was he to judge? For he still would be *himself* if he were entirely alien. Human, half human, or not human in the slightest, he still would be himself. He'd scarcely know the difference. There was no other outside point from which he could stand and judge himself with anything like objectivity.

He—or whatever he might be—had known in a time of terror and of panic how to slip into the past and it stood to reason that, knowing that, he likewise should know how to slide back into the present, or what had been his present—back to that point in time, whatever one might call it, where life was possible.

But the hard, cold fact was there: He had no idea of how it might be done!

He looked about him, at the anti-septic coldness of the moonlight-painted land, and a shudder started at the core of him. He tried to stop the shudder, for he recognized it as the prelude to unreasoned terror, but the shudder would not stop.



He gritted mental teeth and the shudder kept on growing and suddenly he knew—with one corner of his mind, he knew.

Then there was the sound of wind blowing in the cottonwoods—and there'd been no cottonwoods before. Something, too, had happened to the shudder, for it was there no longer. He was himself again.

There were insects fiddling stridently somewhere in the grass and bushes and there were flecks of light moving in the night to betray the lightning bug. And through the shuttered window of the house up on

the hill came thin, strangled shafts of light.

He turned off the road and walked down into the stream bed, stepped through the foot-deep water and up the other bank among the cottonwoods.

He was back again, back where he'd started from. He'd come from past to present and he'd done it by himself. For a fleeting moment, at the very end of it, he had caught the method, but it had slipped from him again and he did not know it now.

But that did not matter. He was safely home.

XII

He woke before morning light, when the birds first began to chirp, and made his way up the hill to the garden patch just below the house. He got three ears of corn, he dug into a hill of potatoes, he dug up a butcher plant and noted with some satisfaction that it had four steaks upon it.

Back in the grove of cottonwoods, he searched through his pockets until he found the book of matches the sheriff had let him keep of all the stuff he had. He flipped back the cover and saw there were three matches left.

Regarding the three matches gravely, he thought of that day long ago when he had to pass a Boy Scout rest by the lighting of a fire with a single match. Was he that good now, he wondered, chuckling at the thought.

He found a dead tree trunk and dug into the heart of it to get punk that was powder-dry. He selected dead, dry twigs. He rustled up some bigger wood, still paying close attention to its dryness, for the fire must be as smokeless as it was possible to make it. There was every reason he should not advertise his presence.

On the road above him the first car of the day went past and far off a cow was bellowing.

The fire started on the second match and he nursed it carefully, building it bit by bit with the adding of more twigs and finally larger twigs until there came a time when

he could put on some of the bigger wood. The fire burned clear and smokeless and he sat down beside it to wait for it to burn into a bed of coals.

The sun was not yet up, but the light in the east was growing brighter and there was a coolness on the land. Below him the creek ran chattering across its bed of pebbles. Blaine drew in a deep breath of the morning air and it tasted good.

He was still alive and in the land of other people and he had food to put into his belly—but what did he do next? He had no money—he had nothing but a single match and the clothes he stood in. And he had a mind that would betray him—a mind, the old crone had said, that would bounce back at you. He would be a sitting duck for any peeper, any spotter, that should chance across him.

He could hide by day and walk by night, for it would be safe to be abroad at night when others kept inside. He could raid orchards and gardens for his food. He could keep alive and make a few miles every night, but it would be slow going.

There must, he told himself, be some other way.

He put more wood on the fire and it still burned bright without any smoke. He went down to the stream and lay flat upon his belly and drank from the singing water.

Had he been mistaken, he asked himself, to run away from Fishhook? No matter what had awaited him in Fishhook, the situation in which he

now found himself probably was worse. For he was a fugitive now from everyone; there was no one he could trust.

He lay staring down into the stream bed, looking at the pebbles—looking at one pebble, a red one that gleamed like polished ruby. He took the pebble into his mind and he saw what it was made of and the structure of its crystals and he knew where it had come from and he could trace its wanderings through millennia.

Then he tossed it from his mind and took in another pebble, a shiny bit of quartz—

There was something wrong here!

This was something he'd never done before!

And yet he had been doing it as if it were a commonplace performance and nothing at which one should even wonder.

He pushed his body up and hunched by the stream, his human sense aghast, but still not entirely startled—for he was still himself, no matter what he was.

He sought the alienness again and it wasn't there; it did not reveal itself, but he knew that it was there. It still was there, he knew, with its grab-bag of senseless memories, with its cock-eyed abilities, with its crazy logic and its topsy-turvy values.

In his mind's eye he saw a strange parade of purple geometric figures lurching across a desert of pure gold, with a blood-red sun hanging in a sulfur sky and nothing else in sight.

And in the fleetness of that moment he knew the location of the place and the meaning of it and the coordinates of a fantastic cosmographic system that could get him there. Then it all was gone—the figures and the knowledge.

He got slowly to his feet and went back to the fire and by this time there was a bed of coals. He found a stick and scratched out a hollow in the coals and put in the potatoes and the corn, still wrapped in its husks, and used the stick to scratch the coals back across the hollow. Breaking a green branch off a sapling, he used it as a fork to broil one of the steaks.

Squatted beside the fire, with the warmth of it upon his face and hands, he felt a smug contentment that seemed strangely out of place—the contentment of a man who had reduced his needs to the strictly basic—and with the contentment came a full-bodied confidence that was just as out of place. It seemed almost as if he could look ahead and see that everything would be all right. But it was not prescience. There were hunchers who had prescience or who seemed to have it, but he was not one of them. It was rather as if he could sense ahead of him the pattern of all rightness, but with no specific detail, with no idea of the future's shape, nor of its direction. An assurance only, something that was akin to plain, old-fashioned hunch, a feeling for the future—but nothing more than that.

The steak was sizzling and he

could smell the potato baking and he grinned at steak and baked potato as a breakfast menu. Although it was all right. There was nothing at the moment that was not all right.

He remembered Dalton slumped spineless in the chair, with the clenched cigar and the brushpile hair, raging at the butcher plant as another outrage committed upon the businessman by the maliciousness of Fishhook. And he tried to recall from what planet of which sun the butcher plant had come and the name, it seemed to him, should be at his command, although he could not put it on his tongue.

The butcher plant, he thought, and how many other things? What would be the total score if all of Fishhook's contributions should be totaled up.

There were the drugs for one thing, an entire new pharmacopoeia brought from other stars to alleviate and to cure the ills of Man. And as a result of this, all of Man's old bugaboos all of his old killers, were being held at bay. Given another generation—given, at the most, two more generations—and the entire concept of illness would be wiped off the human slate. The human race would then emerge as a people healthful both in body and in mind.

There were new fabrics and new metals and many different foodstuffs. There were new architectural ideas and materials; there were new perfumes, unfamiliar literatures, alien principles in art. And there was *dimensino*, an entertainment medium that had replaced all the stand-

ard human entertainment—the movies, radio and TV.

For in *dimensino* you did not merely see and hear; you participated. You became a part of the portrayed situation. You identified yourself with one of the characters, or with more than one of them, and you lived out the action and emotion. For a time you ceased to be yourself; you became the person of your choice in the drama *dimensino* created.

Almost every home had its *dimensino* room, rigged with the apparatus which picked up the weird, alien impulses that made you someone else—that lifted you out of the commonplace, out of the humdrum rut of your ordinary life and sent you off on wild adventure or on strange assignment or pitched you headlong into exotic places and fantastic situations.

And all of these, the food, the fabrics, the *dimensino*, were monopolies of Fishhook.

For all of these, thought Blaine, Fishhook had gained the hatred of the people—the hatred of not understanding, of being left outside, of being helped as no other single agency had ever helped the human race.

The steak was done and Blaine propped the greenwood stick against a bush while he dug into the coals to hook out the potatoes and the corn.

He sat beside the fire and ate as the sun came up and the breeze died down and the world, on the threshold

of another day, appeared to hold its breath. The first sunlight came through the grove of cottonwoods and turned some of the leaves into golden coins and the brook grew hushed as the daytime sounds took up—the bawling of the cattle on the hill above, the hum of cars passing on the road, the distant drone of a cruising plane far up in the sky.

On the road, down by the bridge, a closed panel truck pulled up and stopped. The driver got out and lifted the hood and crawled halfway under it. Then he crawled out again and went back to the cab. Inside of it he hunted until he found what he was looking for, then got out again. He placed a kit of tools on the fender and unwrapped it and the clinking of the tools as he unwrapped them came clearly up the hill.

It was an ancient truck—gas engine and with wheels, but it had some jet assistance. There were not many such vehicles left, except, perhaps, in junk yards.

An independent operator, Blaine told himself. Getting along the best he could, competing with the big truck lines by cutting down his rates and keeping down his overhead in any way he could.

The truck's original paint had faded and peeled off in places, but painted over this, in sharp, fresh color, were complicated hex signs, guaranteed, no doubt, to fend off the evil of the world.

The truck, Blaine saw, had an Illinois license.

The driver got his tools laid out,

then crawled back beneath the hood. The sound of hammering and the screech of stubborn, rusty bolts floated up the hill.

Blaine finished off his breakfast. There were two steaks left and two potatoes and by now the coals were growing black. He stirred up the coals and put on more wood, speared the two steaks on the stick and broiled them carefully.

The pounding and the screeching kept on beneath the hood. A couple of times the man crept out and rested, then went back to work.

When the steaks were finished, Blaine put the two potatoes in his pocket and went marching down the hill, carrying the two steaks on their stick as another man might take a banner into battle.

At the sound of his footsteps crunching on the road, the driver came out from beneath the hood and turned around to face him.

"Good morning," said Blaine, being as happy as he could. "I saw you down here while I was getting breakfast."

The driver regarded him with considerable suspicion.

"I had some food left over," Blaine told him, "so I cooked it up for you. Although, perhaps, you've eaten."

"No, I haven't," said the driver, with a show of interest. "I intended to in the town just down the road, but it was still closed tight."

"Well, then," said Blaine and handed him the stick with the two steaks impaled upon it.

The man took the stick and held

it as if he feared that it might bite him. Blaine dug in his pockets and pulled out the two potatoes.

"There was some corn," he said, "but I ate it all. There were only three ears of it."

"You mean you're giving this to me?"

"Certainly," said Blaine. "Although you can throw it back into my face if that's the way you feel."

The man grinned uneasily. "I sure could use it," he declared. "The next town is thirty miles and with this," he gestured at the truck, "I don't know when I'll get there."

"There isn't any salt," said Blaine, "but it's not so bad without it."

"Well," said the man, "since you've been so kind—"

"Sit down," said Blaine, "and eat. What's the matter with the engine?"

"I'm not sure. Could be the carburetor."

Blaine took off his jacket and folded it. He laid it neatly on the fender. He rolled up his sleeves.

The man found a seat on a rock beside the road and began to eat.

Blaine picked up a wrench and climbed up on the fender.

"Say," said the man, "where did you get this stuff?"

"Up on the hill," said Blaine. "The farmer had a lot of it."

"You mean you stole it?"

"Well, what would you do if you were out of work and had no money and was trying to get home?"

"Whereabouts is home?"

"Up in South Dakota."

The man took a big bite of steak and his mouth became so full he could talk no longer.

Blaine ducked underneath the hood and saw that the driver had all but one bolt loose on the carburetor mounting. He put the wrench on it and the bolt screeched metallic protest.

"Damn thing rusted tight," said the driver, watching Blaine.

Blaine finally freed the bolt and lifted out the carburetor. He walked over with it and sat down beside the eating man.

"Rig's about ready to fall apart," the driver said. "Wasn't much to start with. Been having trouble with it all the way. My schedule's shot to hell."

Blaine found a smaller wrench that fitted the bolts on the carburetor assembly and began to wrestle with the threads.

"Tried driving at night," said the man, "but not for me. Not after that first time. Too risky!"

"See something?"

"If it hadn't been for those signs I painted on the truck, I would have been a goner. I have a shotgun with me, but it doesn't do no good. Can't drive and handle a gun at the same time."

"Probably wouldn't do you any good even if you could."

"I tell you, mister," said the driver. "I am set for them. I have a pocket full of shells loaded up with silver shot."

"Expensive, isn't it?"

"Sure. But you have to be prepared."

"Yeah," said Blaine. "I suppose you do."

"It's getting worse," declared the man, "every blessed year. There is this preacher up north."

"I hear there are a lot of preachers"

"Yes, a lot of them. But all they do is talk. This one, he is all set to get some action on it."

"There she is," said Blaine, loosening the last bolt. He broke open the carburetor and looked at it.

"There it is," he said.

The man bent over and looked where Blaine was pointing.

"Damned if it ain't," he said.

"Have it fixed and back in place in another fifteen minutes. You got an oil can we can squirt these threads."

The driver got up and wiped his hands on the seat of his trousers. "I'll look it up," he said.

He started for the truck, then turned back. He held out his hand. "My name is Buck," he said. "Buck Riley."

"Blaine. You can call me Shep."

Riley stood undecided, shuffling his feet.

"You say you're heading for Dakota."

Blaine nodded.

"I'm damn near out of my mind," said Riley. "I need someone to help me."

"Anything I can," said Blaine.

"Would you drive at night?"

"Hell, yes," said Blaine.

"You could drive and I could have the shotgun ready."

"You'll need to get some sleep."

"We'll manage that, the both of us, somehow or other. We have to keep this wagon rolling. I've lost too much time for comfort."

"You're going South Dakota way?"

Riley nodded. "You'll go with me, then?"

"Glad to," said Blaine. "It beats walking any time."

"There'll be some money in it for you. Not much—"

"Forget about the money. I just want the ride."

XIII

Northeastward out of the southwest they traveled, driving day and night—but not driving all the time; driving, more than likely, not more than half the time. For the truck was no better than a rolling junk heap. They fought with the balky engine, they battled with the old and worn-out tires, they nursed the shaky chassis—and they made some mileage, but not so very much.

The roads were bad, as all roads now were bad. Dead for many years was the old concept of smooth, hard-surfaced, almost polished highways, for they were no longer needed. The traffic in this day was made up almost entirely of cars and trucks that were half plane; there was no need of good roads for vehicles which in their operation never touched the ground.

The old highway surfacing was broken and full of chuckholes. It was rough on tires and the tires were not too good. Nor were new ones, even if

Riley had been able to afford them, easy to obtain. The demand for tires of the type used by his battered truck had dropped to almost nothing and it was only by the greatest luck that they could be found.

There also was another ever-present worry—the finding of gasoline to put into the tank. For there were no service stations; there had been no service stations for almost fifty years. There was no need of service stations when highway traffic moved on atomic power. So, at each town they

hunted for a farm service store or a co-operative tank farm to obtain their fuel, for the bulk of farm machinery still used gasoline.

They slept as they could, snatching catnaps whenever the chance came up. They ate on the run, usually out of a paper bag of sandwiches or of doughnuts, with coffee in an old tin pail they carried.

Thus the two of them found their



way along the ancient highways, used now by the modern traffic only because the engineering of those highways had been good, only because they represented the easiest, shortest distances between two points.

"I never should have took this job," said Riley, "but there was good pay in it and I don't mind telling you that I need the money."

"You'll probably make out all right on it," Blaine reassured him. "You may be a few days late, but we'll get through all right."

"If I have any truck left."

"You didn't," Blaine pointed out, "have very much to start with."

Riley mopped his face with a faded handkerchief that at one time had been turkey red.

"It's not only the truck and all the work," he said. "It's the wear and tear on a man himself."

For Riley was a frightened man—and the fright, Blaine saw, went down to the bone and core of him.

It was not, Blaine told himself, watching the man, the simple emotional mechanics of a man frightened by the horrific menagerie of mischief and of evil from which, because he had believed in it for his entire life, he could conjure up with no effort whatsoever the terrible fantasies of an age gone past. It was something more than that; it was more immediate than latent nighttime fears.

To Blaine the man was an oddity, a human specimen out of some medieval museum; a man who feared the dark and the imagined forms with which he peopled it; a man who

placed reliance in a painted hex sign and in a shotgun loaded with a charge of silver buckshot. He had heard of men like this, but had never met one. If there had been any such as this among the people that he met in Fishhook, they had kept it closely hidden behind a sophisticated mask.

But if Riley was a man of curiosity to Blaine, Blaine was likewise one to him.

"You are not afraid?" he'd ask.

Blaine would shake his head.

"You do not believe these things?"

"To me," Blaine would tell him, "they have always seemed just a little foolish."

Riley would protest: "They are not foolish, friend. I can assure you that I've known too many people; I've heard too many tales that I know are true. There was an old man when I was a boy back in Indiana. He was found tangled in a fence with his throat ripped out. And there were tracks around the body and the smell of sulfur."

If it were not this particular story, then it was another, just as gruesome, just as starkly mystic, just as ancient-dark.

And what could one do with that, Blaine wondered. Where would one find an answer? For the belief was engrained deeply in the human fiber, not entirely, either, in the matrix of the present situation, but in the blood and bone of Man clear back to the caves. There was in the soul of Man a certain deadly fascination with all things that were macabre. The situation as it stood had been grasped

willingly, almost eagerly, by men for whom the world had become a rather tame and vapid place with no terror in it beyond the brute force terror of atomic weapons and the dread uncertainty of unstable men in power.

It had all begun quite innocently as the people grabbed at the new principles of PK for their entertainment and their enjoyment. Almost overnight the fact of mental power had become a fad that had overwhelmed the world. Nightclubs had changed their names, there had been startling fashion trends, new teen-age cants had risen, TV had gone overboard with its horror films and the presses had poured out billions of volumes dealing with the supernatural. There had been new cults and older cults had flourished. The ouija board came back after two centuries of hiding in the mists of an earlier age which had played with ghosts for kicks, but had given up when it had found that you could not play with the spirit world. You either believed in it or you didn't and there was no middle ground.

There had been quacks and there had been earnest men, considerably deluded, who had made names and fortunes from the fad. Manufacturers had turned out carload after carload of novelties and equipment for the pursuance of this new fad, or new hobby, or new study or religion—the specific term would apply in direct proportion to the seriousness with which each individual might consider it.

It all had been wrong, of course—for paranormal kinetics was not supernatural. Nor was it macabre, nor did it deal with ghost or devil or any of the other of the hordes of forgotten things which came charging happily out of the Middle Ages. It was, instead a new dimension to Man's abilities—but the enamored people, agog at this new toy, had adopted it wholeheartedly in all misinterpretation.

