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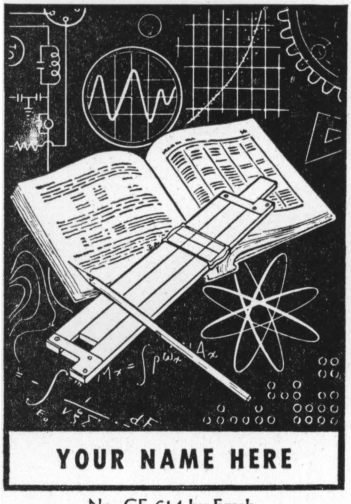

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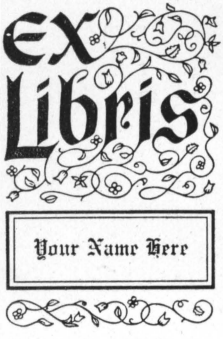

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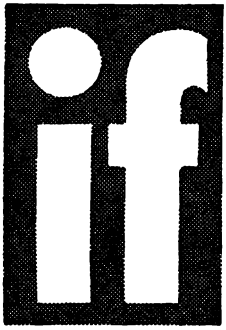

WORLDS OF SCIENCE FICTION

JANUARY 1960

All Stories New and Complete

Editor: H. L. GOLD

Feature Editor: FREDERIK POHL

NOVELETTES

SHORT STORIES

FEATURE

COVER by Emsh; "Take Them to Our Leaders!"

Illustrations by Wood, Morrow and Francis

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the good seed

By MARK MALLORY

The island was drowning —if they failed to find some common ground, both of them were doomed.

THEY said—as they have said of so many frontiersmen just like him—that there must have been a woman in his past, to make him what he was. And indeed there had, but she was no flesh-and-blood female. The name of his lady was Victoria, whom the Greeks called Nike and early confounded with the Pallas Athena, that sterile maiden. And at the age of thirty-four she had Calvin Mulloy most firmly in her grasp, for he


WOOD

had neither wife nor child, nor any close friend worth mentioning—only his hungry dream for some great accomplishment.

It had harried him to the stars, that dream of his. It had driven him to the position of top survey engineer on the new, raw planet of Mersey, still largely unexplored and unmapped. And it had pushed him, too, into foolishnesses like this latest one, building a sailplane out of scrap odds and ends around the Mersey Advance Base—a sailplane which had just this moment been caught in a storm and cracked up on an island the size of a city backyard, between the banks of one of the mouths of the Adze River.

The sailplane was gone the moment it hit. Actually it had come down just short of the island and floated quickly off, what was left of it, while Calvin was thrashing for the island with that inept stroke of his. He pulled himself up, gasping, onto the rocks, and, with the coolness of a logical man who has faced crises before, set himself immediately to taking stock of his situation.

He was wet and winded, but since he was undrowned and on solid land in the semitropics, he dismissed that part of it from his mind. It had been full noon when he had been caught in the storm, and it could not be much more than minutes past that now, so swiftly had everything happened; but the black, low clouds, racing across the sky, and the gusts of intermittent rain, cut visibility down around him.

He stood up on his small island and leaned against the wind that blew in and up the river from the open gulf. On three sides he saw nothing but the fast-riding waves. On the fourth, though, shading his eyes against the occasional bursts of rain, he discerned a long, low, curving blackness that would be one of the river shores.

There lay safety. He estimated its distance from him at less than a hundred and fifty yards. It was merely, he told himself, a matter of reaching it.

UNDER ordinary conditions, he would have settled down where he was and waited for rescue. He was not more than fifteen or twenty miles from the Advance Base, and in this storm they would waste no time waiting for him to come in, before starting out to search for him. No sailplane could survive in such a blow. Standing now, with the wind pushing at him and the rain stinging against his face and hands, he found time for a moment's wry humor at his own bad luck. On any civilized world, such a storm would have been charted and pre-

dicted, if not controlled entirely. Well, the more fool he, for venturing this far from Base.

It was in his favor that this world of Mersey happened to be so Earthlike that the differences between the two planets were mostly unimportant. Unfortunately, it was the one unimportant difference that made his present position on the island a death trap. The gulf into which his river emptied was merely a twentieth the area of the Gulf of Mexico —but in this section it was extremely shallow, having an overall average depth of around seventy-five feet. When one of these flash storms formed suddenly out over its waters, the wind could either drain huge tidal areas around the mouths of the Adze, or else raise the river level within hours a matter of thirty feet.

With the onshore wind whistling about his ears right now, it was only too obvious to Calvin that the river was rising. This rocky little bit sticking some twelve or fifteen feet above the waves could expect to be overwhelmed in the next few hours.

He looked about him. The island was bare except for a few straggly bushes. He reached out for a shoot from a bush beside him. It came up easily from the thin layer of soil that overlaid the rocks, and the wind snatched it out of his hand. He saw it go skipping over the tops of the waves in the direction of the shore, until a wave-slope caught it and carried it into the next trough and out of sight. It at least, he thought, would reach the safety of the river bank. But it would take a thousand such slender stems, plaited into a raft, to do him any good; and there were not that many stems, and not that much time.

Calvin turned and climbed in toward the center high point of the island. It was only a few steps over the damp soil and rocks, but when he stood upright on a little crown of rock and looked about him, it seemed that the island was smaller than ever, and might be drowned at any second by the wind-lashed waves. Moreover, there was nothing to be seen which offered him any more help or hope of escape.

Even then, he was not moved to despair. He saw no way out, but this simply reinforced his conviction that the way out was hiding about him somewhere, and he must look that much harder for it.

He was going to step down out of the full force of the wind, when he happened to notice a rounded object nestling in a little hollow of the rock below him, about a dozen or so feet away.

HE WENT and stood over it, seeing that his first guess as to its nature had

been correct. It was one of the intelligent traveling plants that wandered around the oceans of this world. It should have been at home in this situation. Evidently, however, it had made the mistake of coming ashore here to seed. It was now rooted in the soil of the island, facing death as surely as he, if the wind or the waves tore it from its own helplessly anchored roots.

"Can you understand me?" he asked it.

There was an odd sort of croaking from it, which seemed to shape itself into words, though the how of it remained baffling to the ear. It was a sort of supplemental telepathy at work, over and above the rough attempts to imitate human speech. Some of these intelligent plants they had got to know in this area could communicate with them in this fashion, though most could not.

"I know you, man," said the plant. "I have seen your gathering." It was referring to the Advance Base, which had attracted a steady stream of the plant visitors at first.

"Know any way to get ashore?" Calvin asked.

"There is none," said the plant.

"I can't see any, either."

"There is none," repeated the plant.

"Everyone to his own opinion," said Calvin. Almost he sneered a little. He turned his gaze once more about the island. "In my book, them that *won't* be beat *can't* be beat. That's maybe where we're different, plant."

He left the plant and went for a walk about the island. It had been in his mind that possibly a drifting log or some such could have been caught by the island and he could use this to get ashore. He found nothing. For a few minutes, at one end of the island, he stood fascinated, watching a long sloping black rock with a crack in it, reaching down into the water. There was a small tuft of moss growing in the crack about five inches above where the waves were slapping. As he watched, the waves slapped higher and higher, until he turned away abruptly, shivering, before he could see the water actually reach and cover the little clump of green.

For the first time a realization that he might not get off the island touched him. It was not yet fear, this realization, but it reached deep into him and he felt it, suddenly, like a pressure against his heart. As the moss was being covered, so could he be covered, by the far-reaching inexorable advance of the water.

And then this was wiped away by an abrupt outburst of anger and self-ridicule that he—who had been through so many dangers—should find himself pinned by so common-

place a threat. A man, he told himself, could die of drowning anywhere. There was no need to go light-years from his place of birth to find such a death. It made all dying—and all living—seem small and futile and insignificant, and he did not like that feeling.

CALVIN went back to the plant in its little hollow, tight-hugging to the ground and half-sheltered from the wind, and looked down on its dusky basketball-sized shape, the tough hide swollen and ready to burst with seeds.

"So you think there's no way out," he said roughly.

"There is none," said the plant.

"Why don't you just let yourself go, if you think like that?" Calvin said. "Why try to keep down out of the wind, if the waves'll get you anyway, later?"

The plant did not answer for a while.

"I do not want to die," it said then. "As long as I am alive, there is the possibility of some great improbable chance saving me."

"Oh," said Calvin, and he himself was silent in turn. "I thought you'd given up."

"I cannot give up," said the plant. "I am still alive. But I know there is no way to safety."

"You make a lot of sense." Calvin straightened up to squint through the rain at the dark and distant line of the shore. "How much more time would you say we had before the water covers this rock?"

"The eighth part of a daylight period, perhaps more, perhaps less. The water can rise either faster or more slowly."

"Any chance of it cresting and going down?"

"That would be a great improbable chance such as that of which I spoke," said the plant.

Calvin rotated slowly, surveying the water around them. Bits and pieces of flotsam were streaming by them on their way before the wind, now angling toward the near bank. But none were close enough or large enough to do Calvin any good.

"Look," said Calvin abruptly, "there's a fisheries survey station upriver here, not too far. Now, I could dig up the soil holding your roots. If I did that, would you get to the survey station as fast as you could and tell them I'm stranded here?"

"I would be glad to," said the plant. "But you cannot dig me up. My roots have penetrated into the rock. If you tried to dig me up, they would break off—and I would die that much sooner."

"You would, would you?" grunted Calvin. But the question was rhetorical. Already his mind was busy searching for some other way out. For

the first time in his life, he felt the touch of cold about his heart. Could this be fear, he wondered. But he had never been afraid of death.

Crouching down again to be out of the wind and rain, he told himself that knowledge still remained a tool he could use. The plant must know something that was, perhaps, useless to it, but that could be twisted to a human's advantage.

"What made you come to a place like this to seed?" he asked.

"Twenty nights and days ago, when I first took root here," said the plant, "this land was safe. The signs were good for fair weather. And this place was easy of access from the water. I am not built to travel far on land."

"How would you manage in a storm like this, if you were not rooted down?"

"I would go with the wind until I found shelter," said the plant. "The wind and waves would not harm me then. They hurt only whatever stands firm and opposes them."

"You can't communicate with others of your people from here, can you?" asked Calvin.

"There are none close," said the plant. "Anyway, what could they do?"

"They could get a message to the fisheries station, to get help out here for us."

"What help could help me?" said the plant. "And in any case they could not go against the wind. They would have to be upwind of the station, even to help you."

"We could try it."

"We could try it," agreed the plant. "But first one of my kind must come into speaking range. We still hunt our great improbable chance."

THERE was a moment's silence between them in the wind and rain. The river was noisy, working against the rock of the island.

"There must be something that would give us a better chance than just sitting here," said Calvin.

The plant did not answer.

"What are you thinking about?" demanded Calvin.

"I am thinking of the irony of our situation," said the plant. "You are free to wander the water, but cannot. I can wander the water, but I am not free to do so. This is death, and it is a strange thing."

"I don't get you."

"I only mean that it makes no difference—that I am what I am, or that you are what you are. We could be any things that would die when the waves finally cover the island."

"Right enough," said Calvin impatiently. "What about it?"

"Nothing about it, man," said the plant. "I was only thinking."

"Don't waste your time on philosophy," said Calvin harshly. "Use some of that brain power on a way to get loose and get off."

"Perhaps that and philosophy are one and the same."

"You're not going to convince me of that," said Calvin, getting up. "I'm going to take another look around the island."

THE island, as he walked around its short margin, showed itself to be definitely smaller. He paused again by the black rock. The moss was lost now, under the water, and the crack was all but under as well. He stood shielding his eyes against the wind-driven rain, peering across at the still visible shore. The waves, he noted, were not extreme—some four or five feet in height—which meant that the storm proper was probably paralleling the land some distance out in the gulf.

He clenched his fists in sudden frustration. If only he had hung on to the sailplane—or any decent-sized chunk of it! At least going into the water then would have been a gamble with some faint chance of success.

He had nowhere else to go, after rounding the island. He went back to the plant.

"Man," said the plant, "one of my people has been blown to shelter a little downstream."

Calvin straightened up eagerly, turning to stare into the wind.

"You cannot see him," said the plant. "He is caught below the river bend and cannot break loose against the force of the wind. But he is close enough to talk. And he sends you good news."

"Me?" Calvin hunkered down beside the plant. "Good news?"

"There is a large tree torn loose from the bank and floating this way. It should strike the little bit of land where we are here."

"Strike it? Are you positive?"

"There are the wind and the water and the tree. They can move only to one destination —this island. Go quickly to the windward point of the island. The tree will be coming shortly."

Calvin jerked erect and turned, wild triumph bursting in him.

"Good-by, man," said the plant.

But he was already plunging toward the downstream end of the island. He reached it and, shielding his eyes with a hand, peered desperately out over the water. The waves hammered upon his boots as he stood there, and then he saw it, a mass of branches upon which the wind was blowing as on a sail, green against black, coming toward him.

HE CROUCHED, wrung with impatience, as the tree drifted swiftly through the water toward him, too ponderous to rise and fall more than a little with the waves and presenting a galleonlike appearance of mass and invincibility. As it came closer, a fear that it would, in spite of the plant's assurances, miss the island, crept into his heart and chilled it.

It seemed to Calvin that it was veering—that it would pass to windward of the island, between him and the dimly seen shore. The thought of losing it was more than he could bear to consider; and with a sudden burst of panic, he threw himself into the waves, beating clumsily and frantically for it.

The river took him into its massive fury. He had forgotten the strength of it. His first dive took him under an incoming wave, and he emerged, gasping, into the trough behind, with water exploding in his face. He kicked and threw his arms about, but the slow and futile-seeming beatings of his limbs appeared helpless as the fluttering of a butterfly in a collector's net. He choked for air, and, rising on the crest of one wave, found himself turned backward to face the island, and being swept past it.

Fear came home to him then. He lashed out, fighting only for the solid ground of the island and his life. His world became a place of foam and fury. He strained for air. He dug for the island. And then, suddenly, he felt himself flung upon hard rock and gasping, crawling, he emerged onto safety.

He hung there on hands and knees, battered and panting. Then the remembrance of the tree cut like a knife to the core of his fear-soaked being. He staggered up, and, looking about, saw that he was almost to the far end of the island. He turned. Above him, at the windward point, the tree itself was just now grounding, branches first, and swinging about as the long trunk, caught by the waves, pulled it around and onward.

With an inarticulate cry, he ran toward it. But the mass of water against the heavy tree trunk was already pulling the branches from their tanglings with the rock. It floated free. Taking the wind once more in its sail of leaves, it moved slowly—and then more swiftly on past the far side of the island.

He scrambled up his side of the island's crest. But when he reached its top and could see the tree again, it was already moving past and out from the island, too swiftly for him to catch it, even if he had been the swimmer he had just proved himself not to be.

He dropped on his knees, there on the island's rocky

spine, and watched it fade in the grayness of the rain, until the green of its branches was lost in a grayish blob, and this in the general welter of storm and waves. And suddenly a dark horror of death closed over him, blotting out all the scene.

A VOICE roused him. "That is too bad," said the plant.

He turned his head numbly. He was kneeling less than half a dozen feet from the little hollow where the plant still sheltered. He looked at it now, dazed, as if he could not remember what it was, nor how it came to talk to him. Then his eyes cleared a little of their shock and he crept over to it on hands and knees and crouched in the shelter of the hollow.

"The water is rising more swiftly," said the plant. "It will be not long now."

"No!" said Calvin. The word was lost in the sound of the waves and wind, as though it had never been. Nor, the minute it was spoken, could he remember what he had meant to deny by it. It had been only a response without thought, an instinctive negation.

"You make me wonder," said the plant, after a little, "why it hurts you so—this thought of dying. Since you first became alive, you have faced ultimate death. And you have not faced it alone. All things die. This storm must die. This rock on which we lie will not exist forever. Even worlds and suns come at last to their ends, and galaxies, perhaps even the Universe."

Calvin shook his head. He did not answer.

"You are a fighting people," said the plant, almost as if to itself. "Well and good. Perhaps a life like mine, yielding, giving to the forces of nature, traveling before the wind, sees less than you see, of a reason for clawing hold on existence. But still it seems to me that even a fighter would be glad at last to quit the struggle, when there is no other choice."

"Not here," said Calvin thickly. "Not now."

"Why not here, why not now," said the plant, "when it has to be somewhere and sometime?"

Calvin did not answer.

"I feel sorry for you," said the plant. "I do not like to see things suffer."

Raising his head a little and looking around him, Calvin could see the water, risen high around them, so that waves were splashing on all sides, less than the length of his own body away.

"It wouldn't make sense to you," said Calvin then, raising his rain-wet face toward the plant. "You're old by your standards. I'm young. I've got things to do. You don't understand."

"No," the plant agreed. "I do not understand."

CALVIN crawled a little closer to the plant, into the hollow, until he could see the vibrating air-sac that produced the voice of the plant. "Don't you see? I've got to do something—I've got to feel I've accomplished something —before I quit."

"What something?" asked the plant.

"I don't *know*!" cried Calvin. "I just know I haven't! I feel thrown away!"

"What is living? It is feeling and thinking. It is seeding and trying to understand. It is companionship of your own people. What more is there?"

"You have to do something."

"Do what?"

"Something important. Something to feel satisfied about." A wave, higher than the rest, slapped the rock a bare couple of feet below them and sent spray stinging in against them. "You have to say, 'Look, maybe it wasn't much, but I did this.' "

"What kind of this?"

"How do I know?" shouted Calvin. "Something — maybe something nobody else did— maybe something that hasn't been done before!"

"For yourself?" said the plant. A higher wave slapped at the very rim of their hollow, and a little water ran over and down to pool around them. Calvin felt it cold around his knees and wrists. "Or for the doing?"

"For the doing! For the doing!"

"If it is for the doing, can you take no comfort from the fact there are others of your own kind to do it?"

Another wave came in on them. Calvin moved spasmodically right up against the plant and put his arms around it, holding on.

"I have seeded ten times and done much thinking," said the plant—rather muffledly, for Calvin's body was pressing against its air-sac. "I have not thought of anything really new, or startling, or great, but I am satisfied." It paused a moment as a new wave drenched them and receded. They were half awash in the hollow now, and the waves came regularly. "I do not see how this is so different from what you have done. But I am content." Another and stronger wave rocked them. The plant made a sound that might have been of pain at its roots tearing. "Have you seeded?"

"No," said Calvin, and all at once, like light breaking at last into the dark cave of his being, in this twelfth hour, it came to him—all of what he had robbed himself in his search for a victory. Choking on a wave, he clung to the plant with frenzied strength. "Nothing!" The word came torn from him as if by some

ruthless hand. "I've got nothing!"

"Then I understand at last," said the plant. "For of all things, the most terrible is to die unfruitful. It is no good to say we *will* not be beaten, because there is always waiting, somewhere, that which can beat us. And then a life that is seedless goes down to defeat finally and forever. But when one has seeded, there is no ending of the battle, and life mounts on life until the light is reached by those far generations in which we have had our own small but necessary part. Then our personal defeat has been nothing, for though we died, we are still living, and though we fell, we conquered."

But Calvin, clinging to the plant with both arms, saw only the water closing over him.

"Too late—" he choked. "Too late—too late—"

"No," bubbled the plant. "Not too late yet. This changes things. For I have seeded ten times and passed on my life. But you—I did not understand. I did not realize your need."

THE flood, cresting, ran clear and strong, the waves breaking heavily on the drowned shore by the river mouth. The rescue spinner, two hours out of Base and descending once again through the fleeting murk, checked at the sight of a begrimed human figure, staggering along the slick margin of the shore, carrying something large and limp under one arm, and with the other arm poking at the ground with a stick.

The spinner came down almost on top of him, and the two men in it reached to catch Calvin. He could hardly stand, let alone stumble forward, but stumble he did.

"Cal!" said the pilot. "Hold up! It's us."

"Let go," said Calvin thickly. He pulled loose, dug with his stick, dropped something from the limp thing into the hole he had made, and moved on.

"You out of your head, Cal?" cried the co-pilot. "Come on, we've got to get you back to the hospital."

"No," said Calvin, pulling away again.

"What're you doing?" demanded the pilot. "What've you got there?"

"Think-plant. Dead," said Calvin, continuing his work. "*Let go!*" He fought weakly, but so fiercely that they did turn him loose again. "You don't understand. Saved my life."

"Saved your life?" The pilot followed him. "How?"

"I was on an island. In the river. Flood coming up." Calvin dug a fresh hole in the ground. "It could have lived a little longer. It let me pull it ahead of time—so I'd have something to float to shore

on." He turned exhaustion-bleared eyes on them. "Saved my life."

The pilot and the co-pilot looked at each other as two men look at each other over the head of a child, or a madman.

"All right, Cal," said the pilot. "So it saved your life. But how come you've got to do this? And what *are* you doing, anyhow?"

"What am I doing?" Calvin paused entirely and turned to face them. "What am I doing?" he repeated on a rising note of wonder. "Why, you damn fools, I'm doing the first real thing I ever did in my life! I'm saving the lives of these seeds!" **END**

Charting Our Genes

In a combined assault on "linkage studies" for "the location of genes for such things as eye color, blood groups and specific hereditary diseases," Johns Hopkins University researchers and computer men are engaged in what may be the final probe into the mystery of heredity.

Using inherited disease as a marker, it can be determined which genes travel together; the computers are set to work figuring out the odds of two hereditary traits being contained in the same chromosome, and then the genetic makeup of all members of the family in regard to the hereditary disease.

The same method can be used with eye color, blood groups, and even such odd inherited traits as the ability to taste certain chemicals.

Prof. S. A. Talbot, spokesman for the research group, cited elliptocytosis, a rare dominant characteristic in which the red blood cell has an elliptical shape, as an aid in computing the location of genes. There are about a dozen marker traits known to exist in Man of that clearly determinable a nature, and with the use of computers, scientists should be able to assign a linkage group to one in five of these traits.

The major difficulty is collecting five-generation families. This is no problem with test animals and insects, but it is with human beings. Prof. Talbot suggests an international linkage-analysis center where documented data can be assembled and studied.

The genetic prevention of certain hereditary diseases is one obvious benefit, and it is readily within grasp.

Farther off is the complete charting of the chromosome for the prevention of all inherited disease—but not as far off as one would imagine, for progress is being made at a truly fantastic rate compared with the relatively slow development in other branches of medicine until now. Ultimately? Mating for desired traits has long been done in animal husbandry, and is an overworked theme in science fiction, where governmental decree is taken for granted—but need there be force? There isn't for marriage.

the Divers

By JAMES STAMERS

The key to Fred's success was simple . . . he may not have had much of a mind, but it was all his, nobody else's!

HE HAD forgotten the beer again. He remembered that he had forgotten only as he opened the apartment door. A wave of smoke and onions and hamburger flowed past him into the dingy corridor and he stumbled on the garbage pail, plunked right in the doorway for him to lug along the passage to the chute. The bed was not made in one of their two rooms and newspapers littered the other. Elsie was in the kitchen.

"Fred! Fred, did you remember my beer?"

He closed the door so that the neighbors would not hear the row to come, except through the walls.

"Didja, Fred?"

She stood akimbo in the kitchen doorway, a cigarette hanging from her lips, her dressing gown loose and spotted, her feet in old scuffs.

"I forgot," he mumbled. "I'll go now."

Oh, no, he wouldn't. Not until he had heard a full resumé of his lack of character, lack of enterprise, ambition, decency, thoughtfulness, manhood, semblance of virtue.

"I said I was going, Elsie. I said I was going, didn't I?"

"Well, my day! You remembered my name!"

It was true he rarely used her name or called her any husbandly term such as dear or darling instead, and rarely looked at her at all if he could avoid it inconspicuously. Ten years of marriage—ten years of legal proximity, rather, for nothing in him was married to anything in her any more.

"I don't know why you married me," he said.

"Makes you wonder, doesn't it? Go on, get out."

HE ALMOST knocked the man over as he left the apartment. The man was standing there, about to ring the bell. Well dressed, clean, expensive overcoat, polished shoes, black hat and a mild friendly face.

"Mr. Frederick Williams?" the man asked.

"Yes," said Fred.

"You entered the *Sunday News* competition for a free space ride?"

"Yes. Did I win it?"

"Unfortunately, no," said the man.

"Oh. Well, excuse me, I've got to go and get something."

"I'll come with you. My name is Howard Sprinnell, Mr. Williams, and I've been examining the entries to that competition. Frankly, we think you have considerable talent."

"Mister," said Fred over his shoulder as they went down the stairs, "if you're trying to sell me something—"

"I don't want a penny from you, Mr. Williams."

"Then what—"

"We would merely appreciate a few hours of your time, at your convenience."

"A few hours?" Fred said, distressed. By working double shift in the automation-parts supply house, he could just keep going, financially and physically. The question of mental fatigue was exclusively Elsie's province and there he had a rough working technique for responding without really listening. His job called for no mental effort greater than reading a shipping list, and his home life certainly didn't. Most of the time he had nothing in his mind at all; the days passed

faster that way. But Elsie and the job kept him tired. Odd how just not listening wrung you out and drained you off.

"We are, of course, very glad to offer you compensation for your time, Mr. Williams," said the man.

Elsie would just drink it away. He'd have to haul crates of bourbon instead of cans of beer, that's all.

"Not interested," he said.

That was it. That was the way to keep a salesman stalled. Just "not interested." Keep saying it and nothing else. They all said they were not salesmen and weren't selling anything. Every salesman he had ever met at the door said that. *Galactic Encyclopedia,* Nuclear Brush, Your Venus Vacation, video subscriptions, even the Federal numbers game, they all started out by offering you a special opportunity and were not selling you anything. The man was still talking.

"Not interested," Fred said.

"Fred," said the man as they reached the bottom of the stairs, "I'm doing you a favor. I'm not supposed to tell you this, but either you come voluntarily or you'll come anyway. Why not get paid for it?"

"Not interested. And if anyone wants me, they can come and get me. I don't care. I just don't care."

He slouched off into the rain toward the supermarket.

As Dr. Howard Sprinnell watched him go he took a small silver case from his topcoat pocket. He raised the case to his lips and said quietly: "Sprinnell here. No. A clear case, but no. Pick him up."

THE squad car arrived silently on its jets as Fred Williams reached the door of the apartment house. He was carrying a pack of beer in each hand and was glad to see the man had gone. That's all you had to do—just keep saying "not interested" until they went away.

"O.K., bud."

The troopers took him on both sides, grasped his arms, and levered him round.

"Hey!" Fred protested. "The beer's for my wife. She's waiting for it. Please, fellers, I'll never hear the end of it if she doesn't get her beer."

"Joe," said the trooper on Fred's right, jerking his head in the direction of the door behind them.

A third trooper climbed out of the squad car, took the packs from Fred's hands and walked into the apartment house. He climbed the stairs swiftly, wrinkling his nose at the stale thickness of the air, knocked on the apartment door and waited for Elsie to open it.

"Here's your beer," he said shortly.

"Where's Fred?"

"Your husband is being de-

tained in connection with a robbery at his office."

"Fred! Are you kidding? Fred hasn't the sense or the guts! How long will he be gone?"

"Two or three weeks."

"Oh," said Elsie, scratching herself disinterestedly. "Well, thanks for the beer."

She shut the door and the trooper returned to the squad car. He looked at Fred sympathetically but said nothing. The squad car took off, then turned on its sirens.

"What's this all about?" asked Fred Williams from the back seat.

"Just excitement, bud. We live a dull life."

You think you do, you should live mine. I don't care anyway. If I ask them what I'm doing in this squad car, I'll get a silly answer.

"A guy called Spinner or something send for you?"

"We don't get sent for, bud. Where have you been, the Middle Ages?"

HE had a point there. Security troopers were under direct control of the President and came and went as they pleased. The satellite stations gave them general directives and the President directed the stations. Fred Williams grinned at the thought of Spinner, or whatever his name was, calling the President to call a satellite station to call these cops to come and get him. He would have been shocked and frightened if anyone had told him this was almost exactly what had happened.

They shot into the garage of an ordinary Federal police station, a large tiled vault smelling of hoses, soap and water. The troopers took him upstairs, along wax-polished corridors, through swinging doors and out of the muttered voices, footsteps, paper rattling and telephone tinkle of the station, into the smooth silence of a surgery. That fellow Spinner was waiting in a white doctor's coat.

"They pick you up too?" Fred Williams said.

The Security troopers hoisted him into a dentist's chair, saluted the other man and went away.

"You can leave any time you wish, Fred. If you do, though, I'll have you brought back. I'm Dr. Howard Sprinnell."

"Funny, I thought your name was Cloud Spinner or something," Fred confessed.

"That's very interesting." The doctor leaned forward across his desk. "What made you think that?"

"I just remembered it that way, that's all."

"Ah. You have an unusual mind, Fred. No, I mean it. And just to show you this is not fooling, I have a call here for you from the President."

"From Jake?"

"From President Jackson, yes."

DR. SPRINNELL pressed a green button on the video control on his desk. The wall panel lit and President Jackson's familiar face looked at Fred Williams.

"Mr. Williams," said the President. "The nation has called you to an unusual task. On your complete cooperation and absolute discretion in not mentioning to anyone—to anyone at all—what you may now learn depend matters of the utmost consequence to us all. I wish you good luck and Godspeed."

The panel went dark and the doctor switched off.

"That was Jake himself," Fred Williams said. "Talking to me."