As they always did, they had overdone it. They had played so hard at their misinterpretation that they had forgotten, despite warning after warning, that it was misinterpretation. They finally had come to believe in all the weirdness and all the fantasy; they finally regarded it as the gospel truth. Where there had been fun there now were leering fauns; where there had been gags there now were goblins and ghosts.

So the reaction had set in, the inevitable reaction of fanatical reformers, accompanied by the grim, horse-faced cruelty and blindness that goes with all fanatical reform. Now a grim and frightened people hunted down, as a holy mission, their paranormal neighbors.

There were a lot of these, but they were in hiding now or in masquerade. There had always been a lot of them through all the human ages, but mostly unsuspecting, never dreaming that they had powers within themselves fit to reach the stars. They were the people who had been just a little queer, a bit discomboobolated and had been regarded tolerantly as

harmless by their neighbors. There had been a few, of course, who had been in part effective, but even in their effectiveness they had not believed, or believing, they had used their strange powers poorly, for they could not understand them. And in the later years, when they might have understood it, none of them had dared, for the tribal god of Science had called it all foolishness.

But when the stubborn men in Mexico had demonstrated that it was not all foolishness, then the people dared. Those who had the abilities then felt free to use them, and developed them by use. Others who never suspected that they had them found to their surprise they did and they used them, too. In some cases the abilities were used to good and solid purpose, but in other cases they were wrongly used or used for shallow purpose. And there were those, as well, who practiced this new-found art of theirs for unworthy ends, and a very few, perhaps, who used it in all evil.

Now the good gray moralists and the pulpit-pounding, crag-browed, black-attired reformers were out to quash PK for the evil it had done. They used the psychology of fear; they played upon the natural superstitions; they used the rope and brand and the quick shot in the night and they spread a fear across the land that one could smell in the very air—a thick, foul scent that clogged the nostrils and brought water to the eyes.

"You are lucky," Riley said to Blaine. "Not fearing them, you may

be safe from them. A dog will bite a man who is afraid of it, but lick the hand of one who is not afraid."

"The answer's easy, then," Blaine told him. "Do not be afraid."

But it was impossible advice to a man like Riley.

Night after night he sat on the right-hand seat as Blaine drove through the darkness, shivering in terror like a spooky hound, grasping the gun loaded with its silver buckshot.

There were alarms and frights—the swoop of owl, the running of a fox across the road, an imagined roadside shadow, all became an evil out of some darker night, while the howling of coyotes became the wailing of a banshee, hunting for a victim.

But there was more than imagined terror. There was the shadow shaped like a man, but a man no longer, twisting and turning in a lazy dance from a high branch above the thicket; there was the blackened ruins of the roadside farm, with the smoke-streaked chimney standing like an accusing finger pointing up to heaven; there was the smoke from the tiny campfire that Blaine stumbled on as he followed up a creek hunting down a spring while Riley wrestled with the balky spark plugs. Blaine had been moving quietly, and they had heard him just too late to vanish before he caught sight of them, fleeing like wraiths up the timbered slopes of the looming mountain spur.

He had stepped into the tiny,

tramped-down circle of the campsite, with its small cooking fire and the skillet on its side, with four half-cooked trout lying in the trampled grass, with the wadded blankets and the comforter that had served as beds, with the rudely-built brush shelter as refuge from the rain.

He had knelt beside the fire and righted the skillet. He had picked up the fish and brushed the twigs and grass off them and replaced them in the pan.

And he had thought to call out to the hidens, to try to reassure them, but he knew that it was useless, for they were past all trust.

They were hunted animals. Hunted animals in this great United States which for years had valued freedom, which in its later years had stood as a forthright champion before the entire world for the rights of man.

He had knelt there, torn by an anger and a pity, and he felt the smarting of his eyes. He bunched up his fists and rubbed at his eyes and the moist knuckles smeared streaks of dirt across his face.

He had stayed there for a while, but finally he had risen and went down the creek again, forgetting that he had hunted for a spring, which no doubt had been only a few feet from the camp.

When he got back to the truck he did not mention what he'd found to Riley.

They drove across the deserts and labored across the mountains and finally came to the great high plains

where the wind came knifing down without a hill to stop it, without a tree to break it, a naked stretch of land that lay flat and hard to a far horizon.

And to Blaine, for the first time in his life, the land was more than desert, more than mountains, more than plain. It was a living record of the past. It lay clear—not before his eyes, but, rather, before some new sense, some fresh-sprung comprehension which he did not understand, nor did he attempt to understand, for it seemed as natural as if he'd had it all his life.

He saw the land in making, through the geologic ages. Each strata of twisted rock, each enfolded ridge and hill, each streambed cut into the surface spelled a message for him. He did not really see it; there were no strips of temporal film unwinding in his brain. But he sensed it and he knew it and in the knowing of it, there was no room for doubt.

It was as if he had an X ray in his mind that took him inside the mountains and through time as well and it seemed no great thing to him; it was entirely casual. He looked at the land as it spread before him and at the same time knew it as it once had been. But it was only a fleeting glance that barely impinged upon his present consciousness, although the ability was there for him to use, the ability to probe into the past, through the shifting ages, back to the primal hell when Earth was a boiling cloud of energy, coalescing into something that in time would be called a planet.

But he could only see the inanimate, he could only see the dead, and he knew the reason for it—there was no living past; life floated on the surface of the time tide and it left no trace and no shadow of its passing.

He rode in the seat alongside Riley, slouched and relaxed against the jolting of the truck. The sun beat down and the wind was dry and off to the north dust devils rose and spun above a dried-up river bed.

Riley drove hunched tight against the wheel, with his arms braced against the chuck holes and the ruts. His face was tense and at times a nervous tic twitched the muscles of his cheek.

Even in the daytime, Blaine thought, the man is still afraid, still runs his endless race with darkness.

Had it to do, he wondered, with the cargo in the truck? Not once had Riley said what he was hauling, not once had he inspected it. There was a heavy padlock on the rear door of the rig and the padlock clanged and jangled as the truck lumbered on road.

There had been a time or two when Blaine had been on the verge of asking, but there had been a certain reticence that had prevented it. Not anything, perhaps, that Riley had said or done or any way he'd acted, but, rather, his studied casualness in all these areas.

And after all, Blaine told himself, it was none of his affair. He did not care what might be in the truck. His only interest was in the truck itself; with every turn of a wheel it was carrying him where he had to go.

He slumped lower in the seat and closed his eyes and tried to catch some sleep. But he was not tired enough. He'd had some sleep earlier in the morning and to sleep in the bouncing truck one had to be fagged out.

He quit trying after a while, opening his eyes a slit and watching the area ahead. A jack rabbit went across the swale off to the right and far up in the sky a hawk sailed.

Riley said: "If we get a good run tonight, we'll reach the river in the morning."

"The Missouri?"

Riley nodded. "If we don't break down again. If we make good time."

But that night they met the witches.

XIV

The first they saw of them was a flicker in the fan of light the headlights threw out along the road and then they saw them flying in the moonlight. Not flying, actually, for they had no wings, but moving through the air as a fish would move through water, and graceful as only flying things can be.

There was a moment when they might have been moths flying in the lights or night-swooping birds diving in the sky, but once the mind had its instant of utter disbelief and after that, of human rationalization, there was no doubt of what they were.

They were humans flying. They were levitators. They were witches and there was a covin of them.

In the seat beside him, Blaine saw Riley thrust the shotgun out the open window. Blaine slammed on the brakes.

The gun went off, the sound of the report blasting in the cab like a thunderbolt.

The car skidded to a halt, slantwise across the road. Blaine grabbed Riley's shoulder and jerked him off his balance. With the other hand he jerked the gun away.

He caught a glimpse of Riley's face and the man was yammering. His jaw went up and down in a devil's tattoo and there were little flecks of foam at each corner of his mouth. His eyes were wild and rolling and his face was stiff, with the muscles bunched and tensed, like a grotesque mask. His hooked fingers made clawing motions to get back the gun.

"Snap out of it!" roared Blaine. "They're only levitators."

But the word meant nothing to a man like Riley. All reason and all understanding were lost in the roll of fearful thunder that hammered in his brain.

And even as he spoke to Riley, Blaine became aware of voices in the night—soundless voices reaching out to him, a medley of voices that were talking to him.

Friend—One of us is hit (a line of oozing red across a shapely shoulder)—Not bad—He has (a gun with its muzzle limp and drooping and turning suddenly into a rather melancholy and very phallic symbol) Safe—Our friend has the gun. Let us get the other (a snarling dog backed

into a corner, a skunk with its tail uplifted, a rattler coiled and set to strike)

Wait, yelled Blaine. Wait! Everything's all right. There'll be no more shooting.

He pressed down with his elbow against the door latch and the door swung open. He pushed Riley from him and half fell out of the cab, still clutching the gun. He broke the weapon and the shells jumped out; he threw the gun into the road and backed against the truck.

Suddenly the night was deadly silent except for the sounds of moaning and of wailing that came from Riley in the cab.

Everything is clear, said Blaine. There is no more danger.

They came plunging down out of the sky, as if they might be jumping from some hidden platform, but they landed lightly on their feet.

They moved slowly forward, cat-footed in the night, and they were silent now.

That was a fool thing to do, Blaine told them. Next time one of you will get your head blown off (a headless human walking casually with the stump of neck frothing furiously.)

He saw that they were young, not out of their teens, and that they wore what appeared to be bathing suits and he caught the sense of fun and the scent of frank.

They moved in cautiously and he sought for other signs, but there were no other signs.

Who are you? one asked.

Shepherd Blaine of Fishhook.

And you are going?

Up to South Dakota.

In this truck?

And with this man, said Blaine.

I want him left alone.

He took a shot at us. He hit Marie.

Not bad, said Marie. *Just a scratch is all.*

He's a frightened man, said Blaine.

He's using silver shot.

He sensed the merriment of them at the thought of silver shot.

And caught the weirdness of the situation, the moonlit night and the deserted road, the car slewed across the highway, the lonely wind that moaned across the prairie, and the two of them, he and Riley, encircled, not by Sioux nor by Comanches nor by Blackfeet, but by a ring of paranormal kids out on a midnight lark.

And who was there to blame or censure them, he asked himself. If in this small action of defiance they found some measure of self assertion in their hunted lives, if in this manner they snatched at something resembling human dignity, it was then no more than a very human action and not to be condemned.

He studied the faces, the ones that he could see, indistinct in the moon-and-headlamp-light, and there was indecision in them—faces on hair trigger.

From the cab still came the moaning of a man in mental agony.

Then: *Fishhook?* (*The towered buildings on the hill, the acre upon acre of them, massive, majestic, inspiring . . .*)

That is right, said Blaine.

A girl moved out of the huddled group and walked close to Blaine. She held out her hand.

Friend, she said. *We had not expected one. All of us are sorry that we troubled you.*

Blaine put out his hand and felt the firm, strong pressure of young fingers.

We do not often find someone on the road at night, said another one.

Just having fun, another said. *There's little chance for fun.*

I know how little chance, said Blaine. *I've seen how little chance.*

We Halloween, still another said. *Halloween? Oh, yes, I see. (a fist banging on a closed shutter, a garden gate banging in a tree, a hex sign upside down)*

It's good for them. They've got it coming to them.

I agree, said Blaine. *But it's dangerous.*

Not very. They are all too scared.

But it doesn't help the situation. Mister, there is nothing that can help.

But Fishhook? asked the girl who stood in front of Blaine.

He studied her and saw that she was beautiful—blue eyes and golden hair and the sort of shape that in the ancient days would have won her beauty contests, one of the old paganism that had been happily forgotten in the rush to PK fads.

I cannot tell you, said Blaine. *I'm sorry, I can't tell you.*

Trouble? Danger?

Not at the moment, no.

We could help.

No need, making it as casual as he could, as unworried as he could.

We could take you anywhere you wished.

I'm not a levitator.

No need for you to be. *We could (himself flying through the air, dragged along by two levitators, each hanging to an arm.)*

Blaine shuddered. *No, thanks. I think I'd rather not.*

Someone opened up the door of the cab and another one reached in and hurled Riley to the ground.

The trucker crawled along the ground on hands and knees and sobbed.

Leave him alone! Yelled Blaine.

The girl turned around. Her thoughts were level, sharp: *Keep away from him! Don't touch him! Don't do a thing to him.*

But, Anita—

Not a thing, she said.

He's a dirty reefer. He's using silver shot.

No!

They backed away.

We'll have to go, Anita said to Blaine. *Will you be all right?*

With him, you mean.

She nodded.

I can handle him, he told her.

My name is Anita Andrews. I live in Hamilton. My phone number is 276. Tattoo it.

Tattooed, said Blaine, showing her the words and numbers.

If you need help—

I'll call.

Promise?

Promise (Cross upon a throbbing heart.)

Riley lunged and had the gun, was staggering to his feet, a hand groping in his pocket for a shell.

Blaine flattened in a dive. He caught the man just above the knees, his shoulder slamming hard, one arm about the body, the other slashing at the gun and missing.

And as he leaped, he yelled: *Get out of here! Every one of you!*

He hit the ground and skidded, face down, on the broken pavement. He felt the shattered blacktop scraping on his flesh, tearing at his clothes. But he still kept his grip on Riley and dragged the man down with him.

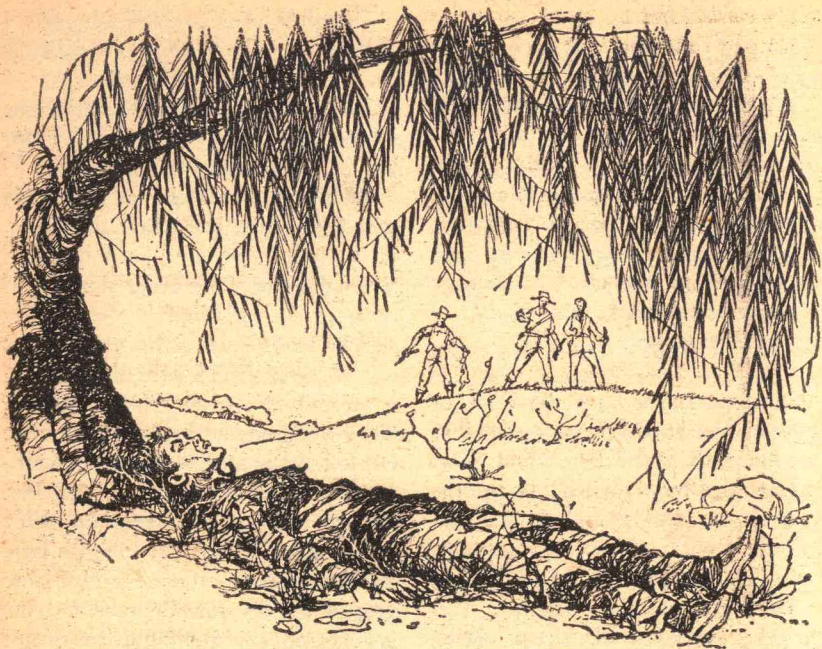
The skidding stopped and Blaine groped blindly for the gun and the gun barrel came lashing down out of the darkness and struck him across the ribs. He swore and grasped for it, but Riley had it raised again for another blow. Blaine punched out desperately in the darkness and his fist caught yielding flesh that grunted at the blow. The gun thudded down, missing his face by the fraction of an inch.

His hand snaked out and grasped it and jerked, twisting as he jerked, and the gun came free.

Blaine rolled, carrying the gun with him, and scrambled to his feet.

Out at the edge of light, he saw Riley coming in a bull rush, with his arms outspread, with his shoulders bunched, his mouth a snarling slit slashed across his face.

Blaine lifted the gun and flung it



out into the darkness with Riley almost on him. He sidestepped, but not quite far enough. One of Riley's ham-like hands caught him on the hip. Blaine spun with the hand and sidestepped again. Riley tried to check his rush, but seemed unable to. He twisted his body frantically but his momentum drove him forward and he slammed with a resounding whack into the front end of the truck.

He folded then and slid into a heap. Blaine stood watching him and there was no motion in the man.

The night was silent. There were just the two of them. All the rest had gone. He and Riley were alone with the battered truck.

Blaine swung around and looked into the sky and there was nothing there but the moon and stars and the lonesome prairie wind.

He turned back to Riley and the man was alive, he saw. He had hauled himself into a sitting position, braced against the front end of the truck. There was a cut across his forehead where he had struck on metal and there was no fight left in him. He was out of breath and panting and there was a wild glare in his eyes.

Blaine took a pace toward him.

"You fool," he said. "If you'd fired at them again, they'd been on top of us. They'd have torn us to pieces."

Riley stared at him and his mouth

was working, but no words came out—just the one word: "You . . . you . . . you."

Blaine stepped forward and held out a hand to help him to his feet, but Riley shrank away from him, pressing his body tight against the truck as if he would intrude into the very metal.

"You're one of them!" he shouted. "I guessed it days ago—"

"You're crazy!"

"But you are! You are afraid of being seen. You stick close to the truck. I always am the one who goes for the eats and coffee. You won't ever go. I always bargain for the gas. It is never you."

"It's your truck," said Blaine. "You have money and I don't. You know I am dead broke."

"The way you came to me," wailed Riley. "Walking from the woods. You must have spent the night in them there woods! And you never believed in nothing, the way ordinary people do."

"I'm not a fool," said Blaine. "That's the only reason. I'm no more PK than you are. If I were, do you think I'd ridden this far in your junk heap of a truck."

He strode forward and seized Riley and jerked him to his feet. He shook him so his head bobbed back and forth.

"Snap out of it!" yelled Blaine. "We're safe. Let's get out of here."

"The gun! You threw away the gun!"

"The hell with the gun. Get into that truck."

"But you talked with them! I heard you talking to them!"

"I never said a word."

"Not with your mouth," said Riley. "Not with your tongue. But I heard you talking with them. Not all of what you said. Just pieces of it. I tell you that I heard you."

Blaine pushed him back against the truck and held him with one hand while with the other he opened the cab door.

"Get in there and shut up," Blaine said, bitterly. "You and your silver shot! You and your hearing things!"

For it was too late, he told himself. It would be useless telling him. It would be a waste of time to show him or to try to help. Perhaps if he ever guessed the truth he might lose his last thin fingerhold on reason and go insane, wallowing in a morass of guilt associations.