Like the many thousand million in the System, Fred referred to the President familiarly as Jake, but he never thought he would get to talk to him, or be talked to personally.

"What did he want to talk to me for?" Fred asked, dazed.

"That's what I want to show you," said Dr. Sprinnell. "You understood what the President said about keeping this entirely confidential?"

"Hell, no one would believe it if I said I'd been talking to the President, anyway."

"That's what we figure," said the doctor, smiling slightly. He picked up a pack of cards and flipped five of them onto the desk, a circle, a cross, two wavy lines, a rectangle and a star. "These are Zener cards, Fred. Ever see them before?"

No, but they didn't look like much. This was cockeyed, the whole situation—having the President call him so that he and a quack could play cards.

"It will be clearer in a little while," Dr. Howard Sprinnell said. "But first we must run this little check. Please point to one of these cards every minute when I say 'now.'"

Fred shifted himself in the high chair and pointed to one of the five cards obediently every minute. After twenty minutes, the doctor increased the rate. He noted every selection.

"Last lap now, Fred."

He was sick of this, but it was better than sitting in the apartment with Elsie. Fred pointed to a card for the last time.

"And now," the doctor said, standing up and feeding his notations into a machine in the corner of the room, "we have here the results."

He pulled a tape from the machine as it purred out, and showed it to Fred. It was a score of some sort.

"In another room," Dr. Howard Sprinnell explained, "we have a synchronized telepath trying to influence your selections of these cards. If you have psi qualities, Fred,

these results will show how high they are. If you have none, then your chances of picking the right card are one in five. That goes for picking the card ahead of the right one, or behind it, or two ahead and so on. In other words, if the cards had been selected here by a machine instead of you, we would expect twenty per cent of the answers to be right, by sheer chance—or statistical probability, to put it more accurately."

"So how did I do? Am I a mind-reader? That would make me laugh."

THE doctor glanced at the result tape he was holding.

"You have the results we want," he said. "Otherwise I would not tell you this. You would be thanked, given a reward, made a fuss of by some civil servant of prominence and sent home in style."

He looked up at Fred in the dentist's chair.

"Do you remember that contest in the *Sunday News*?"

Fred Williams remembered it. Every week there had been a puzzle picture to identify. The contest had lasted nearly a year. He remembered particularly that each week there had been a cut of the room in which entries were to be judged, a large editorial office, just above the puzzle picture. Just a room. He had wondered why they bothered to put it in.

"There was a picture of a room in the paper," said the doctor, "where each week, without any possibility of fraud or anyone seeing it except the judges, the solution to the puzzle was hung up on the wall in the middle of the picture shown in the paper. The puzzles themselves were meaningless. We wanted to see how many people wrote in the right solution just from seeing the picture of the empty room. The right solution, of course, was the one hanging in that room at that time, which no one could see, and which was selected an hour before publication of the paper each week by random selection in a dictionary."

"So what did I get, a consolation prize?" asked Fred.

"In a way," the doctor smiled. "But not for coming near winning. The top twenty winners were highly gifted people we recruited into the Psi faculties of Duke, Harvard, Oxford, Paris and elsewhere. They scored consistently throughout the year with a better than probability deviation."

"Huh?"

"They got a lot more right than they could by chance alone. But your results were even more interesting to us. You got the same result here, just now, on the Zener cards."

"I'm still in the running?"

"Fred, quite seriously, you are the best candidate we've

ever met. Hence the special treatment. In the history of the System Government, there have only been ten other people with results similar to yours."

"Is that so? Well, I suppose you know what you're doing, Doc. But I never had a premonition in my life."

Doctor Howard Sprinnell frowned. "I should *hope* not. Almost everyone has some psi capacities, but we're not interested in minor phenomena. This is a government department, Fred. Here a thing has to work all the time, whenever it's needed, wherever it's needed. A faculty professor has off-days when he couldn't roll a die against chance. But you can't."

"Look, doc. I think you've got the wrong man. I'm Fred Williams. Frederick L. Williams. Are you sure—"

"Look yourself," interrupted the doctor, leaning over to wave the tape under Fred's nose. Chance would give you twenty per cent right—one out of five. Look at your result."

Fred took the tape and studied it. "You've read it wrong. This says several million per cent."

"It says *zero* per cent. *Nil.* Not *one* answer right, Fred. The millions are the probabilities of that deviation . . . oh, never mind. See the big black zero?"

"Yes, Doc."

"That is your result. It's statistically almost impossible, but you've done it. You did it with the puzzle in the competition. You did not get one single, solitary answer right. *Not one!* Even a machine gets one out of five right, Fred. Don't you see?"

No, he didn't, and it seemed to be just what Elsie was always complaining about. He lacked this and lacked that. And now he couldn't even do what a machine did.

"Okay, Doc," Fred said tiredly. "So I'm dumber than a machine. That figures."

"If you talk like that, you are," snapped Doctor Howard Sprinell. "You have the highest negative Psi rating in the Solar System. No clairvoyance, no telepathy, no induced hallucinations, no precognitions, no telekinesis, no psi-screens, no interference of any kind. When we send you out into—well, never mind, Fred. The main point at present is that you are a very, very rare observer."

"That's fine," Fred said. "Look, Doc, I feel beat."

"You're meant to. Hell, man, I've been tiring you for two hours now. And what's more, I'll give you a little warning in advance. We aren't going to let you eat for three days either. You're going to be so tired that your body is going to loosen its grip. Don't worry, you won't die. Ten people have done this before you

and they're all right. You'll meet them all soon. Now just hold still."

Dr. Howard Sprinnell slipped a hypo needle swiftly into Fred's neck, withdrew it and dabbed with a piece of surgical wool.

"Off you go, Fred."

HE WAS breaking into pieces, but he didn't care. He slept and woke and slept and woke in the chair in old Cloud Spinner's office and now he was coming apart and he just did not care. Fred Williams had had several years of simple apathy. It came naturally to him. His body rested, tired and inert, lacking in vigor from lack of food, and his mind separated slowly from it, like a man standing up in a pool of pygmies. His heart, hands, liver, stomach, viscera had their pygmy minds all bundled in with his, and now falling away in separation as he rose from them.

His mind rose away from his body in the chair altogether. He viewed his body with unconcern, and the chair in which it sat, and the room, and through the walls the surrounding offices, and the rooms of the Federal police station, where the Security trooper named Joe who had taken the beer sat picking his teeth and gabbing with a pair of young Federal cops, and the roof of the block in which the station stood.

His mind went up like a balloon, rising swiftly into the atmosphere, and the city shrank away under him like a toy plan, a kid's aid to Better Civics, Home Town box VI, no Solar Credits necessary. He shifted automatically away from the main airport, but a moment later he went clean through an airliner cockpit, cabins with passengers, exhaust, and out exactly where he was before. His mind followed the airliner involuntarily, until he asked himself why, and immediately continued rising into the sky, looking down at the ground and the great spherical horizon.

His mind rose into cloud and examined minutely a water molecule floating from a piece of dust as big as a rock. His sense of proportion sent him shooting out of the top of the cloud suddenly, like a startled fish. The ground became a globe gradually, and as the clouds below became little wisps over the light blue haze of the Earth, his feeling of liberation increased and he rose faster. He went through layer after layer of radiation sparking fitfully around him, and fiercer belts. And then the dust thinned out like scattered transparent ball bearings, and his mind approached the satellite stations riding over the Earth. He was tempted to go through one, but it seemed unimportant and he rose out.

The Moon was swinging down away from him, a vast pitted ball bigger to his mind than the Earth now. He put on more speed, so that his mind flashed away from the Sun. Then as he paused an odd thing happened. One moment he was up there, alone above the small Earth and its smaller Moon, and the next instant his mind had flashed right into the center of the Sun, deep in the inferno of its core, where violence and variegated light surrounded him. And then he was out again, and his mind zoomed off as if he were sitting in the front seat of a low-slung car with the landmarks coming at a rush toward him and away to the side. The Galaxy fell away behind his mind in this fashion and the Great Nebula of Andromeda passed by.

His mind roamed for a while among the other galactic clusters and the spiral galaxies. He found his mind could appear at any point he wished, without the long rush through space. He could transfer instantaneously from place to place, and he hopped in this way at random from Crab to Lagoon and in to Polaris and out to the Great Spiral of Ursa Major, and onward to the open centers of the universe.

In deeper space, where endless banks of galaxies roller-coasted away from each other, he felt a change of quality come over his mind. It turned within itself where all the vivid stars became mere floating lights on the surface of a bubble outside. Here, within his mind, was deeper space and yet another liberation. His mind hung like a grape about to empty into a vat, which in this larger sense was truly himself. Insofar as he, Fred Williams, was a mind, it was only a skin around the greater liquid, in which indeed he perceived all things held in common.

He was about to throw off the skin and mingle in this condition where he and the Magellanic Clouds and Joe the Security trooper's toothpick had a single existence, when he was back in the chair in the office.

His body settled over him again. He felt compressed and imprisoned and robbed. His head turned as if it were on antiquated pulleys and his arms and shoulders were strung together awkwardly.

"It's bad to be back, isn't it? You'll never get used to that. But that was one hell of a Dive."

FRED WILLIAMS looked at the other people in the office. There were ten of them and Dr. Howard Sprinnell. Three were women, and all except the doctor had large eyes.

That was what you noticed about them, their enormous

gentle eyes and their slightly thin faces. The doctor held a mirror up for him to see his own face, and it was much the same.

"They thought we had lost you there for a while," said the doctor. "All Divers do that on their first trip out—but you, I'm told, almost joined the Lord."

"Is that what This is?"

"It's a matter outside our field," said Dr. Howard Sprinnell carefully, "and a matter of choice as to name. But mystical evidence seems to point that way."

One of the girls laughed. "You're embarrassing the Solar Government, Fred. They are not supposed to have any sectarian views. But that's what we Divers think the This is. My name's Milly. This is Pat, and Joan, Bill, Ed, Al, John, Anthony, Ricardo and Mitch. Welcome to the Divers, Fred."

Fred Williams smiled around. The women were attractive, all brown-haired and nicely shaped. The seven men were just regular guys you might meet anywhere. But then, he wasn't anything to win a prize himself.

"So far as we are concerned, Fred," Dr. Howard Sprinnell said, "and this is official, there is the normal conscious mind, the subliminal mind of which we are not usually conscious but which is apparently a parcel of regional physical minds and the mind you roam in, and there is the unconscious mind, which does not seem to belong to any one person, although everyone has it, and which you people embarrass me by referring to as the This.

"All we know, officially, is that the This is the natural or original home of the universe, and the only reason we know that is because we don't want Divers to disappear into it and not come out. You're all too rare. I gather it is almost unbearable to come out of. But you'll just have to avoid the temptation to go home, as it were. After all, it has taken several million years to get man out here where he is and what he is. And the second reason is that the entire Solar Government depends on the people in this room for information."

Fred Williams looked at the others. They were serious. The smallest of the girls, Pat, caught him looking and smiled.

She turned to the doctor. "Can I tell Fred?"

"You followed him, so you may as well. *I* don't know what you Divers feel. But the Defense Council is waiting for the rest of you and we must hurry along."

Dr. Howard Sprinnell patted Fred on the shoulder as he passed. He stood aside for the other Divers to leave the room, nodded to Pat and Fred,

and shut the door behind him.

Fred Williams levered his body off the dentist's chair and stood unsteadily. The girl took his arm. She was smaller than he, the top of her head reaching to his mouth, small, delicate and scented with heather.

"There's a lounge next door —you may not have noticed it on the way out—and there's always a bowl of fruit and some cheese and biscuits there. Let's go in."

He followed her.

Even the short walk helped accustom himself to his body again. And the room was large and airy, overlooking the central park of the city and the clouds beyond the tall buildings in the distance.

He stood looking out at the view and eating an apple while she sliced cheese and laid the pieces on a plate with some biscuits for him. Then she sat down, folded her hands in her lap and looked at him. She was wearing a white-and-blue-check dress. She looked young and fresh and alive. The room was clean and fresh. He could not think of Elsie and that apartment as being in the same world.

"Did the doc say you followed me?" Fred asked eventually.

"One of us always goes with a new Diver on the first trip."

"What did I look like? I mean was there anything to see?"

"Oh, yes." Pat laughed. "As a matter of fact, our minds look like the inside of eggs out there."

"But a plane went through me. And I shot for some reason into the Sun."

HE TURNED and looked disbelievingly up into the sky.

The Sun made him blink and his eyes watered.

"Now I can't even look at it," he said, "any more than I could before."

"Show me your mind," she said simply. "Where is it?"

"Well . . ."

"That's the whole point of the Divers. A mind is not in space-time. It is connected with a body which is—or, to be exact, it is associated with —a physical brain, which in turn can work a mouth and hands to communicate what the mind has seen. The Solar Government has the problem in reverse. They can send ships through hyper-space; otherwise, as you know, we could never have populated the Galaxy. Why, Polaris, which you visited, is over a thousand light-years from Earth! They can make matter shift in and out of hyper-space. But they can't communicate that far away. Radiation won't take the shift. So the government can either send radio waves out and wait a couple of thousand years for the answer, or it has to shuttle whole ships

to and fro just to get a simple message.

"Worse, from a defense viewpoint, there are times when they must have information fast and when the nature of the news means that no ship will be either available or allowed to become available to carry the news. Suppose you are an intelligent life-form off Canopus and you think up a magnificent way of taking over the Solar System. You're six hundred and fifty light-years away, but time is no problem because either you live longer than that or you have a tribe-culture. Even if the system had a billion police ships, which it hasn't, it could never be sure of catching Canopus preparing, or intercepting whatever horror they sent off. And even if it were lucky, the ship would have to come back itself to get the news to the Solar Government.

"A Diver can send his mind instantaneously from one end of the universe to the other, he can examine atomic particles or survey galaxies, he can see through matter as if it were full of holes—which it is—he can patrol sectors and report exactly what he found there. He can dive into deep space and be free."

"Yes," Fred Williams said. "That's it. Free. That's exactly how we feel, isn't it?"

"Never mind. You'll be going out again. Regularly. With me at first until you get patroling under control. And then on your own."

"Are we always hungry?" asked Fred Williams, taking another apple.

"It helps. The government would like us to be permanently at the point of death, but that is fortunately impractical. The less hold our bodies have, the easier it is to go out. There's one other point, though. And since you're coming with me on your training, I'd prefer you to know—no matter what the rules say. Whenever you go near another living being in a Dive, your mind can see the other mind, and you can read it from the pictures in it. It's difficult to describe, but you'll see for yourself. And if the mind you are looking at is connected up to a body, as we are now, and if the pictures don't seem to fit the situation, you can take it that they refer to events still in the future as far as that body is concerned. The mind has a different space-time existence from the body, obviously, and quite often it is ahead in time. That's why we have to be negative Psi. Anyone can Dive, but only a negative Psi can remain objective about other beings' minds. A Psi would collect other minds' contents and get them confused with his own—future and present all messed up, full of symbols—take a look at a Psi's mind sometime

on the way back. There are a lot of accidental roamers around on Earth."