Blaine walked around the truck and got in on the other side. He started the engine and wheeled the vehicle back into a highway lane.

They drove for an hour in silence, with Riley hunched into his corner. Blaine felt his watching eyes.

Finally Riley said: "I'm sorry, Blaine. I guess that you were right back there."

"Sure I was," said Blaine. "If you had started shooting—"

"That's not what I meant," said Riley. "If you'd been one of them, you'd thrown in with them. They could have whisked you anywhere you wanted quicker than this rig."

Blaine chuckled: "Just to prove it to you I'll pick up the eats and cof-

fee in the morning. If you'll trust me with the money, that is."

XV

Blaine sat on the stool in the hamburger joint, waiting for the man to bag a half dozen sandwiches and fill the pail with coffee. There were only two other customers in the place, and they paid no attention to him. One had finished eating and was reading a paper. The other, poised above his plate, was shoveling in a gooey mess that originally had been eggs and fried potatoes, but now looked like some new kind of dog food from being thoroughly mixed together.

Blaine turned from looking at the men and stared out the massive slab of glass which comprised two sides of the building.

The morning street was quiet, with only a few cars moving and only one man walking.

Probably it had been foolish, he told himself, to come out like this in an utterly mad and perhaps rather useless attempt to throw Riley off his guard, to attempt to reassure him. For it was more than likely that no matter what he did and no matter what Riley said, the trucker would continue to carry some suspicion.

But, Blaine thought, it would not be for long, for they must be near the river and Pierre must be just a few miles to the north. And a funny thing, he thought—Riley had never told him where he had been going. Although it was not queer; it fit in with all the rest of it—the man's evi-

dent fright and his secrecy concerning what he carried.

He swung back from the window and watched the man put the hamburgers in the sack and fill the pail with coffee. He paid with the five dollar bill Riley had given him and pocketed the change.

He went out into the street and headed for the bulk oil station where Riley and the truck were waiting. It was too early yet for anyone to be at the station and they'd eat their breakfast while waiting for someone to show up. Then they'd fill the tank and be on their way and this, thought Blaine, might be the last day he'd be with the truck.

For once they hit the river, he'd get off and start heading north. Exactly how he'd get to Pierre, he had no idea, but he knew somehow he would. If blind luck had taken him half across the continent, it could not fail him now. He could travel at night and hide by day. He might be able to take to the river bottomlands and travel unobserved even in the daytime, or he might steal a boat. There were, he told himself, all sorts of possibilities.

The morning was cool almost to the point of chill and the air burned in his nose as he breathed it in. It was going to be another good day, he knew—another moment of October with its winelike air and its smoky sky.

As he came to the street where the bulk station was located, the truck was not in sight.

Perhaps, he told himself, Riley

might have moved it. But even as he thought it, he knew it was not right. He knew he had been ditched.

At the cost of a few dollars, at the cost of finding some place else to get a tank of gas, the trucker had rid himself of Blaine.

It came to Blaine as no great shock, for he realized that he'd been expecting it, although not admitting to himself that he expected it. After all, from Riley's point of view, it was an astoundingly simple solution to his suspicions of the night before.

To convince himself, to make sure there was no mistake, Blaine walked around the block.

The truck was not in sight. And he was on his own.

In just a little while the town would be coming to life and before that happened, he must be out of sight. He must find a place where he could hide out for the day.

He stood for a moment to orient himself.

The nearer edge of town, he was certain, lay to the east, for they had driven through the southern edge of it for a mile or two.

He started out, walking as fast as was possible, but not so fast; he hoped, as would attract attention. A few cars went by along the street, once a man came out of his house to pick up the morning paper, once he met another man with a lunch bucket swinging from his hand. No one paid attention to him.

The houses dwindled out and he reached the last street in the town

and here the prairie ended and the land began to tumble down, in a jumble of wooded hills and knolls, each one lower than the last, and he knew that the Missouri lay beyond. Somewhere down there where the last hill ended, the mighty stream gurgled on its way with its shifting sandbars and its willow islands.

He made his way across a field and climbed a fence and went down the bank of a steep ravine and at the bottom of it was a tiny creek that chuckled at its banks and just beyond was a pool with a clump of willows growing close beside it.

Blaine got down on his hands and knees and crawled beneath the willows. It was a perfect hideout. It was outside the town and there was nothing to bring anybody here—the stream was too small to fish and it was too late for swimming. He would not be disturbed.

There would be no one to sense the flashing mirror he carried in his mind; there'd be no one to yell "Parry!"

And come night he could move on.

He ate three of the hamburgers and drank some of the coffee.

The sun came up and filtered through the willows to make a dappled pattern of sunshine and shadow.

From the town came far-off sounds—the rumble of a truck, the purring of an engine, the barking of some dogs, the calling of a mother rounding up the kids.

It had been a long road from that night in Fishhook, Blaine told him-

self, sitting in the willow shade and poking with a stick into the sandy ground. A long ways from Charline's and from Freddy Bates. And up until this moment he'd had no time to even think about it.

There had been a question then and there was still a question now: Whether it had been smart to run away from Fishhook; whether, despite all Godfrey Stone had said, it might not have been the wiser course to stay and take his chances of whatever Fishhook might have had in store.

He sat there and thought about it and he went back to the bright blue room where all had been set in motion. And he saw the room again as if it were only yesterday—better than if it were only yesterday. The alien stars were shining faintly down on this room which had no roof and the bright blue floor was smooth beneath the rolling of his wheels and the room was filled with the weird fabricated pieces that might have been furniture or art objects or appliances or almost anything at all.

It all came alive for him as it should not come alive—clear and concise, with no rough edges and no blurred, with not a thing put in and not a thing left out.

The Pinkness was sprawling at its ease and it roused and said to him: *So you came back again!*

And he was really there.

Without machine or body, without any outward trappings, with nothing but his naked mind, Shepherd Blaine had come back to the Pinkness.

You cannot see a mind.

But the Pinkness saw it, or sensed it—or at least it knew that the mind was there.

And to Shepherd Blaine there was no surprise and no alienness. It seemed almost as if he were coming home, for the bright blue of the room was much more homelike and familiar than it had seemed that first time.

Well, the Pinkness said, looking the mind up and down, *you make a pretty pair!*

And that was it, of course, thought the part of the mind that still was Shepherd Blaine—he, or at least a part of him, perhaps as much as half of him, had come home, indeed. For he was, in some percentage not yet determined, perhaps impossible to determine, a part of the alien he faced. He was Shepherd Blaine, traveler from Earth, and likewise a carbon copy of this thing that dwelt in the bright blue room.

And how are you getting on? the alien asked most affably. As if he didn't know.

There is just one thing, said Blaine, hurrying to get it in against the time when he might be forced to go from here. *There is just one thing. You've made us like a mirror. We bounce back at people.*

Why, of course, the alien told him. *That is the only way to do it. On an alien planet you would need some shielding. You don't want intelligences prying round in you. So you bounce back their prying. Here at*

home, of course, there would be no need—

But you don't understand, protested Blaine. It doesn't protect us. It attracts attention to us. It almost got us killed.

There is no such thing, the alien told Blaine gruffly. There is no such thing as killed. There is no such thing as death. It is such a horrid waste. Although I may be wrong. It seems to me that there was a planet, very long ago—

One could almost hear him riffling through the dry filing cases of his cluttered memory.

Yes, he said, there was a planet. There were several planets. And it was a shame. I cannot understand it. It makes no sense at all.

I can assure you, Blaine told him, that on my planet there is death for everything. For every single thing—

For everything?

Well, I can't be sure. Perhaps—

You see, the creature said. Even on your planet it is not universal.

I do not know, said Blaine. It seems to me that I remember there are deathless things.

Normal things, you mean.

Death has a purpose, Blaine persisted. It is a process, a function that has made the development of species and the differentiation of species possible on my planet. It averts the dead-end. It is an eraser that wipes out mistakes, that provides for new beginnings.

The Pinkness settled down. You could sense its settling down—smuggly, primly getting set for a long and

satisfactory exchange of ideas and, perhaps, an argument.

It may be so, it said, but it's very primitive. It goes back to the ooze. There are better ways. There even is a point where there is no further need of this improvement that you speak of.

But, first of all, he said, are you satisfied?

Well, you're an improved thing yourself. An expanded thing. You are part yourself and you are partly me.

And you are partly me as well.

The Pinkness seemed to chuckle. But there are just the two of you—yourself and me—and I am so many things I cannot begin to tell you. I have done a lot of visiting and I've picked up a lot of things, including many minds and some of them, I don't mind telling you, were hardly worth the trading. But do you know, for all the visiting I've done, almost no one ever visits me. I cannot tell you how I appreciate this visit. There was a being once who came to visit me quite often, but it was so long ago it's a bit hard to recall. By the way, you measure time, don't you—surface time, that is?

Blaine told him how humans measure time.

Hm-m-m, now, let's see, the creature said, doing rapid mental calculation, that would make it about ten thousand of your years ago.

That this creature came to visit you?

That is right, the Pinkness said.

You are the first since then. And you came visiting me. You didn't wait for me to visit you. And you had that machine—

How come, Blaine asked, you had to ask me about our count of time? You had it all. You traded minds with me. You have everything I know.

Of course, the Pinkness mumbled. Of course I had it. But I hadn't dug it out. You wouldn't believe me if I told you how cluttered up I am.

And that was true, Blaine thought. Even with just one extra mind, he was cluttered up. He wondered—

Yes, of course, the Pinkness told him. You'll get it straightened out in time. It takes a little while. You'll become one mind, not two. You'll get together. You'll make a team. You like it this way, don't you?

It's been a little rough, this mirror business.

I'm not bent on causing trouble, said the Pinkness. I only do the best I can. So I make mistakes. So I fix it up. I take the mirror off, I cancel it. O.K.?

O.K., said Blaine.

I sit here, said the Pinkness, and I go visiting. Without stirring from this place, I go any place I wish and you'd be surprised how few minds I find that I'd care to trade for.

In ten thousand years, however, you'd pick up a lot of them.

Ten thousand years, said the creature, startled. Ten thousand years, my friend, is only yesterday.

He sat there, mumbling, reaching back and back and not reaching the

beginning and he finally gave it up.

And there are so few of them, he complained, that can handle a second mind. I must be careful of them. There are a lot of them that think they are possessed. Some of these would go insane if I traded with them. You, perhaps, can understand.

Readily, said Blaine.

Come, said the Pinkness, and sit down here beside me.

I'm scarcely, Blaine explained, in a condition to do much sitting.

Oh, yes, I see, the creature said. I should have thought of that. Well, then, move over closer. You came for a visit, I presume.

Naturally, said Blaine, not knowing what to say.

Then, said the creature grimly, leave us start to visit.

Certainly, said Blaine, moving somewhat closer.

Now, where shall I start? the creature asked. There are so many places and so many times and so many different creatures. It always is a problem. I suppose it comes because of a desire for neatness, an orderliness of mind. The thought persists to plague me that if I could put it all together I might arrive at something of significance. You would not mind, I presume, if I should tell you about those strange creatures that I ran into out at the edge of the galaxy.

Not at all, said Blaine.

They are rather extraordinary, said the Pinkness, in that they did not develop machines as your culture did, but became, in effect, machines themselves—

Sitting there in the bright blue room, with the alien stars flaming overhead, with the faint, far-off sound of the raging desert wind a whisper in the room, the Pinkness talked—not only of the machines entities, but of many others. Of the insect tribes that piled up over endless centuries huge reserves of food for which they had no need, slaving on an endless treadmill of a blind economic mania. Of the race that made their art forms the basis of a weird religion. Of the listening posts manned by garrisons of a galactic empire that had long since been forgotten by all except the garrisons themselves. Of the fantastic and complicated sexual arrangements of yet another race of beings who, faced with the massive difficulties of procreation, thought of little else. Of planets that never had known life, but rolled along their courses as gaunt and raw and naked as the day they had been formed. And of other planets that were a boiling brew pot of chemical reactions which stretched the mind to think on, let alone to understand, and of how these chemical reactions of themselves gave rise to an unstable, ephemeral sort of sentience that was life one moment and just failed of life another.

This—and yet a great deal more.

Blaine, listening, realized the true fantastic measure of this creature which he had stumbled on—an apparently deathless thing, which had no memory of its beginning, no concept of an end; a creature with a rov-

ing mind that had mentally explored, over billions of years, millions of stars and planets for millions of light-years, in this present galaxy and in some of the neighbor ones; a mind that had assembled a gigantic grab-box of assorted information, but information which it had made no effort to put to any use. That it, more than likely, had no idea of how to put to use, yet troubled by the nagging of a vague idea that some use should be made of it.

The sort of creature that could sit in the sun for endless time and spin eccentric yarns of all that it had seen.

And for the human race, thought Blaine, here squatted an encyclopedia of galactic knowledge, here lounged an atlas that had mapped uncounted cubic light-years. Here was the sort of creature that the tribe of Man could use. Here was a running-off of mouth that would pay human dividends—dividends from an entity which seemed without emotion, other than a certain sense of friendliness—an entity that, perhaps, in years of arm-chair observation, had had all emotion, if any had existed, worn away until they were so much dust—who had not used any of the knowledge it had gained, but had not been the loser. For in all its observation, in its galactic window-peeping, it had gained a massive tolerance and an understanding, not of its own nature, not of human nature, but of every nature, an understanding of life itself, of sentience and intelligence. And a sympathy of all motives and all ethics, and of each ambition, no matter

how distorted in the eyes of other life.

And all of this, as well, Blaine realized with a start, was likewise stored in the mind of one human being, of one Shepherd Blaine, if he could only separate it and classify and store it and then could dig it out and put it to proper use.

Listening, Blaine lost all sense of time, lost all knowing of what he was or where he was or why he might be there, listening as a boy might listen to some stupendous tale spun by an ancient mariner from far and unknown land.

The room became familiar and the Pinkness was a friend and the stars were no longer alien and the far-off howling of the desert wind was a cradle song that he had always known.

It was a long time before he realized he was listening only to the wind and that the stories of far away and long ago had ceased.

He stirred, almost sleepily, and the Pinkness said: *That was a nice visit that we had. I think it was the best that I have ever had.*

There is one thing, said Blaine. *One question—*

If it is the shield, the Pinkness said, *you needn't worry. I took it away. There is nothing to betray you.*

It wasn't that, said Blaine. *It was time. I . . . that is, the two of us . . . have some control of time. Twice it saved my life—*

It is there, the Pinkness said. *The understanding's in your mind. You only have to find it.*

But, time—

Time, the creature said, is the simplest thing there is. I'll tell you—

XVII

Blaine lay for a long time, soaking in the feel of body, for now he had a body. He could feel the pressure on it, he could sense the movement of the air as it touched the skin, knew the hot damp of perspiration prickle along his arms and face and chest.

He was no longer in the blue room, for there he had no body and there was no longer the far-off sound of the desert wind. There was, instead, a regular rasping sound that had a slobber in it. And there was a smell, an astringent smell, an aggressively antiseptic odor that filled not only the nostrils, but the entire body.

He let his eyelids come up slowly against possible surprise, set to snap them shut again if there should be a need. But there was only whiteness, plain and unrelieved. There was no more than the whiteness of a ceiling.

His head was on a pillow and there was a sheet beneath him and he was dressed in some sort of garment that had a scratchiness.

He moved his head and he saw the other bed and upon it lay a mummy.

Time, the creature on that other world had said. Time is the simplest thing there is. And it had said that it would tell him, but it hadn't told him, for he hadn't stayed to hear.

It was like a dream, he thought—thinking back on it, it had the unreal, flat-planed quality of a dream, but it had not been any dream. He had been in the blue room once again and he'd talked with the creature that was its habitant. He had heard it spin its yarns and he still retained within his mind the details of those yarns. There was no fading of the detail as there would have been if it had been a dream.

The mummy lay upon the bed swathed in bandages. There were holes in the bandages for the nostrils and the mouth, but no holes for the eyes. And as it breathed it slobbered.

The walls were of the same whiteness as the ceiling and the floors were covered with ceramic tile and there was a sterility about the place that shrieked its identity.

He was in a hospital room with a slobbering mummy.

Fear moved in on him, a sudden wash of fear, but he lay there quietly

while it washed over him. For even in the fear, he knew that he was safe. There was some reason he was safe. There was some reason if he could think of it.

Where had he been, he wondered; where had he been other than the blue room? His mind went tracking back and he remembered where he'd been—in the willow thicket in the gully beyond the edge of town.

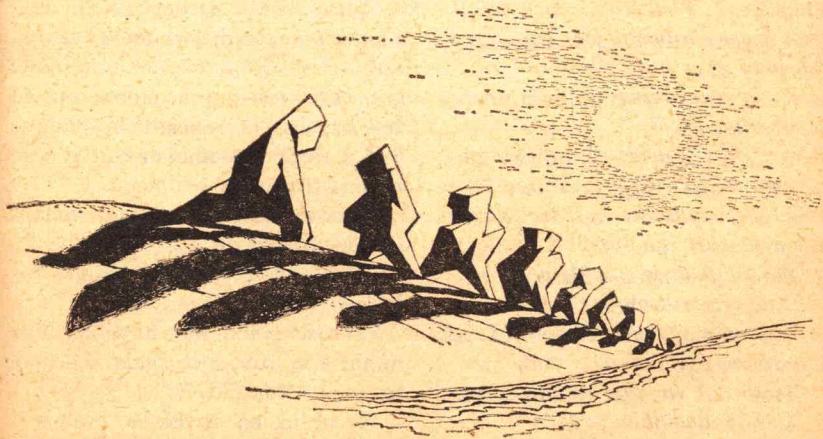
There were footsteps in the hall outside and a man with a white jacket came into the room.

The man stopped inside the door and stood there looking at him.

"So you've come around at last," the doctor said. "How do you feel?"

"Not too bad," said Blaine, and actually he felt fine. There didn't seem to be a thing the matter. "Where did you pick me up?"

The doctor did not answer. He asked another question: "Did anything like this ever happen to you before?"



"Like what?"

"Blacking out," the doctor said. "Falling into coma."

Blaine rocked his head from side to side upon the pillow. "Not that I recall."

"Almost," the doctor said, "as if you were the victim of a spell."

Blaine laughed. "Witchcraft, doctor?"

The doctor grimaced. "No, I don't imagine so. But one never knows. The patient sometimes thinks so."

He crossed the room and sat down on the edge of the bed.

"I'm Dr. Wetmore," he told Blaine. "You've been here two days. Some boys were hunting rabbits east of town. They found you. You had crawled underneath some willows. They thought that you were dead."

"And so you hauled me in."

"The police did. They went out and got you."

"And what is wrong with me?"

Wetmore shook his head. "I don't know."

"I haven't any money. I can't pay you, doctor."

"That," the doctor told him, "is not of any moment."

He sat there, looking at him. "There is one thing, however. There were no papers on you. Do you remember who you are?"

"Sure. I'm Shepherd Blaine."

"And you live where?"

"No where," said Blaine. "I just wander round."

"How did you get to this town?"

"I don't somehow recall."

He sat up in bed. "Look, doctor, how about getting out of here. I'm taking up a bed."

The doctor shook his head. "I'd like you to stick around. There are several tests—"

"It'll be a lot of trouble."

"I've never run across a case like yours," the doctor said. "You'd be doing me a favor. There was nothing wrong with you. Nothing organically, that is. Your heartbeat was retarded. Your breathing a little shallow. Your temperature off a point or two. But otherwise all right, except that you were out. No way of waking you."

Blaine jerked his head toward the mummy. "He's in bad shape, isn't he?"

"Highway accident," the doctor said.

"That's a bit unusual. Not many any more."

"Unusual circumstance," the doctor explained. "Driving an old truck. Tire blew when he was going fast. One of the curves above the river."

Blaine looked sharply at the man on the other bed, but there was no way to tell. None of him was showing. His breath went slobbering in and out and there was a rasping to it, but there was no way to tell who he might be.

"I could arrange another room," the doctor offered.

"No need. I won't be around too long."

"I wish you'd stay a while. You might flop over once again. And not be found this time."

"I'll think on it," Blaine promised.

He lay back on the bed.

The doctor rose and went to the other bed. He bent over it and listened to the breathing. He found a wad of cotton and dabbed it at the lips. He murmured at the man who lay there, then he straightened up.

"Anything you need?" he inquired of Blaine. "You must be getting hungry."

Blaine nodded. Now that he thought of it, he was.

"No hurry, though," he said.

"I'll speak to the kitchen," said the doctor. "They'll find something for you."

He turned about and walked briskly from the room and Blaine lay listening to his crisp, quick footsteps going down the hall.

And suddenly he knew—or remembered—why he now was safe. The flashing signal light was gone, for the creature of the far star had taken it from him. Now there was no longer need to skulk, no need of hiding out.

He lay and thought about and felt a bit more human—although, to tell the truth, he had never felt anything but human. Although now, for the first time, beneath the humanness, he felt the quick, tense straining of new knowledge, of a deep strata of new knowledge that was his to tap.

Across, in the other bed, the mummy wheezed and rasped and slobbered.

"Riley!" whispered Blaine.

There was no break in the breathing, no sign of recognition.

Blaine swung on the bed and thrust out his feet. He sat on the edge of the bed and let his feet down to the floor and the patterned tile was chill. He stood up and the scratchy hospital gown hung obscenely around his shanks.

At the other bed, he bent close above the white-swathed thing that lay there.

"Riley! Is it you? Riley, do you hear me?"

The mummy stirred.

The head tried to turn toward him, but it couldn't. The lips moved with an effort. The tongue fought to frame a sound.

"Tell—" it said, dragging out the word with the effort of its saying.

It tried again. "Tell Finn," it said.

There was more to say. Blaine could sense that there was more to say. He waited. The lips moved again, laboriously, and yet again. The tongue writhed heavily inside the slobbering cavern. But there was nothing more.

"Riley!" But there was no answer.

Blaine backed away until the edge of his bed caught him back of the knees and he sat down upon it.

He stayed there, staring at the swathed figure motionless on the bed.

And the fear, he thought, had caught up with the man at last, the fear that he had raced across half a continent. Although, perhaps, not the fear he ran from, but another fear and another danger.

Riley gasped and panted.

And there he lay, thought Blaine,

a man who had some piece of information to pass on to a man named Finn. Who was Finn and where? What had he to do with Riley?

There had been a Finn.

Once, long ago, he'd known the name of Finn.

Blaine sat stiff and straight upon the bed, remembering what he knew of Finn.

Although it might be a different Finn.

For Lambert Finn had been a Fishhook traveler, too, although he'd disappeared, even as Godfrey Stone had disappeared, but many years before Stone had disappeared, long before Blaine himself had ever come to Fishhook.

And now he was a whispered name, a legend, a chilling character in a chilling story, one of the few Fishhook horror tales.

For, so the story ran, Lambert Finn had come back from the stars one day a screaming maniac!

XVIII

Blaine lay back upon the bed and stared up at the ceiling. A breeze came sniffing through the window and leaf shadows from a tree outside played fitfully upon the wall. It must be a stubborn tree, Blaine thought, among the last to lose its leaves, for it was late October now.

He listened to the muffled sounds that came from the hushed corridors beyond the room and the biting antiseptic smell was still hanging in the air.

He must get out of here, he thought; he must be on his way. But on his way to where? On his way to Pierre, of course—to Pierre and Harriet, if Harriet were there. But Pierre might know, there was no purpose in it. So far as he could know, it was just a place to run to.

For he was running still, in blind and desperate flight. He'd been running since that moment when he'd returned from his mission to the stars. And worst of all, running without purpose, running only to be safe, just to get away.

The lack of purpose hurt. It made him an empty thing. It made him a wind-blown striving that had no free will of its own.

He lay there and let the hurt sink in—and the bitterness and wonder, the wonder if it had been wise to run from Fishhook, if it had been the thing to do. Then he remembered Freddy Bates and Freddy's painted smile and the glitter in his eyes and the gun in Freddy's pocket. And he knew there was no doubt about it: It had been the thing to do.

But somewhere there must be something he could lay his fingers on, something he could grasp, some shred of hope or promise he could cling to. He must not go on forever floating without purpose. The time must come when he could stop his running, when he could set his feet, when he could look around.

On the bed Riley gasped and wheezed and gurgled and was silent.

There was no sense in staying, Blaine told himself, as the doctor

wished. For there was nothing that the doc could find and nothing Blaine could tell him and there was no profit in it for either one of them.

He got off the bed again and walked across the room to the door that more than likely led into a closet.

He opened the door and it was a closet and his clothes hung there. There was no sign of underwear, but his pants and shirt were hanging there and his shoes sat underneath them. His jacket had fallen off the hook and lay in a crumpled heap upon the floor.

He stripped off the hospital gown and reached for his trousers. He stepped into them and cinched them tight about his middle.

He was reaching for the shirt when the stillness struck him—the peaceful, mellow stillness of an autumn afternoon. The peace of yellow leaf and the mellowness of the haze upon the distant hills and the winelike richness of the season.

But the stillness was all wrong.

There should be a gasping and a bubbling from the man upon the bed.

With his shoulders hunched, as if against a blow, Blaine waited for the sound and there was no sound.

He spun around and took a step toward the bed, then halted. For there was no reason for going near the bed. Riley's swathed body lay still and quiet and the bubble on the lips was frozen there.

"Doctor!" Blaine yelled. "Doctor!" running to the door, knowing even as he ran and yelled that he was being foolish, that his reaction was irrational.

He reached the door and stopped. He put his hands against the jambs and leaned forward to thrust his head out into the corridor.

The doctor was coming down the hall, hurrying, but not running.

"Doctor," whispered Blaine.

The doctor reached the door. He put out a hand and pushed Blaine back into the room. He strode over to the bed.

He stooped with his stethoscope placed against the mummy, then stepped back from the bed.

He looked hard at Blaine.

"And you are going where?" he asked.

"He's dead," said Blaine. "His breathing stopped and it was a long time—"

"Yes, he's dead. He never had a chance. Even with gobathain he didn't have a chance."

"Gobathian? That was what you used? That was why he was all wrapped up?"

"He was broken," said the doctor. "Like a toy someone had thrown on the floor and jumped on. He was—"

He stopped and for a long, hard moment looked at Blaine.

"What do you know about gobathian?" he asked.

"I've heard of it," said Blaine.

And he'd heard of it, all right, he thought.

"An alien drug," the doctor said.

"Used by an insect race. A warring insect race, And it's done miracles. It can patch up a smashed and broken body. It can repair bones and organs. It can grow new tissue."

He glanced down at the swathed deadness, then looked back at Blaine.

"You've read the literature?" he asked.

"A popularization," Blaine lied. "In a magazine."

And he could see again the seething madness of that jungle planet where he had stumbled on this drug the insects used—although in very truth they were not insects nor was it a drug they used.

Although, he told himself, there was no need to quibble. Terminology, always difficult, had become impossible with the going to the stars. You used approximations and let it go at that. You did the best you could.

"We'll move you to another room," the doctor told him.

"No need of that," said Blaine. "I was just about to leave."

"You can't," said the doctor, flatly. "I will not allow it. I won't have you on my conscience. There's something wrong with you, something very wrong. There's no one to look after you—no friends, no people."

"I'll get along. I always have before."

The doctor moved closer.

"I have a feeling," he said, "that you're not telling me the truth—not the entire truth."

Blaine walked away from him. He reached the closet and got his shirt

and put it on. He scuffed into his shoes. He picked up his jacket and shut the closet door, then turned around.

"Now," he said, "if you'll just move aside, I'll be going out."

There was someone coming down the corridor. Perhaps, Blaine thought, someone with the food the doctor promised. And maybe he should wait until the food arrived, for he needed it.

But there was more than one person coming down the corridor—there were at least a pair of footsteps. Perhaps someone who had heard him yelling for the doctor, bearing down upon the room to see if help were needed.

"I wish that you would change your mind," the doctor said. "Aside from the feeling you need help, there also is the matter of formalities—"

Blaine heard no more of what he had to say, for the walkers had reached the door and were standing just outside of it, looking in the room.

Harriet Quimby, cool as ice, was saying: "Shep, how did you wind up here! We've been looking everywhere for you."

And the telepathic undertone hit him like a whiplash: *Give! Quick! Fill me in!*

Just claim me, that is all (ferocious woman dragging errant urchin behind her with no ceremony). If you do that they'll let me go. Found me lying underneath a willow tree—

(Drunk who had somehow

climbed into a garbage can and can't get out of it, top hat tilted on one ear, nose snapping and flashing like an advertising sign, crossed eyes registering a rather mild surprise).

No, not that, Blaine pleaded. *Just stretched out underneath the tree, dead to all the world. He thinks there's something wrong with me—*

There is—

But not what he—

And Godfrey Stone was saying, smoothly, friendly, with a half-relieved, half-worried smile: "So you've been having the old trouble. Too much liquor, I suppose. You know the doctor told you—"

"Ah, hell," protested Blaine, "just a snort or two. Not enough—"

"Aunt Edna has been wild," said Harriet. "She imagined all sorts of things. You know what an imaginer she is. She was convinced you were gone for good and all this time."

*Godfrey! Godfrey! Three years—
Take it easy, Shep. No time now.
Get you out of here.*

Dr. Wetmore said: "You people know this man? A relative of yours?"

"Not relatives," said Stone. "Just friends. His Aunt Edna—"

"Well, let's go," said Blaine.

Stone glanced questioningly at the doctor and Wetmore nodded.

"Stop at the desk," he said, "and pick up his release. I'll phone it down. They'll want your names."

"Gladly," said Stone. "And thank you very much."

"It's quite all right."

Blaine stopped at the door and turned back to the doctor.

"I'm sorry," he said. "I didn't tell the truth. I am not proud of it."

"All of us," the doctor said, "have moments in which we can take no pride. You are not alone."

"Good-by, doctor."

"So long," said the doctor. "Take care of yourself."

Then they were going down the corridor, the three of them abreast.

Who was in that other bed? asked Stone.

A man by the name of Riley.

Riley!

A truck driver.

Riley! He was the man we were looking for. We just ran into you.

Stone halted and half turned to go back.

No use, said Blaine. He's dead.

And his truck?

Smashed. He ran off the road.

"Oh, Godfrey!" Harriet cried.

He shook his head at her. "No use," he said. "No use."

Hey, what is going on?

We'll tell you all of it. First, let's get out of here.

Stone seized him by the elbow and hustled him along.

Just one thing? How is Lambert Finn mixed up in all of this?

"Lambert Finn," Stone said vocally, "is the most dangerous man in the world today."

TO BE CONTINUED

Continued from page 82

minutes he uneasily pushed back the plate and stood up. If McAllen's twenty-four hours began with the moment the big clock in the room had been started, the door should be in evidence by now.

Another tour of the place revealed nothing and left him nervous enough to start biting his nails. He moved about the room, looking over things he'd already investigated. A music cabinet—he'd thought it was a radio at first, but it was only an elaborate hi-fi record player; two enclosed racks of records went with it—mainly classical stuff apparently. And a narrow built-in closet with three polished fishing rods and related gear, which would have allowed for speculation on the nature of the cabin's surroundings, except that McAllen might feel compelled to have a sampling of his toys around him wherever he was. Barney closed the closet door morose-

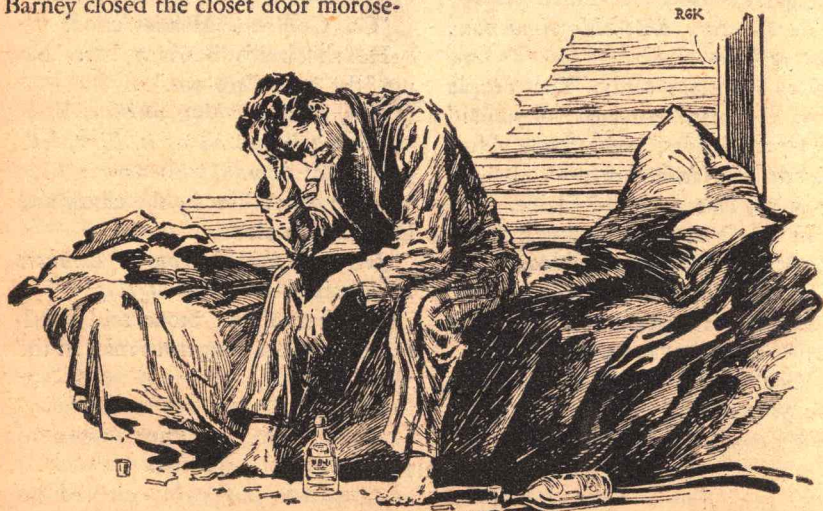
ly, stood regarding the two crowded bookcases next to it. Plenty of books—reflecting the McAllen taste again. Technical tomes. Great Literature. Dickens, Melville, the Life of Gandhi.

Barney grunted, and was turning away when another title caught his eye. He glanced back at it, hauled out the book:

"Fresh Water Game Fish; Tested Methods of Their Pursuit." The author: O. B. McAllen.

Barney was opening the book when the cabin's door also opened.

Bright light—daylight—filled the room with so sudden a gush that Barney's breath caught in his throat. The book seemed to leap out of his hands. With the same glance he saw then the low, wide picture window which abruptly had appeared in the



opposite wall, occupying almost half its space—and, in the other wall on the far left, a big door which was still swinging slowly open into the room. Daylight poured in through window and door. And beyond them—

For seconds he stared at the scene outside, barely aware of what he was looking at, while his mind raced on. He had searched every inch of the walls. And those thick wooden panels hadn't simply slid aside; the surfaces of doorframe and window were flush with the adjoining wall sections. So the McAllen Tube was involved in these changes in the room—and he might have guessed, Barney thought, that McAllen would have found more than one manner of putting the space-twisting properties of his device to use. And then finally he realized what he was seeing through the window and beyond the door. He walked slowly up to the window, still breathing unevenly.

The scene was unfamiliar but not at all extraordinary. The cabin appeared to be part way up one side of a heavily forested, rather narrow valley. It couldn't be more than half a mile to the valley's far slope which rose very steeply, almost like a great cresting green wave, filling the entire window. Coming closer Barney saw the skyline above it, hazy, summery, brilliantly luminous. This cabin of McAllen's might be in one of the wilder sections of the Canadian Rockies.

Or—and this was a considerably less happy thought—it probably

could have been set up just as well in some area like the Himalayas.

But a more immediate question was whether the cabin actually *was* in the valley or only appearing to be there. The use of the Tube made it possible that this room and its seeming surroundings were very far apart in fact. And just what would happen to him then if he decided to step outside?

There were scattered sounds beyond the open door: bird chirpings and whistles, and the continuous burring calls of what Barney decided would be a wild pigeon. Then a swirl of wind stirred the nearer branches. He could feel the wash of the breeze in the room.

It looked and sounded—and felt—all right.

Barney scowled undecidedly, clearing his throat, then discovered that a third item had appeared in the room along with the door and the window. In the wall just this side of the door at shoulder-height was a small ivory plate with two black switches on it. Presumably the controls for door and window . . .

Barney went over, gingerly touched the one on the right, watching the window; then flicked up the switch. Instantly, the window had vanished, the wood paneling again covered the wall. Barney turned the switch down. The window was back.

The door refused to disappear until he pushed it shut. Then it obeyed its switch with the same promptness.

He went back across the room, returned with one of McAllen's fishing

poles, and edged its tip tentatively out through the door. He wouldn't have been surprised if the tip had disintegrated in that instant. But nothing at all occurred. He dug about with the pole in the loose earth beyond the doorsill, then drew it back. The breeze was flowing freely past him; a few grains of soil blew over the sill and into the room. The door seemed to be concealing no grisly tricks and looked to be safe enough.

Barney stepped out on the sill, moved on a few hesitant steps, stood looking about. He had a better view of the valley here—and the better view told him immediately that he was not in the Canadian Rockies. At least, Canada, to his knowledge, had no desert. And, on the left, this valley came to an end perhaps a little more than a mile away from the cabin, its wooded slopes flowing steeply down to a landscape which was dull rust-red—flat sand stretches alternating with worn rock escarpments, until the desert's rim rose toward and touched the hazy white sky. Not so very different from—

Barney's eyes widened suddenly. Could he be in the Sierras—perhaps not more than three or four hours' drive from Los Angeles?

Three or four hours' drive if he'd had a car, of course. But even so—

He stared around, puzzled. There were no signs of a human being, of human habitation. But somebody else must be here. Somebody to keep guard on him. Otherwise there was nothing to stop him from walking away from

this place—though it might very well be a long, uncomfortable hike to any civilized spot.