"If we can read other minds," Fred Williams said thoughtfully, "then we Divers could have a hell of a lot of power."

He was surprised when Pat laughed.

"We all think of that," she said, "but so did the Solar Government. We have a bunch of Psis and Security troops tracing us all the time when we're in the body. But the real hold on us is not that. How would you feel if you were told you could never Dive again?"

"I—I wouldn't like that."

"You see? And you've only been on the first experimental Dive. Imagine when it is your whole life."

Fred Williams nodded slowly.

Then he asked: "Where do you live?"

"Oh, no. Divers never mix. Our existence is a top-secret. And the risk of losing two Divers in a single accident would keep the Defense Council awake at night."

"But everyone was here today."

"To welcome you. That's a big occasion to us."

"It's the biggest thing that ever happened to me," Fred Williams said.

"I know," Pat answered quietly. "I saw your mind. But I'll change that, Fred."

She stood up and brushed her hands over her dress.

"Where will I see you again?" he asked.

"You never will."

He stood up to protest.

"Not in the body," she amended.

He looked so mournful that she walked over and kissed him.

"There's a good-by present, Diver. But *we* will meet regularly."

FINDING him sitting with a pile of apple cores beside him, the doctor clicked his tongue reprovingly.

"Tell me, Doc, how could you stop me Diving?" asked Fred worriedly.

"Fill you full of vitamins and carbohydrates and alcohol and send you on a pleasure-cruise with a lot of accomplished women," said Dr. Howard Sprinnell promptly. "Or allow you to stuff yourself with apples, for a start. Now come along or I'll bar you from the exercise room."

Fred Williams followed him thoughtfully.

"By the way," the doctor said over his shoulder, "your wife thinks you're under arrest. You've been here four days so far and we can keep you another ten or so. After that you'll have to go back. You're on our payroll now, but you'd better keep your job. Or we can find you a heavier one, if you're not tired enough.

We'll seal a miniature transmitter into your larynx under the skin before you leave, so that you can report audibly from wherever you are. Diving has the same effect on the body as sleep, you'll find, so you can do both at once. I'll grade off the injections before you leave here. Now this is the political field as we know it . . ."

They stood in a large lecture hall, filled with spaced models of the Solar System, set in the Milky Way and surrounded by the related galaxies.

"Here's the spiral in Andromeda," said the doctor, using a long pointer. "I understand you went there . . ."

He took Fred Williams on a general tour of the hall.

"Of course there are others not shown here," he concluded. "The Coma-Virgo system of galaxies, for one example. But these are the ones *politically* important at this time. In Sagittarius, we have a problem. There's a human colony there —a very early one, as a matter of fact—which we're sending an envoy to. But we don't know what sort of an envoy they are expecting, whether he should be a technical agronomist, a sociologist, a radiation expert, or a plain folksy reminder of Earth, or what. A simple problem really, but a mistake will cost us several billion credits to correct. So your first assignment, under Pat's tuition, will be to find out and report. When you get back, you'll rank officially as a Diver. Rendezvous is over the Peninsula, above San Francisco; you can't miss it. Take your mind there before you leave and come back there on the way in. Around fifteen thousand feet is the recommended height, but that, like your mind, is immaterial, if you'll pardon the pun. And now I suggest you go down to the police gym and take some good strong exercise so that you feel properly tired for the journey."

Dr. Howard Sprinnell put his hands in his pockets and gazed at his polished shoes.

"I don't quite know how to say this, Fred," he continued, "but I'm responsible for you Divers. You're entitled to your own forms of amusement, of course, but please remember you are being watched by Psis. No dropping in on the President's bedroom. Other people's bedrooms, all right, though I trust you'll keep out of mine. But do nothing that could make you be considered a security risk. That is the *only* thing that would worry us."

Fred Williams assured him and left the hall to go down to the police gym. He did not understand why the warning should be necessary. On the other hand, you could take it as a delicate permission to do anything that was not a security risk. He passed the police canteen and restrained himself

from going in to order a doughnut with Martian syrup. It would keep him from Diving.

HE ROSE into the atmosphere above the city and headed across America to the rendezvous above the West Coast. The Earth spun away from beneath him. He had time to be surprised that in the few hours back on Earth he had forgotten the unburdened clarity of mind in a Dive. He knew who he was. He was unquestionably Fred Williams up here, as much as he was Fred Williams down there. But here he felt different, free, while down there he was embedded and obscured in a shell of a body. Here, this time, his vision was not limited to a forward cone but extended in a complete sphere around him.

He saw the large nick in the coast ahead and came down to meet his tutor Diver.

Pat had said he looked like the inside of an egg, but he was not prepared for the great ovoid poised there below him. He came up to her with a rush and found he was even bigger by comparison. When they touched, he heard her voice. There was a slight resistance as his mind met hers and then she slipped inside his, so that he enclosed her mind within his ovoid mind.

"One of the disadvantages of a Diver," she said quietly within him, "is that we can only talk to each other by contact. A Psi could see our thoughts radiating out like an aurora, but we can't. We travel this way when two Divers are together, which isn't often, so that we both think of going to the same place. If we do get separated, come back here immediately and we'll start again."

"Fine."

"*Please.* The very *gentlest* suggestion of vocalizing will do. That was like a cannon."

"Sorry."

"Much better. Now, gently, out. Think of rising slowly . . . That's right."

They rose away from the Earth.

"Over there," she prompted, "is the galactic spiral arm we are in. See, running from Orion? The Solar System is out here on a limb. Over here is where we're going, deep into the Galaxy, our own galaxy. You'll soon pick up the main roads. See that fan-shaped arch? That's a T-Tauri variable, signposts to us. Think of being just off that one now."

He did—and there they were, in a dark lane of the Milky Way.

"Now you can imagine what would happen if we were moving separately and turned our minds to different points. You have to go back and start again then. Now, we're going down this dark lane."

They moved through the

splendor of the Milky Way, through vast lanes of fine dark nebulae, across a giant rift, past glowing clouds of hydrogen and oxygen and bright expanding shells, rings within rings, flowing out from intense stars in their center as if the star were a pebble dropped in a pond of burning space, the planetary nebulae.

The Sagittarian region was well known to Pat and she commented on the Lagoon, and Omega and Trifid Nebula suspended around them. The local system they sought lay off a loose globular star cluster, one of a crowd here deep in toward the center of the Galaxy, the bright core around which the spiral arms of the entire Milky Way ponderously swung.

He was part engrossed in the technique of moving his mind, part awed by the variety and beauty of the Galaxy, and part lost in the beauty of the mind within him. She moved with deft, clear thought like the chime of crystals. The sensory images of Earth were gross and distorted projections of the way he saw her, but she was at once the beating rhythm beneath rock-and-roll and the abstracted clarity of Chopin, the summer wind and the warmth of a wine. He held her mind within his in a new union so complete that anything else was mere fumbling.

"Thank you," he heard her voice say gently, and they sank down toward the rings of small planets they had come to visit.

A COLONY from Earth implied an atmosphere, and several planets in the group indeed looked fuzzy. The two Divers skimmed rapidly from one to another in a general survey, selected the largest of those which might support man, and sank down through its belts of radiation.

The central mass of land lay beneath thin clouds, through which the local sun shone in drifting spotlights over the cultivated areas and irregular groups of cities.

"When we get closer," her voice said, "you'll see them walking about inside their minds, which to us will be cloudy colored eggs around them. They cannot see this, of course, any more than a non-Psi or we ourselves on Earth. If it isn't obvious what they are thinking, we'll have to go close enough to touch their minds with ours. But be very careful before you do that. If they are very empty-minded, there is a risk that their body magnetism will polarize your mind in temporarily. You can get out again, but it's messy and unpleasant while it lasts. And it's almost impossible to avoid being sucked into a medium's mind, so I hope they haven't got any."

They were now over the main city and headed toward a large domed building, appar-

ently modeled on the Capitol.

"How did they get here?" he asked.

"We don't really know. The contacts so far have been by radio to a very early investigating fleet. Obviously they must have come out after the hyper-space drive was invented—we're over twenty thousand light-years from Earth, here, I'm told—but they don't seem to realize the difficulties of sending them the envoy they asked for. Assuming these are the people that wanted one."

"Look, an old landcar—down there on the street!" he exclaimed.

The colony apparently still used ground vehicles. As they came closer, they could see people walking in the streets and moving in and out of doorways. There were no moving sidewalks, personal vertijets, anti-gravs. It was cleaner but otherwise as old-fashioned as the quarter in which Fred Williams lived on Earth.

"Imagine coming so far—to find this," he said, disappointed.

"You'll find colonies are usually several generations behind, but let's not be too hasty," she said. "We can have a look around later. First, let's see if we have the right planet and get this envoy matter out of the way. Down through the dome, here."

They passed through the weather sheathing and curved girders of the dome into an assembly hall full of human beings, seated around a central dais. The colonists had apparently been inspired by Congress. A quick glance at their minds showed they were politicians, no better and no worse than the Earth variety, intent on compromise and the exchange of benefits between the groups of interests they seemed to represent. Several carried visibly in their minds one fixed interest and a quick count showed that agriculture was, in one form or another, the main business of the colony.

"I think that answers it," she said. "We'll have to check on the other planets, but farm problems seem to be what they're most concerned about."

He felt dissatisfied. "Shouldn't we touch one of their minds to see if this is really the political center? It may only be a village meeting."

It seemed incongruous to use the wonderful reach of Diving to gather little facts like this and to depart knowing nothing else. Then again, he recalled the doctor describing it as a simple problem.

He felt her mind move understandingly within his. "All right, let's touch the Speaker and see how far his authority goes. He'd be very conscious of a superior Congress if there is one."

They moved together to the dais and brushed against the Speaker's mind. The short,

bald man sitting impressively in the center of the bubble immediately leaned forward and banged his gavel. The entire assembly rose to their feet and stood still. The Speaker slouched in his chair. His mind shook off the influences of his body and rose up to touch the two of them.

"Welcome, at last," he said.

"You have been expecting us?"

"Of course. Though why do you say 'us'?"

They moved partly from each other, overlapping only at the extreme limit of their own minds, so that he could see there were two of them together.

A gasp sounded in the Speaker's mind like an echo and there was a movement throughout the assembly.

"Can they hear us?" Pat asked.

"Naturally. Psi capacity is a minimum requirement for the Senate. Can't you hear us?"

"Only by mental contact."

"How odd," the Speaker replied. "Still, we ourselves cannot merge in each other, only into housings."

"Housings?"

"But surely . . . You must know. Of course you must."

"I'm afraid we don't."

"For heaven's sake, what part of the Solar System do you come from that you don't know a housing when you see one? Ganymede, Mercury, Jove, Venus, Bacchus? Although I was under the impression that the entire system used the same terms."

"One moment," Fred said. "What system are you talking about?"

"This system here, naturally."

"We come from a different part of the Galaxy, a part that is called the Solar System by those who live there."

There was a multiple rustling of thoughts which disturbed the Speaker momentarily.

"Please, gentlemen, please! Will every Senator please quit his housing so that we have less of these physical interruptions?"

EVERY member of the assembly sat down, relaxed his body and rose gently above it with a clear and uncluttered mind.

"Thank you, Senators," the Speaker said. "Now. Do we understand that you come from some other part of our galaxy?"

"Yes," Pat said. "We call it the Milky Way."

"So do we."

"You probably brought the name with you."

"You are suggesting that *we* came from *you* and brought the name of the Galaxy with us?"

"Why, yes."

"I see. Would you identify this solar system of yours?"

Pat held in her mind a picture of the Solar System and the Sun, embedded in the long spiral arm of the Galaxy. She made the image of the Earth expand and contract in emphasis.

"Thank you. So you come from that little system, do you? How interesting. And yet you have never heard of housings."

"We call them bodies."

"Well, so they are. I recall a primitive energy transmission we had here long ago. We extended an invitation to the operators, but they have not so far arrived. They came from your system, or so they said."

"They did. They contacted you by what we call radio. We were sent, frankly, to see what sort of envoy should be sent here to you."

"Ah! There has been a natural confusion. We thought you were here from one of our outer systems where we are having some difficulty raising the right housing. In fact, we were just debating the correct form of grain to transmit to feed the housings on. They are in the awkward stage of having sufficient minds to exist, but insufficient nerve cortex to enable us to enter them. Our local represenatives — whom we mistook you for — have been having a very difficult time for several hundred years, but we will soon find the answer. Now, we will be glad to receive an envoy from your system. We are always glad to receive representatives from our successful colonies. As to the type of envoy, anyone with a broad galactic viewpoint will do. We will, of course, be glad to offer housing and the usual facilities."

"When you say housing, you mean bodies?"

"Naturally. Bodies such as these Senators' or my own are the most adaptable for this climate. If you go in to our Ganymede or out to Jove you would have to use a local—er—body, because these human types would melt or suffocate respectively. But the local housings in silica and in ammonia crystal have proved quite adequate for normal locomotion and physical work there. The normal facilities of the sport planets would be available, to be sure. We are quite proud of our slither bodies, I suppose you would call them, in the snow worlds —quite a recent development. I fear we are not too luxurious here, but galactic opinion forces us to make our housings do almost everything they are capable of doing—walk, drive, cook and other such menial tasks. But then at least everyone knows we are not spending the revenue on our own housing—er—our own bodies. Only last century we barely averted a political threat to make all Senators' bodies sleep out in the open weather. But obviously it is much more expensive

to keep breeding new bodies than build a shelter such as this one. Even taxpayers can see that."

The Speaker's mind echoed general agreement from the Senators.

"It will come as a surprise," Pat said clearly, "but our system believes *we* colonized *yours*."

This met polite and general laughter in which the Speaker joined.

"Perhaps," he said, "you would care to communicate direct with the Senators who were in charge of your system during the developmental stages. Will the Senators please come forward for contact?"

Seven of the minds above the floor of the Senate drifted over to touch peripherally against each other and against Pat and Fred.

"When we first undertook that project," one or all of them said, "your system was entirely unpopulated. On the third planet, we found, however, roughly humanoid apes in isolated caves and by selective breeding we succeeded in making that species into a housing identical with those we use on this planet. Unfortunately, only the less stable minds of the Galaxy were prepared to live quite so far out and we eventually lost touch. Is the same housing still used?"

"So much so," Pat told them, "that we cannot normally detach ourselves."

"You mean you send *bodies* from place to place?"

"Yes. The radio signals you received were from a spaceship containg men in their own bodies."

"Remarkable. Naturally, we accept your statement. But this implies considerable technical skill—and a prodigious disregard for the taxpayers' money. You mean there were actually *men* out there in *bodies* sending energy transmissions, instead of visiting us in the mind from Earth?"

"Yes."

"Remarkable. *Very* remarkable. Can you spare the time to tell us more about this? We can accommodate you with a double housing or separate housing, whichever you prefer."

"May I withdraw to consult with my colleague?" Pat asked.

"Of course. We will continue our debate."

The Senators returned to their forms and the Speaker, sinking back into his body, recalled the assembly to their discussion of agricultural problems.

OVER the dome, Pat slipped inside Fred Williams' mind again. They thought of the enormous space-ships developed over many centuries and at uncounted cost to give

men favorable odds in an unfavorable environment. And of the hazardous shifting of power based on bomb-satellites, and the fence upon fence of security precautions on which Earth and the Solar System depended. Or rather, when they considered it, on which their local population depended. It was not a problem for two Divers but for a team of specialists.

They returned to the Speaker.

"We would like to consult with the original Earth Senators again and perhaps borrow two — housings — for a a short while."

"With the greatest pleasure."

The Senators concerned quitted their housings and floated across the assembly to join them. They all rose together to the outside of the dome, where they would not disturb the debate below.

"One of the questions," Fred said, "is what happens if we died—by accident, for example—while in a borrowed housing."

"You imply a question as to what happens to *any* of your people, since they have lost the power to detach themselves, or do not make use of it."

"Yes."

"Unfortunately," one or all of the Senators replied, "we do not know. It is said there is a continual production of new minds in the universe, which appear here and there, wherever there are suitable housings. Others disagree but have no real answer. If we lend you housing — a panther-style body for personal racing on the grass steppes, say, or a vast whale-style body for enjoying some of our oceans, and so on, there is some risk. Among certain cultures, we find a return of the mind to a similar vacant housing. In other places, we have found an obscuration of the mind. We think there are parallel universes differing from this as mind-form differs from substance. And we believe each mind continues in these further dimensions. This would be practical if you were unable to leave a dying housing. Our advice is not to get caught in any accidents.

"Should it be advantageous to you, we will keep housings ready for you here. One male and one female, of course. Ah —on one question which you did not ask—you will find our guest housings are a uniform breed which became popular on your Planet among the Greeks and Romans as ideal godlike forms, shortly before we returned here.

"And as to the other question you have not asked—we never interfere with local cultures, for the greater the variety of each, the greater the enrichment of all. Your system is entirely safe; we pro-

pose to observe it more closely from now on. It is our impression, however, that you would be wise *not* to mention the galactic system we represent, when you return to your Earth. It would be too upsetting to the established pattern. We are all human beings, but we have solved the same problems in very different ways."

"We have not solved ours," Fred said.

"Oh, neither have we. But at least the few of us here, including yourselves, at any time as our guests, have achieved what you would probably call immortality."

"We are free to accept your invitation at any time?"

"Certainly."

"Then we will report that no other envoy is needed," Pat said clearly.

"That would be beneficial indeed."

"And may we send you a very limited number of friends?"

"Your guests shall be our guests. Again, we suggest you limit knowledge of us so far as possible."

"We are called Divers because we can leave our bodies. Only Divers could visit you in this way, and we will not send any others."

"Thank you. It is largely our fault. We have come across traces here and there of other colonies which we assumed were the successful result of past experiments. It occurs to us now that several of these may be in fact body-bound expeditions from your solar system. We will investigate and correct our catalogues."

"We can be of assistance there," Pat answered.

"Excellent. We wish you Godspeed and a pleasant return."

THE nine minds released contact and moved apart. Fred felt Pat's mind slip into his. They rose off the dome and increased speed, soaring into the sky and out, above the ring of planets.

"Why didn't we borrow a couple of bodies?" Fred asked.

He could picture himself strutting elegantly in the body of a Greek god, with Pat to match beside him.

"Please stop that — we're zigzagging about. You're new, Fred. Every Diver goes through the same routine—a pep-talk from the President, Doctor Sprinnell's little tricks, your first Dive all over the universe, and then routine patrols. What you don't know is that whenever we Divers come into contact with another race or another form of life, we are invariably offered gifts of some sort. Primitives sense the presence of a Diver and put on a show, lay out food and their treasures. The more advanced, using trained telepaths, try to bribe us.

And so on, without exception."

"Okay, so I'm new, Pat. So I don't know the pattern. A few days ago I was a slob in an automation-parts supply house and now I'm here with you at the back end of the Milky Way, or the center, whichever way you look at it. But Doc Spinner made some pretty odd cracks to me about security and I don't like the idea of being spied on all the time back on Earth."

"No Diver does. The Defense Council put us in business, but now they are afraid of us, in a way. We can go anywhere and see anything. We might have a look at their secret installations or their private files. Then we *would* be in trouble."

"Well, I didn't ask to come into this. But now that I'm in and a Diver, just one fancy move by Security and I'm off to get another body. That sounds odd, doesn't it? But I mean it."

"I'm glad."

"Eh?"

"I'm very glad, Fred. I wanted to see how you'd take it. I feel the same way. It's true we're always offered presents, but immortality is something larger than a present. And to get out from under the thumb of the Psis and their spying is something all of us have been longing for."

"And I'll tell you something else, Pat. From now on, if the other Divers agree, we'll do what we want. Oh, the Solar System can have its patrolling. I'll have to learn how that's done from you. We'll tell them what they want to know. But one sign of interference and we're off, and they can keep the bodies. We won't tell them they are a backward colony that has forgotten how to Dive. But we know it. We won't tell them the rest of the Galaxy is run from the center back in Sagittarius by humans who can Dive. But we know that too. If I thought at all about it, I thought we were freaks, useful nuisances. And I didn't mind being ordered about. But we're not freaks, Pat. We're the *normal* human beings that the Senate back there meant to create. It's the Solar System that is lop-sided, not us."

"I'm not — overinfluencing you, Fred?"

"Hell, of course you are. I can hardly think of you without looping around a star. But the facts are the same. And from today, we're not Divers. We're the *Free* Divers, housing where we wish to, seeing what we want . . ."

"And protecting the Solar System, Fred."

"Well—they're entitled to that. And we'll keep to their security regulations for our bodies on Earth, if it makes them happy. We can afford to give a little here and there."

They shot together through the nearest T-Tauri variable arch and zoomed happily. After a while, they returned to the rendezvous off the American coast on Earth. The other Divers were waiting for them.

"It's a custom," Pat told him as they approached the nine Divers, hovering in space, "to greet you as a new Diver."

They closed together as they met, within Fred's larger shell. He told them. There were no doubts among their minds.

"Sooner or later," Fred finished, "one of us was bound to meet the true Galactics we've just met. It happened to be Pat and myself. I'm new and don't know much about Diving, but I've seen enough to know that from now on I'm a Free Diver."

"So are we all," they answered.

RETURNING across America in the one shell, they scattered confusion and headache throughout the psi-watching stations in their path by the scramble of eleven sets of thoughts. Then they separated and left Fred to go down to his body while they returned to theirs in the different places Security had put them. Pat followed him down as a precaution.

This time, Fred Williams' body fitted his mind with a greater feeling of strangeness but less muddling. The smaller consciousnesses of his body did not obscure his perceptions; he was aware of it as a housing for his mind.

He looked at Dr. Howard Sprinnell, who had listened to him so far in silence, uncommenting and unmoved, a mild, friendly face in the small medical room.

"So, Fred. I warned you, Pat warned you. You go out on two Dives, a few days after discovering that such things exist, and you come back to give me an ultimatum for the Solar Government. A lifetime here in the drabbest, almost medieval surroundings of the city and, after a few days, you come back announcing you're a Free Diver, owing nothing to anyone. Is that right? Do you still stick to that?"

Fred nodded.

"You realize what we can do to you, Fred? Dammit, on your first Dive you almost went out of space-time altogether, only you didn't know what you were doing. Do you know what you're doing now? Do you think I've spent twenty years searching for negative Psis for government service so that you can turn them against the Solar System?"

"Hold on, Doc. No one said anything about being against the Solar System. If there's work to be done, we'll do it. But in our own way and without being spied on."

"Just give me one reason why the government should trust you, with the entire Security system."

"Because," Fred said carefully, "you may have my body, but in my mind I am a Free Diver."

"And nothing anyone can say will change that, eh?"

"No."

"You know," Dr. Howard Sprinnell said reflectively, "you're talking as if you had another body cached away somewhere."

"Whoever heard of that?"

"Lots of people, Fred. Voodoo zombies, certain Mahayana religious leaders, prehistoric Egyptians—there's quite a well documented tradition. But the great problem has always been to find a leader with the courage to do it scientifically and in the interests of all the people, not just the members of some sect. Give a man the universe to play in and he doesn't mind a few rules as long as he's allowed to play. Finding negative Psis and creating the Divers as an organized official body was easy compared with the task of completing the experiment—*by making one of them revolt!* Nine of the ten before you were too easily satisfied. Diving according to the rules and regulations was enough for them."

"Who was the tenth?"

"Pat. She was the prettiest and most discontented. I thought I could stir up some fire."

"You did."

"Ah, good. I am high-Psi, by the way. I seem to feel she's somewhere around here. However . . . I can never be a Diver myself, but years ago I formed the theory that a lot of phenomena could be explained by minds reaching out beyond their bodies. Now be careful, Fred. I don't want to *know*. The Security Psis are very real and there are a lot of things I cannot afford to know. I'm a Solar Government servant, remember. But it seemed to me there might conceivably be a life-form somewhere in the universe which used the body as a vehicle for its convenience. I hoped one day the Divers would find such a life-form, and if I made the regulations stiff enough and supplied one or two other irritations, one Diver might decide to make the jump, to revolt and stand on his own feet. Free Divers, you called yourselves, eh? A good name. I don't want to know where your base—your other base—is, Fred. I only want to know there is a group of people willing to serve the Solar Government regardless of time, theoretically for eternity— that's what it amounts to when you work it out. As I say, I'm just a government servant. And thanks, Free Diver."

He held out his hand and

shook Fred's. "From now on, Fred, you can all come and go as you wish. If you feel like keeping to the security regulations, fine. But I'll make it clear to the Defense Council that there's nothing they can do about it if you don't. Men who don't mind losing their bodies have always been somewhat beyond the power of a government."

"On that basis, Doc, I don't mind continuing the way you planned."

"Laryngeal transmitter, continue your cover-job and the rest?"

"Don't see why not."

"Come along then. You're due to be released from jail."

Fred followed the doctor into the operating room.

HE REMEMBERED the beer this time. Elsie lay back on her bed, drinking from the can, one of her scuffs dangling from a bare toe.

"The trouble with you, Fred, is you can't even rob an office."

"I didn't."

"That's what I mean. See? You just can't do anything."

He lay back on his own bed and looked at her. There were a lot of things you didn't mind putting up with, voluntarily. You married her, so you'd look after her, trudge to the shipping room to work and trudge back. The tireder you got, the better.

For evening came every day, and with the evening came sleep for his housing and eight hours for patrolling the Galaxy. And beyond the system, out beyond the dark lanes, there were endless forms of life . . . and the two great developments of men, one stemming from the other in different ways, but each expanding, colonizing, growing . . . all with problems for the Free Divers he led.

"Wouldja get me another beer, Fred?"

"Sure."

He remembered to slouch into the kitchen, as if he did not care. And when you considered it, he didn't care at all. This was one path of human developments the Senators never thought of.

"Trouble with you, Fred, is you're just a negative character. You weren't when I married you, but you are now."

Well, she was certainly entitled to a beer for that.

END

There is a way to do this better . . . find it.

Thomas A. Edison

Dissolute Diplomat

By BOB SHAW & WALT WILLIS

After you finish this story

try doing a blurb

that does not give away the point.

It can't be done!

GRINGLEDOONK lay in a comfortable floor dish, experimenting with himself out of sheer boredom. From three points along his perimeter he projected slim pseudopods, intertwined them for a short distance in the center, then split the end of each in two and looped them out to form six little hooks.

Listlessly he solidified the

edifice and extruded an eye to examine it. It did not look like much.

There were several races in the Federation who covered their bodies with fabrics, and this thing he had made might have been useful to one of them, but not to anybody civilized. More bored than ever, he commenced the slow process of dissolving the hardened pseudopods.

A low whistle came from the entrance of the tubeway in the palace wall. The little circular door opened and Mugg, his Minister of Home Affairs, shot out onto the floor. He lay for a moment in the bullet shape that Gyoinks used for traveling the tubeway; then he re-formed and flowed into the floor dish beside Gringledoonk.

When he had stopped rippling, Mugg extruded an eye and, on seeing the peculiar shape his ruler had assumed, kept popping out more and bigger eyes to get a better view. Gringledoonk watched the process with disgust. No matter how often he was told about it, Mugg never seemed to realize how ill-mannered such displays of curiosity were.

"What," Mugg finally enquired, "have you done to yourself, Your Softness?"

"Never mind that," Gringledoonk said irritably. "Why did you come here? You know this is my rest period."

"It's important," Mugg replied. "A spaceship on normal drive has entered the system and is heading for this planet."

For an instant Gringledoonk lost the cool green coloring that befitted his position and allowed his natural mottled orange to show through. "*What?* What sort of a spaceship?"

"It appears to be a Terran ship, Your Fluidity."

"The Treaty does not allow Terran ships to land here," Gringledoonk said. "This is most unexpected. We'll have to check the libraries on how to receive the officers of a Terran ship."

He moved out of his dish, balancing the still rigid tripod with difficulty, and into the entrance port of the tubeway. The soft, warm radiance there helped him dissolve and reabsorb the cumbersome extension, and he vanished into the narrow aperture of the tubeway.

After years of inactivity, Gringledoonk, Lord and Representative of the Gyoinks, was back in business.

HAL PORTMAN was holding a moderate 800C when his warp-drive generators gave a low sigh and vanished into some unknown dimension. The ancient Morris Starcruiser emerged into normal space with a sickening jiggle.

On checking his position, Portman found that there was a planet called Yoink so close, astronomically speaking, that he could have spat on it. He tapped out Yoink's coordinates on his destination selector and began drinking beer in preparation.

Two days and thirty-two cans of beer later, the Starcruiser bulleted down for a landing.

Wiping white froth from his bristly upper lip, Portman opened the lock and went down onto springy yellow turf. He found himself surrounded by a varicolored crowd of beings of indeterminate shape who chittered at him excitedly. He could not decide whether their agitation was due to the sudden appearance of his ship or the fact that it seemed to have crushed a number of their plastic buildings on arrival.

He drew his sidearm and shouted, "Silence, friends. I am a citizen of—uh—Imperial Earth and I command your obedience. I want—"

One of the waist-high cones of jelly interrupted him by sprouting an enormous mouth and bellowing something about violations of the Treaty. Portman gave the little alien a short burst from his Colt .045 which reduced it to a pile of crackling cinders.