Even if this did turn out to be the Himalayas, or some equally remote area, there must be hill tribes about if one went far enough—there should even be an occasional airplane passing overhead.

Barney stood just outside the door, frowning, pondering the situation again, searching for the catch in it. McAllen and his friends, whatever else they might be, weren't stupid. There was something involved here that he hadn't become aware of yet.

Almost without thought then, he turned up his head, squinting at the bright hazy sky above him—

And saw IT.

His breath sucked in and burst from his lungs in a half-strangled, terrified squawk as he staggered backward into the cabin, slammed the door shut, then spun around and began slapping frantically at the switches on the wall-plate until door and window were gone, and only the cabin's soft illumination was around him again. Then he crouched on the floor, his back against the wall, shaking with a terror he could hardly have imagined before.

He knew what the catch was now. He had understood it completely in the instant of glancing up and seeing that tiny brilliant blue-white point of light glare down at him through the incandescent cloud layers above. Like a blazing, incredibly horrible insect eye . . .

This world's sun.

THE END OF YEAR ONE

Barney Chard came up out of an uneasy sleep to the sudden sharp awareness that something was wrong. For some seconds he lay staring about the unlit cabin, mouth dry, heart hammering with apprehension. Then he discovered it was only that he had left the exit door open and the window switched on. . . Only? This was the first time since they had left him here that he had gone to sleep without sealing the cabin first—even when blind drunk, really embalmed.

He thought of climbing out of bed and taking care of it now, but decided to let the thing ride. After all he knew there was nothing in the valley—nothing, in fact, on this world—of which he had a realistic reason to be afraid. And he felt dead tired. Weak and sick. Feeling like that no longer alarmed him as it had done at first; it was a simple physical fact. The sheet under him was wet with sweat, though it was no more than comfortably warm in the room. The cabin never became more than comfortably warm. Barney lay back again, trying to figure out how it had happened he had forgotten about the window and the door.

It had been night for quite a while when he went to sleep, but regardless of how long he'd slept, it was going to go on being night a good deal longer. The last time he had bothered to check—which, Barney decided on reflection, might be several months ago now—the sunless period had continued for better than fifty-six

hours. Not long before dropping on the bed, he was standing in front of the big clock while the minute hand on the hour dial slid up to the point which marked the end of the first year in Earth time he had spent in the cabin. Watching it happen, he was suddenly overwhelmed again by the enormity of his solitude, and it looked as if it were going to turn into another of those periods when he sat with the gun in his hand, sobbing and swearing in a violent muddle of self-pity and helpless fury. He decided to knock off the lamenting and get good and drunk instead. And he would make it a drunk to top all drunks on this happy anniversary night.

But he hadn't done that either. He had everything set up, downright festively—glasses, crushed ice, a formidable little squad of fresh bottles. But when he looked at the array, he suddenly felt sick in advance. Then there was a wave of leaden heaviness, of complete fatigue. He hadn't had time to think of sealing the cabin. He had simply fallen into the bed then and there, and for all practical purposes passed out on the spot.

Barney Chard lay wondering about that. It had been, one might say, a rough year. Through the long days in particular, he had been doing his level best to obliterate his surroundings behind sustained fogs of alcoholism. The thought of the hellishly brilliant far-off star around which this world circled, the awareness that only the roof and walls of the cabin were between himself and that blaz-

ing alien watcher, seemed entirely unbearable. The nights, after a while, were easier to take. They had their strangeness too, but the difference wasn't so great. He grew accustomed to the big green moon, and developed almost an affection for a smaller one, which was butter-yellow and on an orbit that made it a comparatively infrequent visitor in the sky over the valley. By night he began to leave the view window in operation and finally even the door open for hours at a time. But he had never done it before when he wanted to go to sleep.

Alcoholism, Barney decided, stirring uneasily on the sweat-soiled, wrinkled sheet, hadn't been much of a success. His body, or perhaps some resistant factor in his mind, let him go so far and no farther. When he exceeded the limit, he became suddenly and violently ill. And remembering the drunk periods wasn't pleasant. Barney Chard, that steel-tough lad, breaking up, going to pieces, did not make a pretty picture. It was when he couldn't keep that picture from his mind that he most frequently had sat there with the gun, turning it slowly around in his hand. It had been a rather close thing at times.

Perhaps he simply hated McAllen and the association too much to use the gun. Drunk or sober, he brooded endlessly over methods of destroying them. He had to be alive when they came back. Some while ago there had been a space of several days when he was hallucinating the event, when

McAllen and the association seemed to be present, and he was arguing with them, threatening them, even pleading with them. He came out of that period deeply frightened by what he was doing. Since then he hadn't been drinking as heavily.

But this was the first time he'd gone to sleep without drinking at all.

He sat up on the edge of the bed, found himself shaking a little again after that minor effort, but climbed to his feet anyway, and walked unsteadily over to the door. He stood there looking out. The cloud layers always faded away during the night, gathered again at dawn. By now the sky was almost clear. A green glow over the desert to the left meant the larger moon was just below the horizon. The little yellow moon rode high in the sky above it. If they came up together, this would be the very bright part of the night during which the birds and other animal life in the valley went about their pursuits as if it were daytime. He could hear bird-chirpings now against the restless mutter of the little stream which came down the center of the valley, starting at the lake at the right end and running out into stagnant and drying pools a short distance after it entered the desert.

He discovered suddenly he had brought the gun along from the bed with him and was holding it without having been in the least aware of the fact. Grinning twistedly at the old and pointless precaution, he shoved the gun into his trousers pocket,

brought out matches, a crumpled pack of cigarettes, and began to smoke. Very considerate of them to see to it he wouldn't run out of minor conveniences . . . like leaving him liquor enough to drink himself to death on any time he felt like it during these five years.

Like leaving him the gun—

From the association's standpoint those things were up to him, of course, Barney thought bitterly. In either unfortunate event, he wouldn't be on *their* consciences.

He felt a momentary spasm of the old hate, but a feeble one, hardly more than a brief wash of the early torrents of rage. Something had burned out of him these months; an increasing dullness was moving into its place—

And just what, he thought, startled, was he doing outside the cabin door now? He hadn't consciously decided to go that far; it must have been months, actually, since he had walked beyond the doorway at all. During the first few weeks he had made half a dozen attempts to explore his surroundings by night, and learned quickly that he was confined to as much of the valley as he could see from the cabin. Beyond the ridges lay naked desert and naked mountain ranges, silent and terrifying in the moonlight.

Barney glanced up and down the valley, undecided but not knowing quite what he was undecided about. He didn't feel like going back into the cabin, and to just stand here was boring.

"Well," he said aloud, sardonically, "it's a nice night for a walk, Brother Chard."

Well, why not? It was bright enough to see by now if he kept away from the thickest growths of trees, and getting steadily brighter as the big moon moved up behind the distant desert rim. He'd walk till he got tired, then rest. By the time he got back to the cabin he'd be ready to lie down and sleep off the curious mood that had taken hold of him.

Barney started off up the valley, stepping carefully and uncertainly along the sloping, uneven ground.

During the early weeks he had found a thick loose-leaf binder in the back of one of the desk drawers. He thought it might have been left there intentionally. Its heading was NOTES ON THE TERRESTRIAL ECOLOGICAL BASE OF THE EIGHTEENTH SYSTEM, VOLUME III. After leafing through them once, it had been a while before Barney could bring himself to study the notes in more detail. He didn't at that time, want to know too much about the situation he was in. He was still numbed by it.

But eventually he went over the binder carefully. The various reports were unsigned, but appeared to have been compiled by at least four or five persons—McAllen among them; his writing style was not difficult to recognize. Leaving out much that was incomprehensible or nearly so, Barney could still construe a fairly specific picture of the association project

of which he was now an unscheduled and unwilling part. Selected plants and animals had been moved from Earth through the McAllen Tube to a world consisting of sand, rock and water, without detected traces of indigenous life in any form. At present the Ecological Base was only in its ninth year, which meant that the larger trees in the valley had been nearly full-grown when brought here with the soil that was to nourish them. From any viewpoint, the planting of an oasis of life on the barren world had been a gigantic undertaking, but there were numerous indications that the McAllen Tube was only one of the array of improbable devices the association had at its disposal for such tasks. A few cryptic paragraphs expressed the writer's satisfaction with the undetailed methods by which the Base's localized climatic conditions were maintained.

So far even the equipment which kept the cabin in uninterrupted operation had eluded Barney's search. It and the other required machinery might be buried somewhere in the valley. Or it might, he thought, have been set up just as easily some distance away, in the desert or among the remotely towering mountain ranges. One thing he had learned from the binder was that McAllen had told the truth in saying no one could contact him from Earth before the full period of his exile was over. The reason had seemed appalling enough in itself. This world had moved to a point in its orbit where the radiance of its distant sun was

thickening between it and Earth, growing too intense to be penetrated by the forces of the McAllen Tube. Another four years would pass before the planet and the valley emerged gradually from behind that barrier again.

He walked, rested, walked again. Now and then he was troubled by a burst of violent sweating, followed by shivering fits until his clothes began to dry again. The big moon edged presently over the ridge above him, and in the first flood of its light the opposite slope of the valley took on the appearance of a fanciful suboceanic reef. The activity of the animal life about Barney increased promptly. It was no darker now than an evening hour on Earth, and his fellow occupants of the Ecological Base seemed well-adjusted to the strange shifts of day and night to which they had been consigned.

He pushed through a final thicket of shrubbery, and found himself at the edge of the lake. Beyond the almost circular body of water, a towering wall of cliffs sealed the upper end of the valley. He had come almost a mile, and while a mile—a city mile, at least—wouldn't have meant much to Barney Chard at one time, he felt exhausted quite now. He sat down at the edge of the water, and, after a minute or two, bent forward and drank from it. It had the same cold, clear flavor as the water in the cabin.

The surface of the water was unquiet. Soft-flying large insects of some kind were swarming about, stip-

pling the nearby stretch of the lake with their touch, and there were frequent swift swirls as fish rose from beneath to take down the flyers. Presently one of them broke clear into the air—a big fish, thick-bodied and shining, looking as long as Barney's arm in the moonlight—and dropped back with a splash. Barney grinned twistedly. The NOTES indicated Dr. McAllen had taken some part in stocking the valley, and one could trust McAllen to see to it that the presence of his beloved game fish wasn't overlooked even in so outlandish a project.

He shifted position, became aware of the revolver in his pocket and brought it out. A wave of dull anger surged slowly through him again. What they did with trees and animals was their own business. But what they had done to a human being . . .

He scrambled suddenly to his feet, drew his arm back, and sent the gun flying far out over the lake. It spun through the moonlight, dipped, struck the surface with less of a splash than the fish had made, and was gone.

Now why, Barney asked himself in amazement, did I do that? He considered it a moment, and then, for the first time in over a year, felt a brief touch of something not far from elation.

He wasn't going to die here. No matter how politely the various invitations to do himself in had been extended by McAllen or the association, he was going to embarrass them by being alive and healthy when they came back to the valley four years

from now. They wouldn't kill him then; they'd already shown they didn't have the guts to commit murder directly. They would have to take him back to Earth.

And once he was there, it was going to be too bad for them. It didn't matter how closely they watched him; in the end he would find or make the opportunity to expose them, pull down the whole lousy, conceited crew, see them buried under the shambles an outraged world would make of the secret association . . .

THE END OF YEAR TWO

The end of Year Two on the Ecological Base in the Eighteenth System arrived and went by without Barney's being immediately aware of the fact. Some two hours later, he glanced at his wrist watch, pushed back the chair, got up from the desk and went over to the big grandfather clock to confirm his surmise.

"Well, well, Brother Chard," he said aloud. "Another anniversary . . . and three of them to go. We're almost at the halfway mark—"

He snapped the cover plate back over the multiple clock faces, and turned away. Three more years on the Ecological Base was a gruesome stretch of time when you thought of it as a whole . . .

Which was precisely why he rarely let himself think of it as a whole nowadays.

This last year, at any rate, Barney conceded to himself, had to be regarded as an improvement on the

first. Well, he added irritably, and what wouldn't be? It hadn't been delightful; he'd frequently felt almost stupefied with boredom. But physically, at least, he was fit—considerably fitter, as a matter of fact, than he'd ever been in his life.

Not very surprising. When he got too restless to be able to settle down to anything else, he was walking about the valley, moving along at his best clip regardless of obstacles until he was ready to drop to the ground wherever he was. Exertion ate up restlessness eventually—for a while. Selecting another tree to chop into firewood took the edge off the spasms of rage that tended to come up if he started thinking too long about that association of jerks somewhere beyond the sun. Brother Chard was putting on muscle all over. And after convincing himself at last—after all, the animals weren't getting hurt—that the glaring diamond of fire in the daytime sky couldn't really be harmful, he had also rapidly put on a Palm Beach tan. When his carefully rationed sleep periods eventually came around, he was more than ready for them, and slept like a log.

Otherwise: projects. Projects to beat boredom, and never mind how much sense they made in themselves. None of them did. But after the first month or two he had so much going that there was no question any more of not having something to do. Two hours allotted to work out on the typewriter a critical evaluation of a chapter from one of McAllen's abstruse technical texts. If Barney's

mood was sufficiently sour, the evaluation would be unprintable; but it wasn't being printed, and two hours had been disposed of. A day and a half—Earth Standard Time—to construct an operating dam across the stream. He was turning into an experienced landscape architect; the swimming pool in the floor of the valley beneath the cabin might not have been approved by Carstairs of California, but it was the one project out of which he had even drawn some realistic benefit.

Then:

Half an hour to improve his knife-throwing technique.

Fifteen minutes to get the blade of the kitchen knife straightened out afterwards.

Two hours to design a box trap for the capture of one of the fat gray squirrels that always hung about the cabin.

Fifty minutes on a new chess problem. Chess, Barney had discovered, wasn't as hairy as it looked.

Five hours to devise one more completely foolproof method of bringing about the eventual ruin of the association. That made no more practical sense than anything else he was doing—and couldn't, until he knew a great deal more about McAllen's friends than he did now.

But it was considerably more absorbing, say, than even chess.

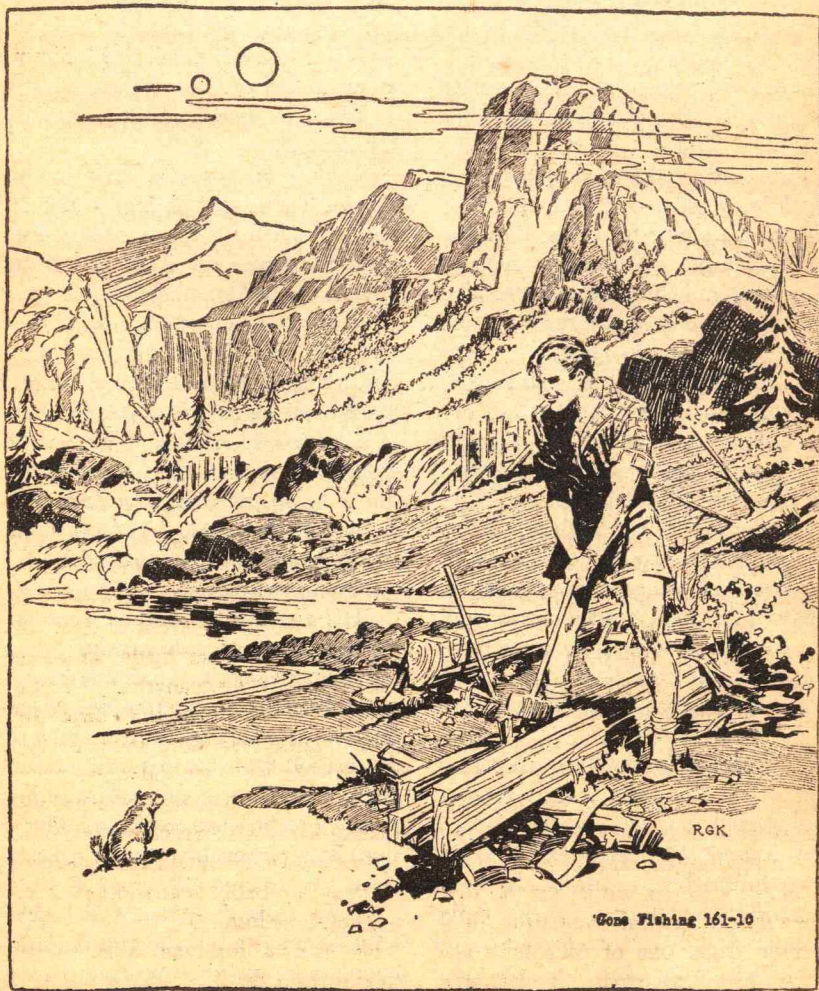
Brother Chard could beat boredom. He could probably beat another three years of boredom.

He hadn't forgiven anyone for making him do it.

THE END OF YEAR FIVE

For some hours, the association's Altiplano station had been dark and almost deserted. Only the IMT transit lock beneath one of the sprawling ranch houses showed in the vague

light spreading out of the big scanning plate in an upper wall section. The plate framed an unimpressive section of the galaxy, a blurred scattering of stars condensing toward the right, and, somewhat left of center, a large misty red globe.



John Emanuel Fredericks, seated by himself in one of the two Tube operator chairs, ignored the plate. He was stooped slightly forwards, peering absorbedly through the eyepieces of the operator scanner before him.

Melvin Simms, Psychologist, strolled in presently through the transit lock's door, stopped behind Fredericks, remarked mildly, "Good evening, doctor."

Fredericks started and looked around. "Never heard you arrive, Mel. Where's Ollie?"

"He and Spalding dropped in at Spalding's place in Vermont. They should be along in a few minutes."

"Spalding?" Fredericks repeated inquiringly. "Our revered president intends to observe the results of Ollie's experiment in person?"

"He'll represent the board here," Simms said. "Whereas I, as you may have guessed, represent the outraged psychology department." He nodded at the plate. "That the place?"

"That's it. ET Base Eighteen."

"Not very sharp in the Tube, is it?"

"No. Still plenty of interfering radiation. But it's thinned out enough for contact. Reading 0.19, as of thirty minutes ago." Fredericks indicated the chair beside him. "Sit down if you want a better look."