"You're only saying that because you're jellos," he joked hastily, feeling that it might be better to pass the incident off. The directory had stated that the Gyoinks were nonaggressive, but there was no point in not acting in a friendly manner. He knew about the Treaty, but the cargo of contraband luminous furs that he had tucked away would have caused unwelcome comment if he had waited for an AA repair ship.

"Now listen, *friends*," he repeated, brandishing the weapon. "We'll get along as long as nobody argues or tries to get funny. My ship has broken down. Replace the warp generators and I'll be on my way."

"Imperial Earth will be grateful," he added as an afterthought. This diplomacy stuff was a cinch for a guy who knew how to handle people and things.

SEVERAL of the Gyoinks immediately extruded stumpy legs and waddled up the ramp into the ship. Others went off toward a larger dome-shaped building, muttering something about going for tools.

Portman went into the ship and obtained a further supply of beer, booting aside any of the Gyoinks who got in his way, then lay down on the bright turf and contentedly watched the work progress. In spite of the fact that the Gyoinks were just animated trifles, he had to admit that

they were pretty good space-drive mechanics.

LATER in the afternoon as Portman sat on the ramp, smoking under the brilliantly pink sky, a Gyoink approached from the direction of the town on the horizon. This was a large, pale green Gyoink who looked unfamiliar to Portman.

"What do you want? You're disturbing a representative of Imperial Earth."

"I know, I know," the Gyoink replied humbly. "My name is Gringledoonk."

"Anything to the Boston Gringledoonks?" Portman queried genially.

"No," Gringledoonk said, wincing slightly. "I come to apologize for the conduct of my people earlier. When I heard that you were here, I came from the Capital to make sure you would receive the proper attention due to a representative of—"

"Yeah, yeah, I should think so," Portman cut in. "One of those jellos argued with me today. Argued! How do you like *that*?" He took the cigar from between his thick lips and pursed them in disapproval.

"Most regrettable," the Gyoink agreed. "I can assure you there will be no more such incidents. My people are ignorant of the formalities involved in the reception of the captain of a Terran ship. Fortunately, our libraries contain something about the traditions of the great Earth space fleets and, from now on, we will observe those traditions to the best of our limited ability."

"That's more like it," Portman said.

IT HAD been necessary to dismantle the ship's power plant and, as the Yoink nights were chilly and the installation of the new generators would not be completed until the morning, Portman was moved into one of the little plastic huts about a mile from the ship. He found that the Gyoinks had rigged up a hammock, of all things, but it took him only a short while to find the knack of sleeping in it.

In the morning he was wakened by the sound of bells and the insistent prodding of a Gyoink who was proffering a glass of brown liquid on a small tray. The Gyoink's shiny surface had become bright blue. Portman demanded to know what was going on.

"Eight bells, sir," the Gyoink replied. "Your breakfast is ready." There was a note of eager sincerity in the Gyoink's voice.

Portman stretched luxuriously in the hammock, took the glass and found that the Gyoinks had contrived to produce a pretty fair rum. Grinning with satisfaction, he got up and lumbered out of the hut, stooping to get through the low door.

Outside, a flat open convey-

ance on four wheels, manned by two more blue Gyoinks, was waiting. It looked brand new and had lifebelts slung along the sides.

"The Chief Engineer reports that your ship is ready, sir," one of the Gyoinks said. "Step aboard and we will take you to it, sir. Aye, aye, sir."

Portman got into the car and sat down. As he was being driven the short distance to his ship, he found himself almost wishing that he was not leaving so soon. Once the jellos had come to understand that he was the boss, they had been all right, in spite of being such ugly brutes.

When they arrived at the battered old Starcruiser, Portman hardly recognized it. Its hull was shining with a rich brassy brilliance in the morning sunlight. Gringledoonk was waiting for him on a little platform at the foot of the ramp up to the airlock. Other bright blue Gyoinks stood in quivering rows nearby.

"Good morning, sir," Gringledoonk said, his voice charged with friendliness. "I hope that the launch we constructed for you was comfortable."

"The launch? Oh, yeah—very smooth. One of the jellos said the ship was ready. Is it?" Portman stepped out onto the platform.

"Everything is shipshape, sir," the Gyoink said. "We are doing our humble best to do everything in accordance with—"

"Yeah, I know. Skip all that stuff. As long as the new generators are in, I'll be satisfied."

"There's just one more thing, sir," Gringledoonk said. The ranks of Gyoinks moved aside, revealing a shallow depression in the platform, in the center of which was a circular hole about six inches in diameter. From under the depression a plastic tube led up the ramp and into the ship.

"What, *what?*" Portman snarled.

"We only use this for long distances, but our library—"

"Skip it," Portman said.

HE PUSHED Gringledoonk aside and headed for the bottom of the ramp across the dish-shaped hollow. Too late he noticed that there was a peculiar radiance hovering above the depression, coming from little translucent panels around its perimeter. He tried to retreat.

But his bones had softened too rapidly and indeed his feet were already flowing out of his shoes onto the floor, to be joined by what had been his legs and the remainder of his unwashed body. He stopped screaming as his head completed its gracious descent, and his staring eyes remained visible only for a moment, silently surveying the surface of the great blob which he had

so unaccountably become. It liquified still further and the mortal remains of Harold Portman ran out through the hole in the basin with a regrettably undignified noise. The plastic pipe became dark and murky as he passed up it into his ship.

"Just a matter of tradition," Gringledoonk explained proudly to the onlookers. "Our records are incomplete about Terran space fleet tradition, but they all agree on one thing —the Captain is always piped on board."

END

The Plastics Revolution

Within the memory of most people now alive, plastics have bounded into a leading place in all sorts of things from hosiery to construction materials, yet their potentialities have scarcely been explored. Work now being done in Germany and Italy may replace or surpass polyethylene, the head of the polymer or long-chain-molecule family, that the majority of familiar plastics are descended from, along with straight chain alcohols and cyclic compounds with up to sixteen carbon atoms.

The key now being explored is catalysts of organo-metals, such as combinations of aluminum, carbon and hydrogen, and titanium and chlorine.

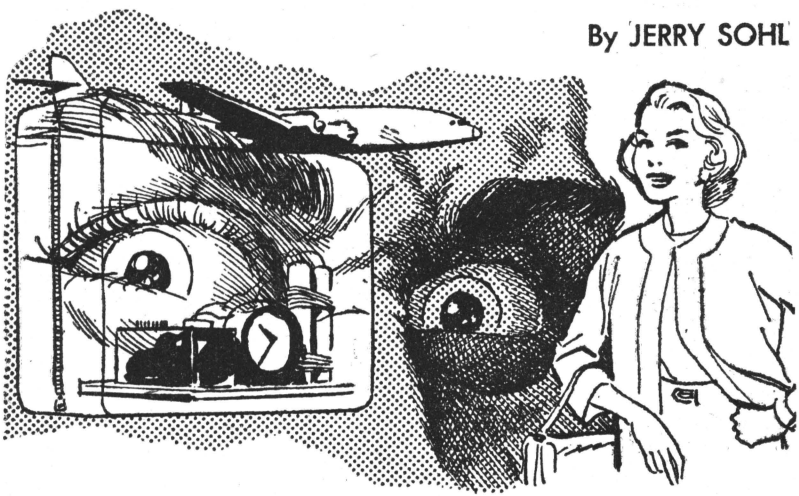
Dibasic acids with twelve carbon atoms and lactame with thirteen are produced by the cyclic process, promising new plastics that may outdo anything currently on the market.

The organo-metallic catalysts make possible an "almost unbelievable" variety of chemical reactions. Ethylene, for example, is polymerized into substances of as much as several million molecular weight with atmospheric pressure, whereas less dense substances required high pressure. Among other qualities, the new plastics, used in tires, may increase mileage up to 120,000 miles!

The new tetraethyl lead process, if proved practical, should reduce costs. This new method, when added to gasoline to prevent auto engine knock, has also been made possible by using catalysts. The United States alone produces 300,000 tons a year. It was invented in 1920 in America, and the new process using Ziegler catalysts reduces the need of so much sodium and chlorine as in the old process. It uses the temperature of boiling water instead of six to seven times as much heat and about half as much electrical energy is used.

Nuts to wild talents! Mine was no satisfaction, never earned me a penny — and now it had me fighting for my life in... **THE LITTLE RED BAG**

By JERRY SOHL



ABOUT an hour out of San Francisco on the flight to Los Angeles, I made the discovery. I had finished reading the *Chronicle*, folded and put it beside me, turned and looked out the window, expecting to see the San Joaquin Valley

but finding only a sea of clouds instead. So I returned my attention to the inside of the plane, to the overstuffed gray-haired woman asleep beside me, to the basks of heads in seats before me, across the aisle to other heads, and down to the blonde.

I had seen her in the concourse and at the gate, a shapely thing. Now she had crossed her legs and I was privileged to view a trim ankle and calf, and her profile as she stared moodily across the aisle and out a window where there was nothing to see.

I slid my eyes past her to others. A crossword-puzzle worker, a togetherness-type-magazine reader.

Inventory completed, I went back to looking at the clouds, knowing I should be thinking about the printing order I was going to Los Angeles for, and not wanting to.

So I started going through the purse of the woman next to me. Perhaps that sounds bad. It wasn't. I'd been doing it for years and nobody ever complained.

It started when I was a kid, this business of being able to explore the insides of things like purses and sealed boxes and locked drawers and—well, human beings. But human beings aren't worth the trouble. It's like swimming through spaghetti. And I've got to stay away from electric wires. They hurt. Now don't ask me *how* they hurt.

Maybe you think it's fun. For the most part, it really isn't. I always knew what was in Christmas presents before I unwrapped them, and therefore Christmas was always spoiled for me as a kid. I can't feel the color of anything, just its consistency. An apple senses about the same as a potato, except for the core and the stem. I can't even tell if there's writing on a piece of paper. So you see it isn't much. Just the feel of shapes, the hardnesses and softnesses. But I've learned to become pretty good at guessing.

Like this woman next to me. She had a short, cylindrical metal object in her purse with waxlike stuff inside it—a lipstick. A round, hard object with dust inside—a compact. Handkerchief, chewing gum, a small book, probably an address book, money in a change purse—a few bills and coins. Not much else.

I was a little disappointed. I've run across a gun or two in my time. But I never say anything.

I LEARNED the wisdom of keeping my mouth shut in the fourth grade when Miss Winters, a stern, white-haired disciplinarian, ordered me to eat my sack lunch in the classroom with her instead of outside with some of the other kids. This was the punishment

for some minor infraction. Lunchtime was nearly over and we'd both finished eating; she said she'd be gone for a few moments and that I was to erase the blackboard during her absence, which I dutifully did.

Class had hardly resumed when she started looking around the desk for her favorite mechanical pencil, asking if any of us had seen it, and looking straight at me. I didn't want her to think I had taken it while she was out of the room, so I probed the contents of her purse, which she always kept in the upper right drawer of her desk.

"It's in your purse," I blurted out.

I was sent home with a stinging note.

Since then I've kept quiet. At one time I assumed everybody was able to sense. I've known better for years. Still, I wonder how many other people are as close-mouthed about their special gift as I am about mine.

I used to think that some day I'd make a lot of money out of it, but how? I can't read thoughts. I can't even be sure what some of the things I sense in probing really are.

But I've learned to move things. Ever so little. A piece of paper. A feather. Once I stopped one of those little glass-enclosed light or heat-powered devices with vanes you see now and then in a jeweler's window. And I can stop clocks.

Take this morning, for example. I had set my alarm for five-thirty because I had to catch the seven o'clock plane at San Francisco International Airport. This being earlier than I usually get up, it seems all I did during the night was feel my way past the escapement and balance wheel to see where the notch for the alarm was. The last time I did it there was just the merest fraction of an inch between the pawl and the notch. So I sighed and moved to the balance wheel and its delicate ribbon of spiraling steel. I hung onto the wheel, exerting influence to decrease the restoring torque.

The wheel slowed down until there was no more ticking. It took quite a bit of effort, as it always does, but I did it, as I usually do. I can't stand the alarm.

When I first learned to do this, I thought I had it made. I even went to Las Vegas to try my hand, so to speak, with the ratchets and pawls and cams and springs on the slot machines. But there's nothing delicate about a slot machine, and the spring tensions are too strong. I dropped quite a lot of nickels before I finally gave up.

So I'm stuck with a talent I've found little real use for. Except that it amuses me.

Sometimes. Not like this time on the plane.

The woman beside me stirred, sat up suddenly and looked across me out the window. "Where are we?" she asked in a surprised voice. I told her we were probably a little north of Bakersfield. She said, "Oh," glanced at her wristwatch and sank back again.

Soon the stewardesses would bring coffee and doughnuts around, so I contented myself with looking at the clouds and trying to think about Amos Magaffey, who was purchasing agent for a Los Angeles amusement chain, and how I was going to convince him our printing prices were maybe a little higher but the quality and service were better. My mind wandered below where I was sitting, idly moving from one piece of luggage to another, looking for my beat-up suitcase. I went through slips and slippers, lingerie and laundry, a jig saw puzzle and a ukulele.

I never did find my suitcase because I found the bomb first.

THE bomb was in a small bag—a woman's bag judging by the soft, flimsy things you'd never find in a man's—and I didn't know it was a bomb right away. I thought it was just a clock, one of those small, quiet alarms. I was going to pass it by and go on, but what held me was that something was taped to it. By the feel, I knew it must be electrician's tape. Interested and curious, I explored the clock more closely, found two wires. One went to a battery and the other to hard round cylinders taped together. The hairs stood up at the base of my neck when I suddenly realized what it was.

The clock's balance wheel was rocking merrily. Quickly I went up past the train of gears to the alarm wheel. If this was anything like my own alarm clock, this one had something like ten minutes to go.

It was forty minutes to Burbank and Lockheed Air Terminal.

My mind was churning when I turned from the window to look around at the unconcerned passengers, the woman at my side asleep again. I thought: Which one of these . . . No, none of them would know it was there. I glanced out the window again; clouds were still in the way. We'd be leaving the valley for the mountain range north of Los Angeles soon, if we hadn't left it already. No place to land the plane there.

But of course that had been the plan!

My heart was beating in jackhammer rhythm; my mouth was dry and my mind was numb. Tell somebody about the bomb before it's too late! No, they'd think I put it there. Besides, what good

would it do? There would be panic and they'd never get the plane down in time—if they believed me.

"Sir." My head jerked around. The stewardess stood in the aisle, smiling, extending a tray to me, a brown plastic tray bearing a small paper cup of tomato juice, a cup of coffee, a cellophane-wrapped doughnut, paper spoon, sugar and dehydrated cream envelopes, and a napkin.