"Thanks." The psychologist settled himself in the chair, leaned forward and peered into the scanner. After a few seconds he remarked, "Not the most hospitable-looking place—"

Fredericks grunted. "Any of the ecologists will tell you Eighteen's an unspoiled beauty. No problems there

—except the ones we bring along ourselves."

Simms grinned faintly. "Well, we're good at doing that, aren't we? Have you looked around for uh . . . for McAllen's subject yet?"

"No. Felt Ollie should be present when we find out what's happened. Incidentally, how did the meeting go?"

"You weren't tuned in?" Simms asked, surprised.

"No. Too busy setting things up for contact."

"Well"—Simms sat back in his chair—"I may say it was a regular bear garden for a while, doctor. Psychology expressed itself as being astounded, indignant, offended. In a word, they were hopping mad. I kept out of it, though I admit I was startled when McAllen informed me privately this morning of the five-year project he's been conducting on the quiet. He was accused of crimes ranging . . . oh, from the clandestine to the inhumane. And, of course, Ollie was giving it back as good as he got."

"Of course."

"His arguments," Simms went on, pursing his lips reflectively, "were not without merit. That was recognized. Nobody enjoys the idea of euthanasia as a security device. Many of us feel—I do—that it's still preferable to the degree of brain-washing required to produce significant alterations in a personality type of Chard's class."

"Ollie feels that, too," Fredericks said. "The upshot of the original situation, as he saw it, was that Barney

Chard had been a dead man from the moment he got on the association's trail. Or a permanently deformed personality."

Simms shook his head. "Not the last. We wouldn't have considered attempting personality alteration in his case."

"Euthanasia then," Fredericks said. "Chard was too intelligent to be thrown off the track, much too unscrupulous to be trusted under any circumstances. So Ollie reported him dead."

The psychologist was silent for some seconds. "The point might be this," he said suddenly. "After my talk with McAllen this morning, I ran an extrapolation on the personality pattern defined for Chard five years ago on the basis of his background. Results indicate he went insane and suicided within a year."

"How reliable are those results?" Fredericks inquired absently.

"No more so than any other indication in individual psychology. But they present a reasonable probability . . . and not a very pleasant one."

Fredericks said, "Oliver wasn't unaware of that as a possible outcome. One reason he selected Base Eighteen for the experiment was to make sure he couldn't interfere with the process, once it had begun."

"His feeling, after talking with Chard for some hours, was that Chard was an overcondensed man. That is Oliver's own term, you understand. Chard obviously was intelligent, had a very strong survival drive. He had

selected a good personal survival line to follow—good but very narrow. Actually, of course, he was a frightened man. He had been running scared all his life. He couldn't stop."

Simms nodded.

"Base Eighteen stopped him. The things he'd been running from simply no longer existed. Ollie believed Chard would go into a panic when he realized it. The question was what he'd do then. Survival now had a very different aspect. The only dangers threatening him were the ones inherent in the rigid personality structure he had maintained throughout his adult existence. Would he be intelligent enough to understand that? And would his survival urge—with every alternative absolutely barred to him for five years—be strong enough to overcome those dangers?"

"And there," Simms said dryly, "we have two rather large questions." He cleared his throat. "The fact remains, however, that Oliver B. McAllen is a good practical psychologist—as he demonstrated at the meeting."

"I expected Ollie would score on the motions," Fredericks said. "How did that part of it come off?"

"Not too badly. The first motion was passed unanimously. A vote of censure against Dr. McAllen."

Fredericks looked thoughtful. "His seventeenth—I believe?"

"Yes. The fact was mentioned. McAllen admitted he could do no less than vote for this one himself. However, the next motion to receive a majority was, in effect, a generalized agreement that men with such . . .

ah . . . highly specialized skills as Barney Chard's and with comparable intelligence actually would be of great value as members of the association, if it turned out that they could be sufficiently relieved of their more flagrant antisocial tendencies. Considering the qualification, the psychology department could hardly avoid backing that motion. The same with the third one—in effect again that Psychology is to make an unprejudiced study of the results of Dr. McAllen's experiment on Base Eighteen, and report on the desirability of similar experiments when the personality of future subjects appears to warrant them."

"Well," Fredericks said, after a pause, "as far as the association goes, Ollie got what he wanted. As usual." He hesitated. "The other matter—"

"We'll know that shortly." Simms turned his head to listen, added in a lowered voice, "They're coming now."

Dr. Stephen Spalding said to Simms and Fredericks: "Dr. McAllen agrees with me that the man we shall be looking for on Base Eighteen may be dead. If this is indicated, we'll attempt to find some evidence of his death before normal ecological operations on Eighteen are resumed.

"Next, we may find him alive but no longer sane. Dr. Simms and I are both equipped with drug-guns which will then be used to render him insensible. The charge is sufficient to insure he will not wake up again. In this circumstance, caution will be required since he was left on the Base

with a loaded gun.

"Third, he may be alive and technically sane, but openly or covertly hostile to us." Spalding glanced briefly at each of the others, then went on, "It is because of this particular possibility that our contact group here has been very carefully selected. If such has been the result of Dr. McAllen's experiment, it will be our disagreeable duty to act as Chard's executioners. To add lifelong confinement or further psychological manipulation to the five solitary years Chard already has spent would be inexcusable.

"Dr. McAllen has told us he did not inform Chard of the actual reason he was being marooned—"

"On the very good grounds," McAllen interrupted, "that if Chard had been told at the outset what the purpose was, he would have preferred killing himself to allowing the purpose to be achieved. Any other human being was Chard's antagonist. It would have been impossible for him to comply with another man's announced intentions."

Simms nodded. "I'll go along on that point, doctor."

Spalding resumed, "It might be a rather immaterial point by now. In any event, Chard's information was that an important 'five-year-plan' of the association made it necessary to restrict him for that length of time. We shall observe him closely. If the indications are that he would act against the association whenever he is given the opportunity, our line will be that the five-year-plan has been concluded, and that he is, therefore,

now to be released and will receive adequate compensation for his enforced seclusion. As soon as he is asleep, he will, of course, receive euthanasia. But up to that time, everything must be done to reassure him."

He paused again, concluded, "There is the final possibility that Dr. McAllen's action has had the results he was attempting to bring about. . . Ollie, you might speak on that yourself."

McAllen shrugged. "I've already presented my views. Essentially, it's a question of whether Barney Chard was capable of learning that he could live without competing destructively with other human beings. If he has grasped that, he should also be aware by now that Base Eighteen is presently one of the most interesting spots in the known universe."

Simms asked: "Do you expect he'll be grateful for what has occurred?"

"We-e-ll," McAllen said judiciously, turning a little pale, "that, of course, depends on whether he *is* still alive and sane. But if he has survived the five years, I do believe that he will not be dissatisfied with what has happened to him. However"—he shrugged again—"let's get ahead with it. Five years has been a long time to find out whether or not I've murdered a man."

In the momentary silence that followed, he setted himself in the chair Fredericks had vacated, and glanced over at Simms. "You stay seated, Mel," he said. "You represent Psychology here. Use your chair scanner. The plate's still showing no indications of

clearing, John?"

"No," said Fredericks. "In another two hours we might have a good picture there. Hardly before."

McAllen said, "We won't wait for it, Simms and I can determine through the scanners approximately what has been going on." He was silent a few seconds; then the blurred red globe in the plate expanded swiftly, filled two thirds of the view space, checked for a moment, then grow once more; finally stopped.

McAllen said irritably, "John, I'm afraid you'll have to take over. My hands don't seem steady enough to handle this properly."

A minute or two passed. The big plate grew increasingly indistinct, all details lost in a muddy wash of orange-brown shades. Green intruded suddenly; then McAllen muttered, "Picking up the cabin now."

There was a moment of silence, then Fredericks cleared his throat. "So far so good, Oliver. We're looking into the cabin. Can't see your man yet—but someone's living here. Eh, Simms?"

"Obviously," the psychologist acknowledged. He hesitated. "And at a guess it's no maniac. The place is in reasonably good order."

"You say Chard isn't in the cabin?" Spalding demanded.

Fredericks said, "Not unless he's deliberately concealing himself. The exit door is open. Hm-m-m. Well, the place isn't entirely deserted, after all."

"What do you mean?" asked Spalding.

"Couple of squirrels sitting in the window," Simms explained.

"In the window? Inside the cabin?"

"Yes," said Fredericks. "Either they strayed in while he was gone, or he's keeping them as pets. Now, should we start looking around outside for Chard?"

"No," Spalding decided. "The Base is too big to attempt to cover at pinpoint focus. If he's living in the cabin and has simply gone out, he'll return within a few hours at the most. We'll wait and see what we can deduce from the way he behaves when he shows up." He turned to McAllen. "Ollie," he said, "I think you might allow yourself to relax just a little. This doesn't seem at all bad!"

McAllen grunted. "I don't know," he said. "You're overlooking one thing."

"What's that?"

"I told Chard when to expect us. Unless he's smashed the clock, he knows we're due today. If nothing's wrong—wouldn't he be waiting in the cabin for us?"

Spalding hesitated. "That is a point. He seems to be hiding out. May have prepared an ambush, for that matter. John—"

"Yes?" Fredericks said.

"Step the tubescope down as fine as it will go, and scan that cabin as if you were vacuuming it. There may be some indication—"

"He's already doing that," Simms interrupted.

There was silence again for almost two minutes. Forefinger and thumb

of Fredericks' right hand moved with infinite care on a set of dials on the side of the scanner; otherwise neither he nor Simms stirred.

"Oh-hoo-hoo-haw!" Dr. John Fredericks cried suddenly. "Oh-hoo-hoo-HAW! A message, Ollie! Your Mr. Chard has left you a . . . hoo-hoo . . . message."

For a moment McAllen couldn't see clearly through the scanner. Fredericks was still laughing; Simms was saying in a rapid voice, "It's quite all right, doctor! Quite all right. Your man's sane, quite sane. In fact you've made, one might guess, a one hundred per cent convert to the McAllen approach to life. Can't you *see* it?"

"No," gasped McAllen. He had a vague impression of the top of the desk in the main room of the cabin, of something white—a white card—taped to it, of blurred printing on the card. "Nothing's getting *that* boy unduly excited any more," Simms' voice went on beside him. "Not even the prospect of seeing visitors from Earth for the first time in five years. But he's letting you know it's perfectly all right to make yourself at home in his cabin until he gets back. Here, let me—"

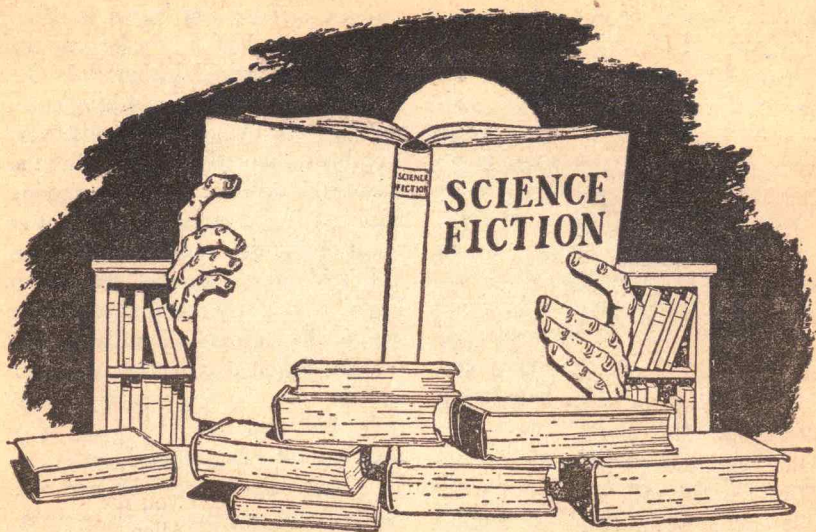
He reached past McAllen, adjusted the scanner. The printing on the card swam suddenly into focus before McAllen's eyes.

The message was terse, self-explanatory, to the point:

GONE FISHING,

Regards,
B. Chard.

THE END



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By P. SCHUYLER MILLER

A SURFEIT OF CLASSICS



MISSED the opportunity, last month, to offer felicitations on the thirty-fifth birthday of our contemporary, *Amazing Stories*, and especially to comment on the role played by its founder, Hugo Gernsback, in launching the first science-fiction magazine in this or

any country. It reached escape velocity and is still in orbit after several stormy passages through a perturbed upper atmosphere. What's more, it now has plenty of company.

Grizzled veterans will remember, and brash young collectors may have discovered, that Hugo Gernsback had a hearty respect and excellent taste

for the "classics" of our field. In the early years of *Amazing Stories*, and later in the various incarnations of *Wonder Stories*, he brought his readers translations of some of the best European science fiction as well as reprints of the better known stories of Verne, Wells and other pioneers.

I have always wondered why, in that collection of classics, we were not given a translation of at least one of the stories of the acknowledged Russian pioneer in the theory and practice of rocket flight, Konstantin Tsiolkovsky. It may have been simply because no English translation was available until now—though that is not the kind of stumbling block that would have impressed Mr. Gernsback. More probably, he knew Tsiolkovsky's work and realized how exasperatingly it represented—and violated—the principles he had established in his selection of classic science fiction.

Tsiolkovsky's best known science-fiction novel, "Beyond the Planet Earth," is now available in English from Pergamon Press of New York, London, Paris, Frankfurt, and elsewhere. The English edition appeared first, and the translator is English, but more competent than those who have been handling Russian satellite books. You get 190 pages, with an introduction by B. N. Vorobyev that sketches in Tsiolkovsky's career, for \$3.75.

The story had been serialized in a Russian magazine, and appeared in book form in 1920. He had begun the book as early as 1896, we are told,

and the serialization began in 1916 but was only half finished when the magazine folded. Whether the "October Revolution" had anything to do with this is for others to discover; Vorobyev, naturally, suggests that the scientist's brilliant but unorthodox ideas could be expressed only after the Communist regime took over.

I said that "Beyond the Planet Earth" is precisely the kind of science fiction that Hugo Gernsback preferred—fiction that teaches the facts and theories of science, subtly if possible, but with the directness of a textbook if that seemed necessary. This was Verne's approach, and to a much lesser extent Wells'—Hollywood kept the time lecture in "The Time Machine." It is not only the approach but the purpose of Tsiolkovsky's book.

The time is 2017; the place, a retreat in the Himalayas where a group of scientifically inclined millionaires, representing most of the principal nations, have set up an observatory and laboratories. It's difficult, incidentally, to imagine the Soviet regime letting this part of the book through unedited, but Papa Tsiolkovsky's work may be too well known at home for any tampering to be possible. The Russian, Ivanov, is the moving genius, but his colleagues, Laplace, Newton, Franklin, Helmholtz, Galileo—namesakes or pseudonyms—do their share to put a rocket driven satellite into orbit, and eventually take it to the Moon and nearly to Mars. What's more, they establish it in space on a self-sustaining basis and are shortly

joined by a veritable swarm of satellite colonies.

Every step of the project is explained and argued out by Ivanov and his companions, sometimes in scholarly colloquium, often as lectures for the technicians who accompany them. Some of the ideas are dated, but on the whole Tsiolkovsky anticipated and spelled out most of the principles and many of the minutiae of life in space more fully and accurately than factual books were to do for more than a generation.

To complete my paradox, I said that Hugo Gernsback would probably not have used the story if he had had a translation at hand. That astute gentleman knew very well that science fiction had to have story value as well as teaching value. The heavier the exposition, the wilder the action was likely to be . . . and "Beyond the Planet Earth" is weak in action. The astronauts do undergo a few gyrations in weightlessness; they build a greenhouse on the outside of their rocket—rather too easily—to replace their oxygen and keep them fed; they visit the Moon and find mobile plants living there; and they set off for Mars with perfect confidence—but the plot line is invisible, the action is sluggish, and American readers who had been nibbling at Burroughs, Merritt, Cummings, George Allan England, and Mr. Gernsback himself would not have stuck with it.

Jules Verne, now, was a better storyteller; in fact, it is making no earth-shaking revelation to say that

he was first of all a writer of popular adventure stories, many of which happened to be science fiction. The new English "Fitzroy" edition, handled in the United States by Associated Booksellers of Westport, Connecticut and by Gnome Press, now has twelve titles in print at \$3.00 apiece. Two of the new books make up a posthumous science-fiction yarn that has never appeared in English before.

To dispose of the familiar first, we have both parts of Verne's greatest classic, "From the Earth to the Moon" and "Round the Moon." The former has a meaty little introduction by the English editor and sometime translator of the Fitzroy editions, I. O. Evans; the latter has the wonderful original engraving of the weightless voyageurs, and a mathematical appendix by Mr. Evans, supporting some of Verne's scientific statements, refuting others, and supplying a few bits that have been pruned out of the story for the sake of "modern readers." This hewing away is my only quarrel with the series.

We also have, in two parts instead of the original three, the first Verne novel I ever read—"The Mysterious Island." This is, in a degree, a sequel to "20,000 Leagues Under the Sea," in that Captain Nemo appears at the end as the mysterious benefactor of the five escapees from besieged Richmond, whose balloon has dropped them—"Dropped From the Clouds" is the first book—on a weird and wonderful island somewhere in the Pacific. Science is applied to make the

castaways a comfortable home, in a way that makes Robinson Crusoe and the Swiss family Robinson look like fumlbers—as Verne considered them. If the movie-makers, now alleged to be at work on the book, handle it as well as "20,000 Leagues," they should have a worthy successor. If they "modernize" it as they did "From the Earth to the Moon," then "The Secret of the Island"—volume 2—should be unrevealed.

There is also a somewhat shortened version of "Michael Strogoff," a whopping success as a stage melodrama and at least twice a movie. This is straight "historical" adventure at its most Victorian; "science" is dragged in only if you insist that the scene in which Strogoff is saved from being blinded with a white-hot saber-blade, because his copious tears vaporize and absorb the heat of the steel, is scientific.

No piker, Verne had had a real elephant on the stage for the dramatic version of "Around the World in Eighty Days"—it stole the show. He promptly put a robot elephant into "The Steam House," now reprinted in two parts: "The Demon of Cawnpore" and "Tigers and Traitors." This, again, is good Victorian melodrama with the pachydermous Adam Link the only bow to technology. Incidentally, the original engravings, two of which are reproduced, make Behemoth a far more impressive creation than the cubist device on the present jackets.