I goggled at her, managed to croak, "No, thanks." She gave me an odd look and moved along. My seatmate had accepted hers and was tearing at the cellophane. I couldn't bear to watch her.

I closed my eyes, forced my mind back to the luggage compartment, spent a frantic moment before I found the bag again. I had to stop that balance wheel, just as I stopped my alarm clock every morning. I tried to close everything off—the throb of engines, the rush of air, the woman sipping coffee noisily beside me—and I went into the clock and surrounded the seesawing wheel. When it went forward, I pulled it back; when it went back, I pulled it forward. I struggled with it, and it was like trying to work with greasy hands, and I was afraid I wasn't going to be able to stop it.

Then, little by little, it started to slow its beat. But I could not afford to relax. I pushed and pulled and didn't dare release my hold until it came to a dead stop.

"Anything the matter?"

My eyelids flew open and I looked into the eyes of the woman next to me. There was sugar from the doughnut around her mouth and she was still chewing.

"No," I said, letting out my breath. "I'm all right."

"You were moaning, it sounded like. And you kept moving your head back and forth."

"Must have been dreaming," I said as I rang for the stewardess. When she came I told her I'd take some of that coffee now. No, nothing else, just coffee. I didn't tell her how much I needed it. I sat there clammy with sweat until she returned. Coffee never tasted so good.

ALL right, so I had stopped the bomb's timer. My mind raced ahead to the landing. When they unloaded the luggage, the balance wheel would start again. I wouldn't be able to stay with it, keeping it still. I considered telling the authorities as soon as we landed, or maybe calling in ahead, but wouldn't that just bring suspicion, questions. Maybe I could convince them I could stop a clock—but not before the bomb exploded. And then what? My secret would be out and my life would be changed. I'd be a man not to be trusted,

a prying man, a man literally with gimlet eyes.

Mountain crags jutted through the clouds. We were in the range north of the city. Here and there were clear spots and I could see roads below, but there were also clouds far above us. It was very beautiful, but it was also very bumpy, and we started to slip and slide.

To my horror I found that the balance wheel was rocking again. Closing my eyes and gritting my teeth, I forced my senses to the wheel, tugging and pulling and shoving and pushing until it finally stopped.

A jab in the shoulder. I jumped, startled.

"Your cup," my seat partner said, pointing.

I looked down at the coffee cup I had crushed in my hands. Then I looked up into the eyes of the stewardess. I handed it to her. She took it without a word and went away.

"Were you really asleep that time?"

"Not really," I said. I was tempted to tell the woman I was subject to fits, but I didn't.

It was only a few minutes to landing, but they became the longest minutes of my life as time after time I stopped the rocking wheel when the plane dipped and bumped to a landing.

Leaving the apron with the other passengers, I tried to walk as unconcernedly as they through the exit gate. I would have liked walking through the terminal and out the entrance and away, but I could not. I had my suitcase to get, for one thing. The damned bomb was the other. So I strolled out into the concourse again to look at the plane and watch the baggagemen at work, transferring the luggage to two airfield carts. They weren't as careful as I would have been.

It was impossible to tell from this distance just which bag contained the bomb; I could hardly identify my own scarred suitcase. The assortment of bags—a strange conglomeration of sizes and colors—was packed in some places six deep, and it rolled toward the gate where I was standing. I didn't know whether to stay or run, imagining the balance wheel now happily rocking again. The load went past me down a ramp to the front of the air terminal where the luggage was unloaded and placed in a long rack. I went with it.

There was a flurry of ticket matching, hands grabbing for suitcases, and a general exodus on the part of my fellow passengers, too fast to determine who had got the one with the bomb. Now all that was left was the attendant and I had two bags—my own battered veteran of years, and a fine

new red overnight case, small enough to be the one.

I lit a cigarette, reached out. Inside were a woman's things and—a clock. The escapement was clicking vigorously.

I didn't moan this time. I just closed my eyes, stretched toward and grabbed the balance wheel I was getting to know like my own. I entered into a union with it so strong that after I had reduced it to immobility, it was like waking when I opened my eyes.

THE baggage claim attendant was staring at me. For only a moment I stared back. Then I quickly reached for my baggage check and presented it to him. His hand hovered over the handle of the little red bag and I was ready to yell at him. But then, matching numbers on the tags with his eyes, his hand grasped the handle of my own suitcase and pushed it toward me.

"Thanks," I said, taking it. I glanced ever so casually toward the remaining bag. "One left over, eh?"

"Yeah." He was so bored I was tempted to tell him what was in it. But he was eying me with a "well-why-don't-you-get-along?" look.

I said, "What happens if nobody claims it?"

"Take it inside. Why?"

He was getting too curious. "Oh, I just wondered, that's all."

I stepped on my cigarette and walked toward the air terminal entrance and put my suitcase on the stone steps there. A redcap came hurrying over.

"Cab?"

I shook my head. "Just waiting."

Just waiting for somebody to pick up a bomb.

I lit another cigarette and glanced now and then toward the baggage claim area. The red bag was still there. All sorts of theories ran through my head as to why it should still be there, and none satisfied me.

I should not have been there, that much I knew; I should be with a man named Amos Magaffey on Sixth Street at ten o'clock, discussing something very mundane, the matter of a printing order. But what could I do? If I left the airport, the attendant would eventually take the bag inside and there would be an explosion, and I wouldn't be able to live with myself.

No. I had to stay to keep the balance wheel stationary until —until what?

A man in tan gabardine, wearing a police cap and badge, walked out of the entrance to stand on the stone steps beside me while he put on a pair of dark glasses. A member of the airport police detail. I could tell him. I could take him down to the little red bag and explain the whole thing. Then it would be his

baby and I would be off on my own business.

But he moved on down the steps, nodded at the redcap, and started across the street to the parking area. I could have called to him, "Hey, officer, let me tell you about a bomb in a little red bag." But I didn't. I didn't because I caught a movement at the baggage claim counter out of the side of my eye.

The attendant had picked up the bag and was walking with it up the ramp to the rear of the air terminal. Picking up my own suitcase, I went inside in time to see him enter through a side door and deposit the bag on the scales at the airline desk and say something to the clerk. The clerk nodded and moved the bag to the rear room.

I could visualize the balance wheel once again rocking like crazy. How many minutes—or seconds—were left? I was sweating when I moved to the counter, and it wasn't because of the sunshine I'd been soaking in. I had to get as close to the bag as I could if I was going to stop the clock again.

"Can I help you?" the clerk asked.

"No. I'm waiting for someone."

I turned my back to him, put down my suitcase, leaned against the counter and reached out for the wheel. I found I could reach the device, but it was far away. When I tried to dampen it, the wheel escaped my grasp.

"Do you have my suitcase?"

I blinked my eyes open and looked around. The blonde in the plane stood there looking very fresh and bright and unconcerned. In her right hand she had a green baggage claim check.

The clerk took it, nodded, and in a moment brought out the overnight case and set it on the scales. The girl thanked him, picked it up, glanced at me indifferently, and then started for the entrance with it.

"Just a moment," I found myself saying, grabbing my bag and hurrying after her.

AT HER side and a little ahead of her, I said, "Listen to me."

She looked annoyed and increased her stride toward the door.

"It's a matter of life or death," I said. I wanted to wrest the bag from her and hurl it out through the doorway into the street, but I restrained myself.

She stopped and stared. I noticed a short, fat man in a rumpled suitcoat and unpressed pants staring, too. Ignoring him, I said, "Please put the bag down. Over there." I indicated a spot beside a telephone booth where it would be out of the way.

She didn't move. She just said, "Why?"

"For God's sake!" I took the case. She offered no resistance. I put her bag and mine next to the booth. When I turned around she was standing there looking at me as if I had gone out of my mind. Her eyes were blue and brown-flecked, very pretty eyes, and my thought at the moment was, I'm glad the bomb didn't go off; these eyes wouldn't be looking at me or anything else right now if it had.

"I've got to talk to you. It's very important."

The girl said, "Why?" I was beginning to think it was the only word she knew. At the same time I was wondering why anyone would want to kill someone so lovely.

"I'll explain in a moment. Please stand right here while I make a telephone call." I moved toward the phone booth, paused and said, "And don't ask me why."

She gave me a speculative look.

I must not have seemed a complete idiot because she said, "All right, but—"

I didn't listen for the rest. I went into the booth, closed the door, pretended to drop a coin and dial a number. But all the time I was in there, I was reaching out through the glass for the clock. At this range it wasn't difficult to stop the balance wheel.

Just the same, when I came out I was wringing wet.

"Now will you please tell me what this is all about?" she said stiffly.

"Gladly. Let me buy you a cup of coffee and I'll explain."

She glanced at the bags. I told her they'd be all right. We followed the short, fat man into the coffee shop.

Over coffee I explained it all to her, how I had this extrasensory ability, how she was the first person I had ever revealed it to, and how I had discovered what was in her overnight bag.

During the telling, her untouched coffee grew a skin, her face grew pale, her eyes grew less curious and more troubled. There were tears there when I finished. I asked her who put the bomb in her bag.

"Joe did," she said in a toneless voice, not looking at me any more but staring vacantly across the room. "Joe put it there." Behind her eyes she was reliving some recent scene.

"Who is Joe?"

"My husband." I thought she was going to really bawl, but she got control again. "This trip was his idea, my coming down here to visit my sister." Her smile was bleak. "I see now why he wanted to put in those books. I'd finished packing and was in the bathroom. He said he'd put in some books we'd both finished reading—for my sister. That's when he must have put the—put it in there."

I said gently, "Why would he want to do a thing like that?"

"I don't know." She shook her head. "I just don't know." And she was close to bawling again. Then she recovered and said, "I'm not sure I want to know." I admired her for saying it. Joe must have been crazy.

"It's all right now?" she asked.

I nodded. "A long as we don't move it."

I told her I didn't know how much more time there was, that I'd been thinking it over and that the only way out seemed to be to tell the airport policeman. After I explained it to her, the girl—she said her name was Julia Claremont—agreed to tell him she thought there was a bomb in her bag, that she had noticed a ticking and had become worried because she knew she hadn't packed a clock. It wasn't good, but it would have to do.

"We've got to get it deactivated," I said, watching the fat man pay for his coffee and leave. "The sooner the better."

I FINISHED my coffee in one gulp and went to pay the bill with her. I asked her why she didn't claim the bag at the same time the other people had. She said she had called her sister and the phone was busy for a long while.

"She was supposed to meet me, and when she wasn't here, I got worried. She said she isn't feeling well and asked me to take a cab." She smiled a little. It was a bright, cheery thing. I had the feeling it was all for me. "That's where I was going when you caught up with me."

It had become a very nice day. But the bottom dropped out of it again when we reached the lobby.

The two bags weren't there.

I ran to the entrance and nearly collided with the redcap.

"See anybody go out of here with a little red bag and an old battered suitcase?"

"Bag? Suitcase?" he mumbled. Then he became excited. "Why, a man just stepped out of here—" He turned to look down the street. "That's him."

The dumpy man I'd seen was walking off; Julia's bag in his right hand, mine in his left. He seemed in no hurry.

"Hey!" I shouted, starting toward him.

The man turned, took one look at me, and started to run. He came abreast an old gray, mud-spattered coupe, ran around, opened the door and threw both bags into the rear seat as he got in.

The car was a hundred feet away and gathering speed by the time I reached where it had been parked. I watched it for a moment, then walked back to the entranceway where Julia was standing with

the redcap, who said, "That man steal them suitcases?"

"That he did," I said.

Just then the airport policeman started across the street from the parking lot. Redcap said, "Better tell him about it."

The policeman was sympathetic and concerned. He said, "We'd better get over to the office."

But we never left the spot because an explosion some blocks distant shattered the air. Julia's hand grasped my arm. Hard.

"Jets," the redcap said, eying the sky.

"I don't know," the policeman said. "Didn't sound much like a jet to me."

We stood there. I could visualize the wreckage of an old gray coupe in the middle of a street, but I couldn't visualize the driver. That was all right. I didn't want to see him. I didn't know what Julia was thinking.

She said, "About those bags," and looked at me.

The officer said, "Yes, miss?"

"I—I don't care about mine. I didn't have much of anything in it."

"I feel the same way," I said. "Would it be all right if we didn't bother to report it?"

"Well," the policeman said, "I can't *make* you report it."

"I'd rather not then," Julia said. She turned to me. "I'd like some air. Can't we walk a little?"

"Sure," I said.

We started down the street, her arm in mine, as the air began to fill with the distant sounds of sirens.

END

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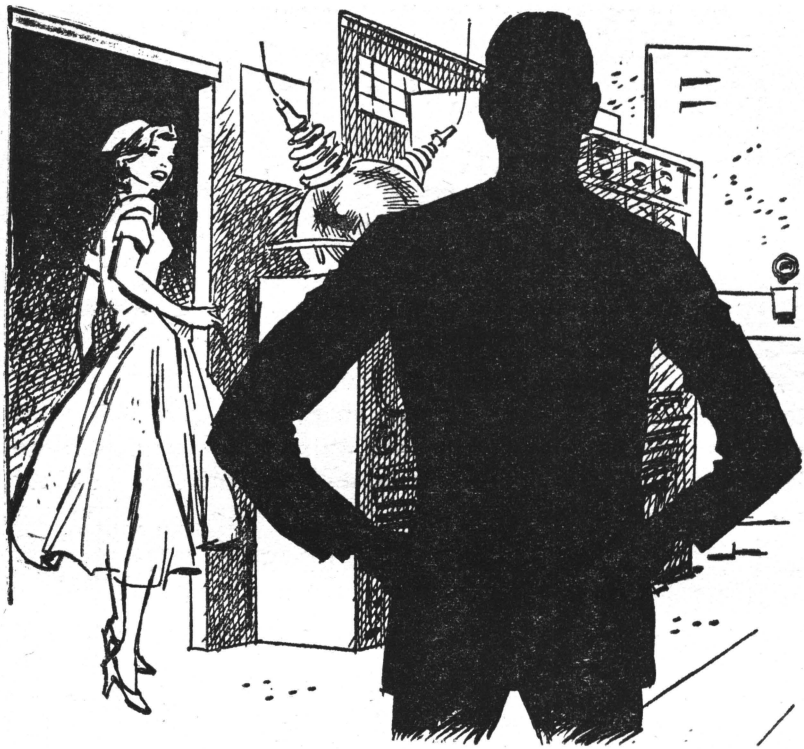
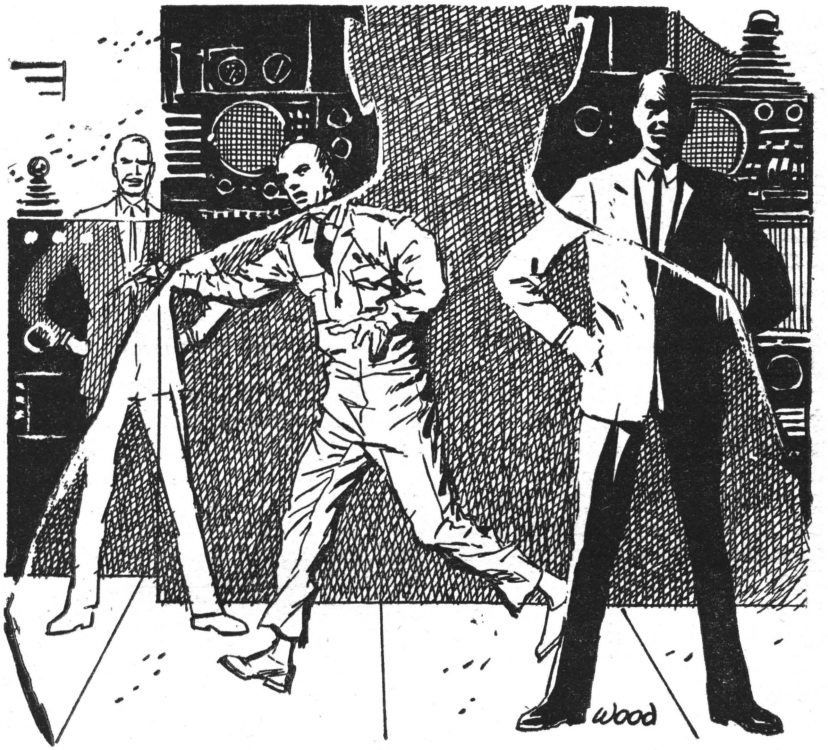


The

They went somewhere and something happened to

was to go there

HUNCHED tensely over the foot of the bed, Bradford Sanderson stared down at the unconscious sergeant. There was a heavy stillness in the hospital room. Outside, beyond the window, the sun-splashed expanse of the Army medical base stretched away toward the glaring beach and the shimmering Gulf waters beyond.