Behemoth was built for a deceased rajah. Reclaimed by Colonel Edward Munro, whose young wife was lost in the Sepoy Rebellion of 1857, the iron monster slogs from Calcutta to the Himalayas and down to Bombay, while Munro hunts the "demon of Cawnpore," Nana Sahib, and Nana hunts him. Behemoth gains native worshipers, has a tug of war with a team of real elephants, is nearly mobbed by hundreds of other pachyderms, and all the while drags after him a two-car train of true Victorian opulence, with mechanical refrigeration and built-in fireplaces. Verne was weak on zoology—he perpetrates zebras and alligators on India—and he was the perpetual tourist, so that his corps of characters pry into rajahs' gardens, join forces with an animal trapper, and have other enjoyable interludes.

The two parts of "The Barsac Mission"—"Into the Niger Bend" and "The City in the Sahara"—were published after Verne's death and are appearing in English for the first time. Part I is a strange mixture of mystery and Vernian travelogue, opening with a masterful bank robbery, then switching to a comic-opera political investigation of French Guinea, with a truly modern heroine thrown in. In Part II some of the mysteries of the earlier chapters are revealed in a scientific metropolis, hidden in a corner of the Niger Bend, where a collection of vicious criminals reap the harvest of an ivory-tower scientist. Flying machines, rocket missiles, rain-making,

and a host of other marvels play their part in the final revolt against Harry Killer and his Merry Fellows.

Verne's satire is also at its liveliest here. He has two prime examples of scientific stupidity in the statistician who lives to draw trivial conclusions from masses of irrelevant figures, and the ivory-tower genius of Blackland, who knows nothing and cares less about what is done with his inventions. Here is the argument of the Atomic Scientists, half a century before its time. There are also such gems as Barsac's frank maxim: "Anyone in politics can make a mistake. That doesn't matter. But if he admits the error, he's lost."

If he were writing in our time, in our style—as he would be—Jules Verne would be turning out best-selling paperbacks faster than John Creasey writes detective stories!

Although fantasy is generally out of our scope here, the University of Nebraska Press has brought out a paperback edition of that lively and little known Danish successor to "Gulliver," Ludvig Holberg's "Journey of Niels Klim to the World Underground." It is Bison Book BB-102; 236 pages plus a 31-page introduction on Holberg; for \$1.40.

Niels Klim, a typical young scholar of his time—supposedly 1665, the book appearing in 1741—sets out to explore a cave and falls through into a world inside the Earth. It has a central sun, inhabited planets, and another world on the inner surface like Edgar Rice Burroughs' *Pellucidar*.

Klim, after serving for a time as a satellite of the subterranean planet Nazar, harpoons an attacking griffin with his alpenstock and is dragged down to the surface. Fleeing from a bull, he climbs the nearest tree—which turns out to be the sheriff's wife. He is presently in court for attempted rape. However, he manages to make his peace with the intelligent though sluggish trees . . . explores the planet . . . is exiled to the "Firmament," the inner surface, and builds himself an empire there among nations of intelligent animals, birds, and humanoids.

Needless to say, Holberg's purpose was satirization of his own society. He handles this in the same classic manner that Swift did in "Gulliver's Travels," and that current writers still use: by making his hero unable to explain the logic of human society to nonhumans, and by exaggerating human foibles in the societies of his talking trees, monkeys, and tigers. "Klim" is no Gulliver, and Holberg is no Swift, but the edition is welcome as a curiosity and collector's item. The original Latin edition of 1741 might prove harder to read than to get.

INVISIBLE MEN, edited by Basil Davenport. Ballantine Books No. 401K. 1960. 158 pp. 35¢

With this original anthology the theme collection reappears among us—introduced by Martin Greenberg, adopted by Groff Conklin, and now

taken over by an equally knowing anthropologist. Even so, invisibility has become something of a relic from the earliest days of science fiction, so that the collection is dated.

It begins auspiciously with an adventure from Gavagan's Bar, explained by L. Sprague de Camp and Fletcher Pratt—that of "The Weissenbroch Spectacles," so ground that they looked through such superficial impedimenta as clothes. The Jack London, in "The Shadow and the Flash," is revealed as the pioneer of the transparent man story; his companion and contemporary is H. G. Wells' "The New Accelerator," which enables a man to move so fast he can't be seen.

Analog's feminine companion, *Mademoiselle*, published Ray Bradbury's "Invisible Boy" back in 1945; it is one of his better tales, about a boy whose witch-kin persuaded him he couldn't be seen. Pulled out of thin air like the Jack London tale, Maurice Leblanc's "The Invisible Prisoner" is actually a mystery—the invisibility is only apparent.

Back to more formal science fiction and fantasy, H. L. Gold's "Love in the Dark" is the story about the invisible lover with blue feathers instead of hair; I've been trying to place it for the last couple of years, for a friend. Then there's that straight, good old classic by Fitz-James O'Brien, "What Was It?"—the invisible, suffering monster that lives and dies unseen.

In such a collection as this, with one gimmick shared by all the stories, individual selections have to

stand on originality of treatment and quality of writing. You get both in John Collier's "The Invisible Dove Dancer of Strathpeen Island," an inimitable wisp of Irish whimsy, and in Charles Beaumont's "The Vanishing American," about the nobody who revolted. And you have it in Theodore Sturgeon's classic "Shottle Bop" from *Unknown*, which makes ghosts as unpleasant as anything since Bulwer-Lytton.

Finally Henry Slesar, an uneven mystery-fantasy-SF writer, gives us "The Invisible Man Murder Case," played perfectly straight: how do you catch an invisible killer?

It's a rather run-of-the-mill anthology, I'm afraid. Nowadays invisibility just isn't the marvel it once seemed, and so massive a dose is soporific.

STORIES FROM "THE TWILIGHT ZONE," by Rod Serling. Bantam Books No. A-2046. 1960. 151 pp. 35¢

By this time you know that Rod Serling's TV series, "The Twilight Zone," won the Drama "Hugo" for 1959 hands down; it was lengths ahead in the nominations and went on gaining in the final vote, until it led its nearest rival by five to one. Here are six short stories, based on the teleplays, or perhaps stories on which the plays were based, since the author is no man to be limited to one means of expression.

Two of the stories, "Escape Clause" and "The Fever" are open fantasy. The first is an ironic switch on the

bargain-with-the-Devil formula, while the second shows the gambling mania engulfing a strait-laced man, with just a touch of the supernatural to add a snapper at the end.

"The Mighty Casey," opening the book, tells what happened the year the Dodgers signed a robot pitcher. It is broad comedy with enough needling of the baseball world to give it spice. "Walking Distance" is almost a shortened reflection of Conrad Richter's "Waters of Kronos," in which a man strays back into the village of his lost boyhood and tries to make himself known. "Where is Everybody?" was the opening show of the series, and the only one—unfortunately—that I saw. This is the already classic story of the man who walks into a town to find it empty of people, but with evidence that they are just out of sight. It was a masterful show and it's an effective story. Finally, "The Monsters are Due on Maple Street" is a bitter, violent little tale comparable to Shirley Jackson's "The Lottery" or the cruel plays of Friedrich Duerrenmatt. This time I feel the real monsters are a false note, perhaps forced by the format of the series; Man is monster enough.

They're good stories, and it is easy to see how a fine director could turn them into memorable drama—especially when he had written them and could play them "straight".

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THE REFERENCE LIBRARY

SCIENCE FICTION, edited by
Robert P. Mills. Doubleday & Co.,
Garden City, N.Y. 1960. 406 pp.
\$4.50

The annual anthologies of "Best from F&SF" are institutions by this time. It seems to me that they have a special appeal to readers of *Analog*, because they carry on the traditions of modern fantasy that were shaped in *Unknown Worlds*, years ago, and enrich the mixture with science fiction of novelty and literary excellence, perhaps more middle-of-the-road than the stories you find here.

As a tenth anniversary present, Bob Mills has assembled two dozen short stories and novelettes and one Ogden Nash ballad, none of which have appeared in other annual "Bests," and none of which are in other anthologies at the moment. You will find such names as Howard Fast, John Masefield, Oliver La Farge, Graham Greene, Horace Walpole and John Collier on the contents page. You will also find Poul Anderson, Isaac Asimov, Alfred Bester, Theodore Sturgeon, Avram Davidson, and that feminine trio who have identified themselves with *F&SF*, Idris Seabright, Zenna Henderson, and Mildred Clingerman.

There isn't a poor story in the lot, but there isn't room here to list or describe all of them, so I will hit the highlights. From Poul Anderson, in "The Sky People," we have one of his superb action stories of warfare among contrasting societies in a future where civilization is struggling up from collapse. But this is more

than an action entertainment, richly embroidered as a tapestry; at the very end comes a quick, inevitable, bitter twist that sets the whole story apart.

Oliver La Farge's fantasy, "Spud and Cochise," stands well in advance of the rest of that section of the book. Here one of our most gifted writers and students of the Indian builds a delightful, outrageous, flabbergasting story of magic on the old stereotype of the fastest gun in town and the noble whore. But don't overlook John Novotny's impudent "A Trick or Two," or Isaac Asimov's gently haunting fantasy, "Unto the Fourth Generation," or Idris Seabright's pyramiding "The Causes" or Alfred Bester's hilariously satirical "Will You Wait?"

And, back again in the science-fiction pages, never forget Avram Davidson's cutting little "The Certificate," or the slapstick of Raymond E. Banks' "Rabbits to the Moon," or J. Francis McComas' rare essay on penology among the stars, "Shock Treatment." There is a strange quality about Robert F. Young's "To Fell a Tree," and it seems to me that Ward Moore's sequel to his classic "Lot," "Lot's Daughter," is deliberately anticlimactic.

I have skipped good stories in pointing up these few. It took *F&SF* ten years to find them all—and they are worth it.

THE INTELLIGENT MAN'S GUIDE TO SCIENCE, by Isaac

Asimov. Vol. I—The Physical Sciences (382 pp); Vol. II—The Biological Sciences (471 pp); Basic Books, New York, 1960. \$15.00

The Good Doctor—as he is known in the pages of one of our friendly contemporaries—has been writing like a demon in the last year or two. He has been turning out books—good books—on practically every aspect of science, for young people down to ABC age and oldsters eligible for Congress, and doing it faster than the Australian whirlwind, Carter Brown, pumps out paperback mysteries. In this gigantic two-volume masterpiece, however, he has outdone himself and just about anyone else you may care to mention.

"The Intelligent Man's Guide" is not, and does not pretend to be, an attempt to cram "everything" known about science into 875 pages and 219 pictures. It is a lucid, logical skeleton that is built up rather like a coral reef, beginning with the ideas of the Greek philosophers, examining them, appraising them, strengthening or exploding them. The story begins with what Man wondered about first—the universe—and proceeds on down through the sciences of the Earth, its atmosphere, the elements, the atoms, physical laws and their application in machines, to molecules, cells, people, and the mind.

I started with Volume I as a bathtub book. It was too heavy and too handsome to risk dunking it. I tried it as a bedside book, and found myself getting no sleep. I wound up reading through both volumes and

neglecting a stack of rented mysteries. Go, thou, and do likewise . . .

EARTH'S LAST FORTRESS, by A. E. van Vogt. **LOST IN SPACE**, by George O. Smith. Ace Books No. D-431. 1960. 114 + 142 pp. 35¢

Ace has gone back to giving us something old and something new in these Double Books—in this case, a reprint of George O. Smith's highly pleasant reflections on the problem of finding a needle lost in space, with a gang of extraterrestrial bullies standing by to take over, and the first book publication of a Van Vogt story that was called "Recruiting Station" when it was in *Astounding* in March of 1942. The latter yarn has been quite smoothly updated in its references to physics *et al*, but its most memorable moment is the last sentence—one of those phrases that sticks in your mind for years: "Poor, unsuspecting superman!"

The heroine is retrieved from suicide and enlisted as a receptionist for a gang of future supermen who are trapping "volunteer" ray-fodder for a terrific war, millennia from now. A time machine in the back room of a store funnels the dupes into the future and also keeps Norma in line, but she does manage to summon an ex-boyfriend who is promptly gulped by the machine. At about this time things start getting complicated in true Van Vogtian fashion, rather as if eight ball teams were playing on the same diamond at the same time,

with every base a home plate and one pitcher shared among them.

"Lost in Space" is a long way from the best George O. Smith has done, but it is the better half of this bargain.

BOW DOWN TO NUL, by Brian W. Aldiss. **THE DARK DESTROYERS**, by Manly Wade Wellman. Ace Books No. D-443. 1960. 145 + 111 pp. 35¢

The new half of this Ace Double is a highly uncharacteristic action adventure yarn by one of the more talented of the new British writers, boiling a pot with smoothness but none of his usual originality of viewpoint. Such novelty as the story has arises mainly from the extraterrestrial conquerors of Earth, the Nuls, being treated as understandable and sometimes sympathetic individuals. Trouble is, they are *human* individuals, not the trisymmetrical, columnar-bodied, stalk-eyed non-oxygen-breathers you see on the cover.

The plot is standard wheels-within-wheels: Nul overlord of Earth is making a fortune; jealous underling reports his abuse of the paper regulations; blue-nose investigator comes to check up; misunderstood human hero serves as top interpreter and underground courier and spy; assorted machinations machinate. When the book was serialized in the British *New Worlds* it was called "X for Exploitation," which suggests that the author wasn't taking himself too seriously but just trying to entertain. He

does, but I resent the rabbit-from-a-hat which cleans up the plot after all the heroic to-do has futzed out.

The flip half is an abridgment of the rather short, minor and entertaining yarn about another kind of ET conquerors the Cold People, and how human savages brought down their civilization with a thunk.

DRUNKARD'S WALK, by Frederik Pohl. Ballantine Books, New York, No. 439K. 142 pp. 35¢

One of the hottest arguments stirred up in science-fiction circles by Kingsley Amis' "New Maps of Hell" is his evaluation of the respective contributions of Frederik Pohl and the late C. M. Kornbluth to "The Space Merchants" and their other collaborations. Pohl, he believes, is the genius; Kornbluth was a plot-doctor. This extended version of the recent *Galaxy* serial suggests that the doctor worked very hard. He may have cured the patient of anemia or the twitch.

"Drunkard's Walk" begins to build up as a very nice satire on trends in modern education, extrapolated to a time when our population has outgrown its *lebensraum*, the nobodies of the world are clinging like barnacles to the understructure of the Texas towers studded along the continental shelf, and the world of scholarship is a most peculiar thing, compounded of televised lectures and ivory-tower research. I choose to believe that Kornbluth might have

kept it at this pitch all along and brought out something better than "The Space Merchants."

Unfortunately the plot—the "real" plot—gets in the way. Our hero, Master Cornut, a math instructor, is trying to commit suicide. He says several times, very positively, that he has proved that telepathy is impossible; it therefore follows to any s-f reader that he is being driven to death by telepathy. The villain? That is quite evident, quite soon. The reason? Clearly Carnut is about to discover a Guilty Secret. The secret? That's clear as soon as we meet the villain—and it's not new. And so the surprise dissolves into routine action, and the satire evaporates completely.

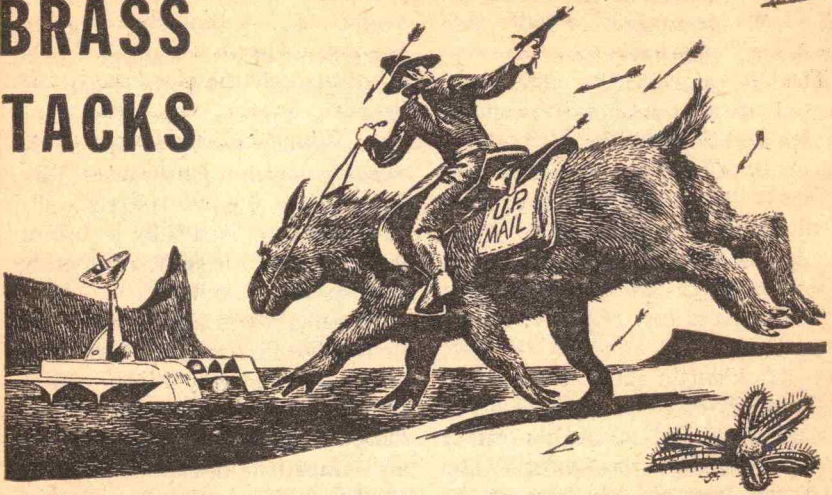
"Bitingly funny," the cover says; "sharply satirical." If it's funny to be gummed by a toothless minnow, then it bites. If a dime-store carving knife is sharp, so is the satire. I read "Space Merchants" again . . . and the melodrama took over in that biting, sharply satirical masterpiece, too.

BACK IN PAPER COVERS

POSSIBLE WORLDS OF SCIENCE FICTION, edited by Groff Conklin. Berkley Books No. G-471. 188 pp. 35¢

Ten good old stories—1939 to 1950—in the 1951 Vanguard anthology that Berkley reprinted in 1955, and is now giving a third incarnation.

BRASS TACKS



Dear John:

Been playing "the game" with Poul Anderson's "Longest Voyage" in the December issue. Notes, slightly amplified from the highly cryptic form in which I took 'em, follow:

p. 10 Going west, Tambur rising with travel. Planet keeps same face toward T., twin worlds?

p. 12 Sable patches going across T; latter larger, or at least has independent rotation. T. full at midnight; ship should therefore be at point right under it (or rather, on that meridian) but T. stated to be halfway up the sky. ????

Sient and Balant must be satellites of T, Balant in larger orbit. But how can it be crescent when T. is full? Maybe time of event not actually midnight—Zhean was talking about appearance "at midnight" but didn't say it was "now."

p. 13 Eclipses in midafternoon; ship can't be under T. after all; consistent with T. in western sky. Eclipses last ten min. If central, period of world about T.—and hence length of -day—about nine hours. Longer if eclipses not central, all bets off if speaker doesn't use 360 degree circle and 60-minute hour—and why should he, under the circumstances?

Day now stated to be twelve hours. Eclipses not quite central, or language alternative. Afterthought: angular diameter of sun? It would have to be over two degrees. Eight or ten times our sun's apparent surface area, effective temperature about 4,000 Kelvin. Possible. Look for references to redness of sun.

Tides rising high. Other satellites relatively close and massive, or else orbit about T. quite eccentric.

p. 17 Implication of human descent. Would account for 360° circle and "our" time measure.

Tides mentioned throughout world. Due to satellites; cancel eccentric orbit possibility.

p. 19 Check on preceding sentence—"high tide" positions of Sient and Balant mentioned.

pp. 19-20 Left at *sundown*, T. crescent. Checks with island position 40-50 degrees east of sun-T. meridian.

(Afterthought about "sable patches" mentioned on p. 12; shadows of satellites? If so, invalidates earlier conclusions about rotation of T. The old star-gazer doesn't have to be right about their being storms.)

p. 27 *Sun rise*. . . T. a crescent. I don't care *where* the island is, you can't have it both ways. They didn't travel halfway around the world since p. 20.

The end. Wonderful story, even if I still don't know where in blazes Balant was to be crescent when Tambur was full, and still seldom be visible in the anti-Tambur hemisphere.

People must hate me, but I have lots of fun—and I do stick my own neck out in return.—Hal Clement.

Dear John:

Thanks for forwarding Hal Clement's letter to me. I am delighted that the Game is still being played and honored that so eminent a practitioner is playing it with me—even though he does get in a few shrewd blows.

On the whole, as you will see, Clement has gotten the right answers. Some of his remaining puzzlement stems apparently from the natural assumption that Tambur is approximately the same size as the world on which the story takes place. Since this world was merely called "the world" or "earth" by its inhabitants, I shall simplify matters by christening it Campbell.

Actually, I was lazy. Tambur and its satellite system are taken to be physically similar to Minos and *its* satellite system in my novel "Virgin Planet." Those interested can find my calculations discussed in an appendix to that book. Changes were made, of course. The star in "Longest Voyage" has no companion, and thus Tambur's orbit is not especially eccentric. With this in mind, the setting of the story is as follows:

Sun, a G-type dwarf like our own. The major planet, Tambur, circles it at about one astronomical unit distance. But Tambur is a giant planet with a mass of about 5000 times Earth's—a cousin of Clement's Mesklin, in other words. Whether a star like that can have a planet like that, I don't know; but probably no one else does either. The equatorial diameter of Tambur is 51,200 kilometers, its rotation period about ten hours, its atmosphere dense, stormy, and mostly hydrogen. It has a number of satellites, but most of them are so small and far out as to be insignificant. Campbell is the third one, Earth-sized.

The table which follows gives data

on the first five satellites. Column 1 lists equatorial diameters in kilometers; densities may be taken approximately equal to Earth's, 5.5 g/cc. Column 2 shows their average orbital radius about Tambur, in kilo-

meters. No orbit is extremely eccentric. Column 3 lists the period of each orbit in hours; column 4 the angular diameter as seen from Campbell at closest approach, in degrees of arc. Column 5 gives the names.

Moon	1	2	3	4	5
I	162	161,000	2.45	Very small	Sient
II	3218	272,000	5.2	0.9	Balant
III	12,502	483,000	12.2	—	"Campbell"
IV	4793	720,000	22.2	0.7	Vieng
V	1610	1,920,000	97.0	0.07	Darou

Tidal drag has equalized rotation and revolution periods of all these satellites, so that they always turn the same face to Tambur. Seen from the inner hemisphere of Campbell, Minos has an angular diameter of about 7 degrees and, given an albedo of 45%, is equivalent at full phase to something like 1200 full moons of Earth—and then there are the other large satellites.

Now to take up Clement's points in order.

p. 10. He's right, except that Tambur and Campbell are not twin worlds.

p. 12. Right again about independent rotation, though as the relative rotation is not too big I visualized the "moving blotches" as being storms of high velocity: which I should certainly think a Mesklin-type planet with Earth-type irradiation could build up. Shadows of satellites would also be seen, of course.

Why should Balant not be crescent when Tambur is full, if the former happens to be off to one side?

p. 13. Right again—except, of course, that a sun of 0.5 degrees angular diameter is quite easily eclipsed by a planet of 7 degrees, and the eclipse need not be central. Tambur shows as a "black disk encircled with red" because the sunlight is refracted through its atmosphere. O.K.? Tides due to the other satellites can get extremely big—Clement is right about their being close and massive. (Cf 17 and 19)

p. 17. I thought human descent was not merely implied in the story, but clearly stated. My fault, probably, if there was any confusion. The units used, hours and degrees and so on, may be considered to have persisted for many thousands of years, or else to be translations of units used by the Campbellites; it'd hardly be fair to specify quantities in unglubs.

p. 19-20. Right again.

p. 27. Ouch! I phrased it badly. What I should have said was that Tambur was about half full, entering a decrescent phase. Not being an

astronomer myself, I tend to think and speak of the moon as "crescent" anytime when it's more or less horn-like. Come to think of it, that's what I meant commenting on p. 12 above. O.K., it's a misuse of language. I apologize and will try too mend my ways.

In conclusion, thanks again to you and Hal Clement for your interest. But when in the deuce is he going to write another story himself?—Poul Anderson?

No need for my comments—except to agree with Poul's last comment!

Dear John Campbell:

Since I have to spend the ten afs any way, I may as well add the letter which I have always been going to write, but never got around to.

1. And did you really expect to get a letter from Afghanistan?/ and how did you expect to know who it was from if you asked neither name nor address? We have an unorganized Sf group here. It means that we all meet at my house for supper, swap magazines and talk science fiction. We are an assorted group, naturally all college people since we are here either under Columbia (Teachers College) or Wyoming U. (They teach the science.) At the last meeting we had Dr. Garland Cannon, head of the English language section of Columbia, Hubbard Goodrich with MA's in both English as a second language and in Archeology, Richard and Jean Chisholm, newly married and both with their Ma's, and Charles

and Lee Goetz, Ma's and English Teachers, and Mr. Hayes, English teacher with the British Council. We would have more of the British Embassy and Council if there had not been sickness. My copies go the rounds, but they are marked to come back to me, because I keep them.

Our job here is not merely teaching English, but setting up the system and training enough teachers of English so that we can go home. They speak fourteen languages, three major ones here—no group is larger than thirty per cent—and need English for intra- as well as international communication.

2. I have been reading the magazine for sixteen years, and find you have stimulated much thinking and anticipated much. Now in linguistics I find all the problems people are getting excited about have already been discussed in your magazine. I like your editorials. They have some of the clearest and most pertinent thinking I have found lately. Of course, I enjoy those stories which deal with social experiments. The only answer to the Marshal Plan that I ever saw was in one of your serials. Also the answer to the need for diversity. Lately you have been leaving this field to *Galaxy*, but I like your other problems, too.—Mrs. Jean Harper Selch, Columbia University Team, c/o American Embassy, Kabul, Afghanistan.

Good luck and we all enjoy the magazine.

Now—anyone from Zanzibar?

Dear Mr. Campbell:

After reading the December issue of ASF, I looked through the eleven previous magazines and must admit that 1960 was a rather good year for Astounding-Analog.

Being a fan of your Analytical Laboratory, thought you might be interested in my personal ratings for the whole year. So here they are:

Best serial: "The High Crusade,"

by Poul Anderson

Best short novel: "Adaptation,"

by Mack Reynolds

Best novelette: "Star Tiger," by

Christopher Anvil

Best short novel: "The Measure

of a Man," by Garrett

I think you will notice that my list is in favor of the space science fiction, which has steadily been losing ground to the psychological stories like "Stress Pattern," by Silverberg; "Psychopath," by T. Langart; and "The Crackpot," by L. Thomas to name only a few.

Recently the Question has come to my mind as to how a person gets interested in science fiction. You might answer this question with one word: "Comics". But having been born in Belgium, I never saw comics until my arrival here in the United States two years ago. The only alternative would be that I became interested through the so-called bad science-fiction movies, which were mentioned in the Reference Library of the December issue. Therefore I think that the movies are one of the great contributors to the science fiction field; "You can not appreciate

a good apple, without tasting a bad one".

One question I would like to ask you, this being the thirtieth year of ASF, above the date of each issue is written VOL. LXVI, which would be 66. Where do those 6 left over volumes fit in?—Jean Van Hertbruggen, 230 Broad Avenue, Fairview, New Jersey.

The secret of the extra six is known only to those who own the first few volumes, made up of three issues each.



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"The SATA Trader", Dept. 7

P. O. Box 400, Los Alamos, N. Mex.

Continued from page 7

evolution will appear, to us, to be Barbarism, and be a horrible, degenerate, loathsome system indeed.

Just as the Civil system appears, to the Barbarian, to be the Tribal system, in which the individual has no dignity, and a man is not a Man, for he lacks the courage to express his individual worth and will.

In last month's editorial, I discussed the effect of the cultural system of the local natives on the type of relationship that grows up between colonists and natives.

Notice that the root philosophy of the ritual-taboo tribesman is such that it is inherently impossible to cooperate with him in establishing a colony. So long as the natives are true Tribesmen, Change is Evil—and the colonists are introducing change. There is no such thing as "a good change" in a pure-tradition system: "Change is Evil; Evil is Change."

More immediately, the Tribesman's sense of security stems entirely from having a sure source of Answers. The Tribesman has no answers himself, and has no sense that he can be a source of answers. His sense of security, his defense against the Unknown, is a Source of Answers. He expects to be told what to do, when, and how; if his Tribal Traditions don't do so, then some other source of Answers must. He has no expectation or desire to be responsible for his own acts; that way lies the terror of the Unknown.

If some colonist comes in and

overthrows the Tribal Traditions—then the Colonist must be the Source of Answers. The Tribesman *cannot* co-operate on a man-to-man basis with the colonist, no matter how the colonist may seek to establish such a system. The Tribesman doesn't know he's a man; he knows only that he's a Unit of the System—that he has to be a unit of *some* system.

You can lead a horse to water, but you can't make him drink. And you can lead a Tribesman to Liberty . . . but you can't make him free.

If the colonists move in to an area where there are Barbarian natives . . . again, co-operation is strictly impossible. Barbarians can't co-operate among themselves; they do not operate as a cross-linked, integrated team in any operation, but as individuals heading toward the same goal, and hence incidentally traveling parallel paths. Like the pellets from a shotgun charge, they produce a net group effect, but not by reason of being in a co-operating system.

The colonists, seeking to set up a civilized colony, are presenting the Barbarians with an irresistible challenge; the colonists are showing the weakness, the spineless cowardice, the slave mentality, of allowing themselves to be pushed around by their masters. And they're demanding that the Barbarians give up their self-respect and crawl among them!

He'd rather die in honorable battle, than knuckle under, than crawl before masters, like that!

Of course, if the natives have already reached the Civil level of cul-

ture themselves, co-operation is not only possible, but practically inevitable. When there are free men who can, and will work, slaves invariably prove too expensive.

The Citizen can be enslaved; on that, the Barbarian is right. The Barbarian cannot be enslaved; he'll either kill himself trying to rebel, or die of psychosomatic illnesses brought on by hopelessness if rebellion is impossible. He loses the will to live, if he cannot live as a Free Barbarian.

A Citizen can be enslaved, because, with him, freedom is not an absolute thing, as it is with the Barbarian. But such men are more efficiently productive as free men than as slaves—and they will, therefore, wind up free-in-fact, whether slaves-in-name or not.

If the natives in an area being opened for colonization by a civilized people are themselves civilized—the result will be a hybrid civilization, with mutual respect between natives and colonists.

If the natives are Barbarians, they cannot be enslaved, and it is impossible to co-operate with them, or establish any form of peaceful co-existence. But the Barbarian is only a short step from civilization himself. After those "sniveling, cowardly slaves" of Citizens have repeatedly defied all the certainties of Barbarian ideas by shellacking every Barbarian attack, the Barbarian—who is *not* stupid!—starts re-evaluating his ideas.

At this point, co-operation may set

in—because the Barbarians have ceased to be Barbarians.

The Spanish Conquistadors represent a very unusual sort of "Colonization"; they were, actually, typical Barbarians themselves! Like the Barbarian, each of them was a force unto himself. He may not have thought that he was, himself, God, but he definitely acted on the basis that he was God's Chosen Instrument. They had unlimited faith in themselves—right up to the instant of death. Nothing had ever been able to kill them; they were invulnerable! Death and disaster was something that happened to others.

The resultant personality made

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CLYDE J. SARZIN Port Washington, N. Y.

possible a level of achievement that was, quite clearly, far beyond any reasonable man's level. Their self-will and self-importance absolutely dominated anything else.

They came from a Civil system, and had many aspects of the Civil system—but they were, individually, Barbarians.

The Barbarian is not a worker; he's a looter. He's a high-risk gambler. He will never develop a land; he will only loot it. For him, vast, rich farm lands, just waiting for an industrious population to develop them, are of no value whatever.

The Spanish Conquistadors never achieved anything whatever in the United States area; all the natives in this area were Barbarian-level themselves—and nothing is less profitable to a Barbarian than getting into a clawing match with other Barbarians.

The Conquistadors did just fine in Mexico and in the Inca empire; there, the natives had recently developed a civilization—they were very-late-Barbarian early—Civilization. They could be enslaved . . . and were.

Spain never established a foothold anywhere where there were no enslaveable natives.

Wherever the enslaveable natives were early-civilization level people . . . the slavery lasted just long enough for the natives to learn the higher-order techniques of mid-civilization. Whereupon the now-educated natives dumped the conquerors: the result is a hybrid civilization.

It's interesting to wonder what would have happened if the British, instead of the Spanish, had been first into those areas. In the areas where British colonists met natives of early-Civilized level—the Polynesians in New Zealand and Hawaii, for example—hybrid cultures grew up from the start.

It's also interesting to wonder what will happen if we go in to some planet, and find what seems to be a Barbarian culture . . . which isn't. It would certainly be baffling, and almost certainly be disastrous in a way we cannot dimly imagine.

It would mean the destruction of our very souls. Just as Civilization, by merely contacting Barbarians repeatedly, brings about the corruption and degradation of their dignity, their self-respect—their very souls. And turns them into cowardly, weakened, crawling things that actually cooperate with another human being.

We can't, of course, guess just what form of loathsome corruption of our selves, our dignity, looms before us.

It doesn't really matter; we're going to get it anyway, whether from outside, or from our own unwanted, yet inescapable, evolution.

But we won't like it. Any more than a Tribesman likes becoming that essence of corruption and evil, a Barbarian. Or a Barbarian likes becoming that sniveling thing, a Citizen.

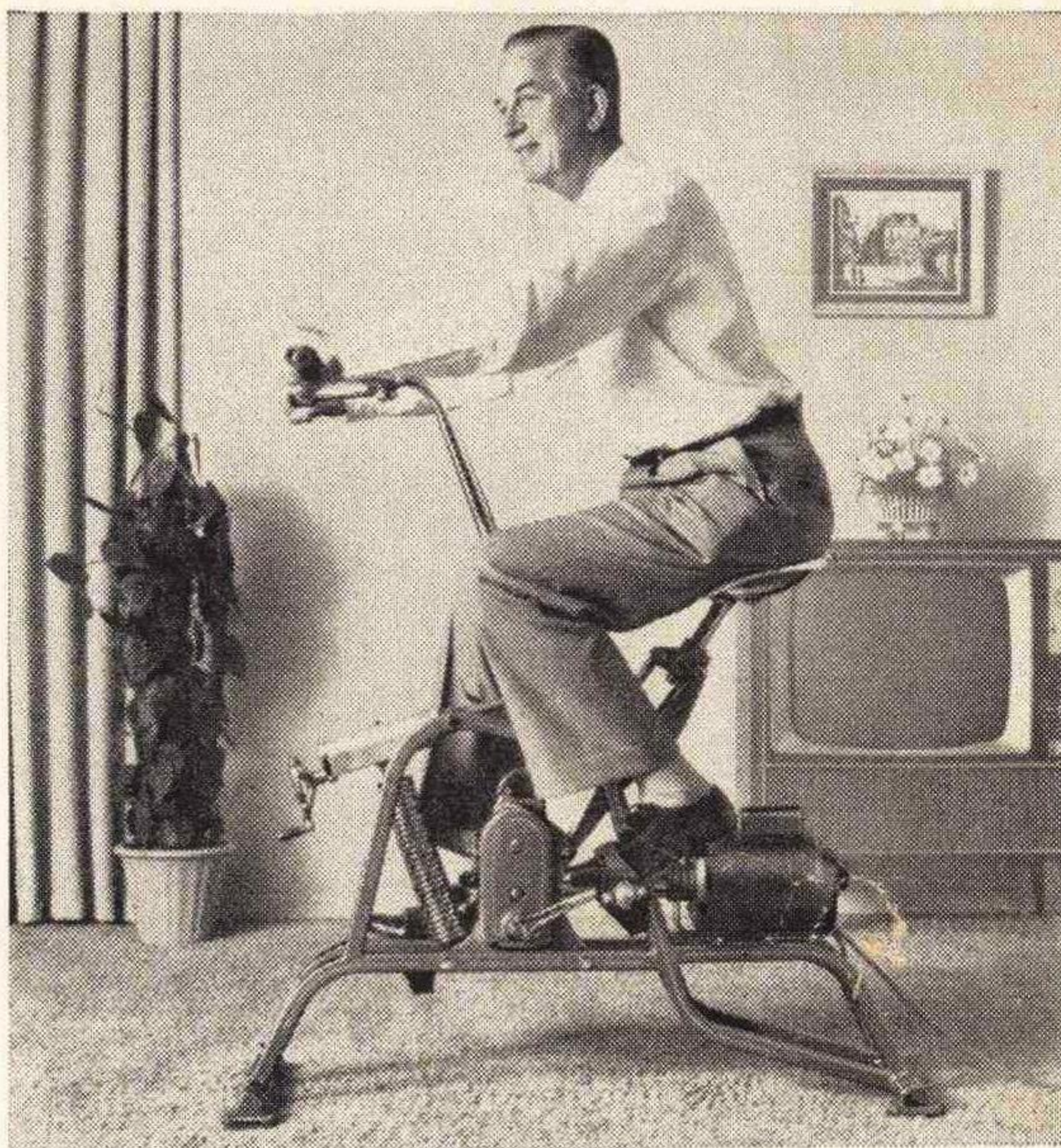
The Editor.

How to stop feeling your years

One reason why you may feel older than you are is that you have slowed down, lost some of your energy and vitality. How to regain it? Medical men know that lost vigor can often be restored through the right kind of physical activity. Not just ordinary "exercise," but a stimulating activation of all parts of the body.

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