Last Leap

By DANIEL F. GALOUYE

them—and the one way to find out where and what

and let it happen!

The door opened and closed softly, admitting a lean and erect Medical Corps colonel.

"Has he come around yet, Doctor?" he asked in an uneasy whisper.

Dr. Sanderson shook his head. "No, but he's sleeping lightly. He'll be awake in a minute."

"Think you'll do any better with this one?" The colonel's

voice sharpened to an apprehensive edge.

"I intend to take all precautions, Dr. Vickers. I don't think we'll lose McNaught."

"God, I hope not," Vickers said, relieved only a little. "We've already got the Bureau breathing down our necks over the first two—ah—accidents."

"I'm sure we have nothing to fear this time," said Sanderson.

For his forty-eight years and despite the flecks of gray in his hair, there was a preserved air of youthfulness about the physicist. Stocky and in obvious good trim, he presented an appearance that belied his professional status.

The door opened and closed again, as softly as before, and a woman whose dense black hair contrasted her Army nurse's uniform came and stood between the two men. Slightly built and attractive, she fixed the slumbering sergeant with an anxious stare.

Vickers glanced at the hypodermic syringe in her hand. "Sodium pentothal, Miss Connerly?"

She nodded without looking at him. "Two hundred cc."

Drawing in a deep breath, the sergeant rolled over and buried his head luxuriously in the pillow. The movement, however, did little to dishevel his bristly blond hair. His eyes flicked open and he stared abstractedly at the others. Then he smiled and his lips parted to form a word.

"Easy now!" Sanderson cautioned. "Don't think about *anything!* Just keep your mind blank!"

ALL expression drained from the sergeant's face. His naturally ruddy features blanched imperceptibly, as though he had remembered something of appalling consequences.

Colonel Vickers and Miss Connerly moved precautiously away from the bed.

"Did it take?" McNaught asked, sitting up.

"That's what we're going to find out now," Sanderson replied. "And that's *all* we're going to find out."

Exploring the floor, McNaught's feet found and squirmed into his slippers. Then he rose, straightened his pajama blouse and reached for his robe. He was a tall, well-proportioned man and his excessive size was evident in the skimpy fit of the hospital garments.

"Take it slow," Sanderson soothed again, backing off before the sergeant. "Just do as we say—*nothing else.*"

McNaught tightened the robe sash and offered a smile that was intended to be reassuring. "If you're thinking about Watterman and Fisher," he said lightly, "they'll be back. They just took French leave and—"

"*Blank,* Sergeant!" Sanderson cut in. "We don't want you thinking of *anything* that might make you pop away impulsively. Now—are you all set?"

Miss Connerly strained forward, her intense gray eyes vigilant with restrained apprehension.

Vickers glanced uncertainly behind him and eased back.

Sanderson stepped to one side, as though it might be necessary to get out of the sergeant's way. "The opposite corner of the room—and *that's all,*" he directed. "Ready Go!"

Instantly there was a double thunderclap of minor intensity—like two distant jets slipping through the sound barrier—as McNaught disappeared from where he was standing and reappeared simultaneously in the designated corner.

The sergeant turned and faced Sanderson triumphantly. "It works!"

But the physicist sprang across the room, signaling for Miss Connerly at the same time.

"Let him have the injection!" he told the nurse. "Easy, son. Everything's going to be all right. *Just don't think!* Dr. Vickers, help me bring him back across the room."

The injection took effect almost immediately and it required the efforts of both men to get McNaught comfortably positioned in bed.

Sanderson shook his head briskly, trying to clear the ringing in his ears. And he wondered whether he would ever get used to the unexpected explosions that resulted as air rushed into the suddenly vacated space and was abruptly expelled from the newly occupied one.

LATER that evening, Vickers paced nervously in Sanderson's office while Sanderson chronicled the day's incidents in his official record book.

Unsettled by the colonel's restlessness, he paused and looked up irately. "I wouldn't worry too much about McNaught. He's going to do all right."

"That's what you said about Watterman and Fisher."

"But the sergeant has good control. He knows the meaning of the word restraint."

Vickers cast him an unconvinced glance and continued pacing. "That's the way it was with Watterman and Fisher—at first. They went slow. They had a lot of respect for teleportation—until they started throwing caution to the wind and went popping all over the place."

Sanderson rose, packing his pipe bowl with a crooked thumb. "McNaught's forewarned by the disappearances of the first two subjects. You

can be sure he's going to be damned careful."

Vickers leaned backward against the desk and folded his arms, while the physicist lit his pipe and raised a thick white cloud of fragrant smoke between them.

"What do you suppose happened to Watterman and Fisher?" the colonel asked grimly.

"That's what McNaught is going to help us find out."

"Collision with something solid?"

Sanderson shook his head. "You don't pass *through* anything en route from one place to another."

"I mean in the rematerialization. Maybe Watterman and Fisher popped up in a space that was already occupied."

"Impossible. Watterman cleared that for us months ago. He proved rematerialization can take place only in gaseous spaces or attenuated liquids. He even *tried* to reappear within a brick wall. The best he could do was to pop out next to it."

Still, Vickers was not mollified. His thin, rough hands rigidly gripped the edge of the desk behind him as he stood there with one leg crossed over the other. He shook his bowed head regretfully and the light from the cortical excitation laboratory in the next room sent glistening highlights dancing across his slick scalp.

"Maybe they popped off to a polar region and froze to death," he speculated sourly.

"That, too, is highly unlikely. There's a lot of reflex action involved. Waterman, after his second excitation, *did* go to the Arctic, you'll remember. He was only there about three seconds—long enough for the cold to begin seeping in—before he found himself back in his room. Fisher even tried a surge into space, without any injury at all. His reaction to a vacuum was so spontaneous that I don't imagine he spent more than a hundredth of a second out there."

Nodding absently, Vickers lighted a cigarette with unsteady hands while Sanderson returned to his record book. But the physicist only sat there staring thoughtfully through the surface of the desk, pen poised over the lined paper.

WATTERMAN had gone first. There had been his initial reaction to cortical excitation — uncertainty, perhaps even a tinge of fear. His leaps during the first day were executed with a gingerly reluctance. By the second day, however, he had overcome all his qualms. And before the stimulated frontal region of his brain had returned to normal at the end of the third day, he had materialized in four different sections of the country.

It was after his second exposure to the multiple-frequency stimulus a month later, however, that he had lost himself in an orgy of teleportive experiences, cropping up in so many places throughout the country and abroad that the story had to be released.

Only then did the public become aware that, under direct subsidy of the Bureau of Research, Bradford Sanderson's previous experiments in exciting telepathy had been ingeniously expanded to include teleportive ability. It was Watterman's materialization at the United States Moon Base, the physicist recalled, that had forced the Bureau to release the findings of the experiment in order to avert panic.

The next day—that was five months ago, Sanderson recalled as he pulled pensively on his pipe—Watterman had disappeared, literally, completely, permanently. He had left behind only a vacuous tranquility in the hospital room, ruffled solely by rustling curtains that quietly altered the pattern of sunlight on the floor as they swayed with the Gulf breeze.

With Fisher, it had been different. Sanderson had questioned his selection as a volunteer. Thin and fidgety, he had definitely turned out to be the excitable type. And exposure to the catalytic frequencies had only heightened his nervousness to the extent that before he disappeared he had even shown psychotic tendencies.

His teleportive leaps had been few indeed and were executed only after inordinate coaxing. Only once during his entire phase had he shown any initiative. That was on his jump into empty space. But even afterward—until he had vanished permanently from under a shade umbrella on the beach several hours later—he had disclaimed any intent in the feat. Rather, he had insisted that it was the result of an "auto-suggestive impulse."

With McNaught, though, it would be different, Sanderson promised himself. The sergeant was as perfectly balanced, mentally, as any person he had ever known.

"I wonder," Vickers said, stubbing out his cigarette in the ash tray, "whether Watterman and Fisher will ever be heard from again."

"I like to think they will." Sanderson cupped his hands around the warmth of his pipe bowl. "I tell myself that in both cases, and perhaps coincidentally, they were stranded in remote areas just as the effects of the stimulative frequencies wore off."

"That could have been the case with Watterman," the colonel admitted. "He disappeared toward the end of his second three-day period. But Fisher was in phase less than

a day and a half when it happened to him."

"Maybe the stimulation wasn't as strong in Fisher's case."

"Maybe," said Sanderson.

Vickers turned to leave, but paused near the door. "By the way, the Under Secretary of Research is due in tomorrow morning."

"Peabody? What does he want?"

"Mainly to keep abreast of what's going on. If we lose McNaught, he probably has orders to put his foot down on your work."

"That's bad. I didn't want any interference during the sergeant's three-day phase. As a matter of fact, I'd planned to have him spend most of tomorrow on the beach. That'll help keep his mind occupied."

Vickers shrugged. "You'll have to see Peabody first."

UNDER SECRETARY of Research Sylvester A. Peabody was impressive both in size and proclivity to imposition. The adjectives "Washington" and "bureaucratic" were stamped all over him—in the intolerant set of his jaw, the disdainful sharpness of his eyes, his mannerism of wielding an otherwise nonfunctional pair of glasses to stress a point.

He had taken possession of Sanderson's desk by the next morning and, for the better part of an hour, had thumbed through the day-by-day chronology on all the experimental work.

He looked up abruptly. "So now it's Number Three?"

Annoyed over the loss of time, Sanderson said nothing.

"And what makes you think we'll fare any better with this new subject?" Peabody asked.

"For one thing, I altered three of the basic frequencies," the physicist explained wearily. "There may be a correlation between some of the ultra-wave forms and the feeling of a compulsion to teleport."

The undersecretary rose and thumped his knuckles with the spectacles. "As I understand it, both Fisher and Watterman said that at times they felt this almost uncontrollable impulse to—as you say—make a leap."

Sanderson nodded. "Watterman found himself jumping on several occasions when he merely *thought* about another location."

"And you believe you've corrected this rashness in McNaught?"

"Sergeant McNaught went through extensive training and thorough conditioning for two months before exposure. I consider him well insulated against any whimsical use of his ability."

Peabody struck a pose of thoughtfulness as he stared out the window.

Impatiently, Sanderson

checked his watch. It was almost noon and he had thus far managed to spend only two hours with the new subject. But it had been a most rewarding two hours. McNaught had executed over a dozen controlled leaps, two of them covering distances of better than a mile. And if the sergeant had felt any inner elation over the experiences, he had not shown it. Exhibiting only a purely impersonal approach to the manifestation, he hadn't taken a single impulsive leap.

But if Sanderson was going to continue with his planned program of sensible indoctrination for McNaught, he realized, he would have to break away from Peabody soon. For nearly a third of the sergeant's three-day phase had already been used up and as yet he had been subjected to nothing but a false, laboratory environment.

The undersecretary turned and spoke with a precise, meaningful inflection. "If you lose this third subject, Sanderson, your project is going to be indefinitely abandoned."

"McNaught's secure."

"As I understood it, so were the first two."

"You'll have to admit that it's possible they may have simply taken French leave—Watterman because he was naturally frivolous and Fisher because he was afraid."

"That's just the point!" Peabody banged the desk. "Do you realize that for months now security has been sweating? Don't you see what it would mean if the details of your work fell into hostile hands?"

"It can't happen. Wherever they go, the subjects take no knowledge of the process with them."

SANDERSON didn't manage to get away with Sergeant McNaught and Miss Connerly until almost three that afternoon. But that was just as well, he conceded as he helped unpack the chairs, umbrella, lunch basket and brazier at the beach. The hottest part of the day was behind them now and cool offshore breezes were beginning to moderate the tepid glare of white sand and glistening water.

Eventually, the physicist settled down in one of the chairs, fished in his pockets for his pipe, and began planning a series of more ambitious leaps for the sergeant to perform later that afternoon.

McNaught shed his polo shirt and helped the nurse off with her beach robe.

"Come on, Kate," he challenged. "I'll race you to the water."

Sanderson watched the couple sprint away while the sun played softly against their lithe forms. But several yards

from the water McNaught swerved to spare the architectural integrity of a deserted sand castle, lost his balance and toppled. Miss Connerly, unmindful of the sergeant's mishap, raced on, splashing through the shallow water and plunging headlong into a frothy breaker.

At once there was a muffled double explosion as McNaught vanished from where he had sprawled on the sand and rematerialized in the water beside the girl. And, accommodating his impetuous entry, the water shot outward and upward in a geyserlike spray.

Sanderson bolted from his chair and raced across the beach. Scarcely aware that he was in water above his shoes, he cupped his hands and shouted, "I didn't tell you to leap!"

"I didn't either." McNaught displayed a confused frown. "It just sort of—happened."

Sanderson stiffened. Was this a first indication of capricious reaction? Was McNaught losing his detached calmness? Was he headed the same way as Watterman and Fisher?

"You'd better come on in," Sanderson said.

"I'm sure he'll be all right, Dr. Sanderson," the nurse interceded. "It wouldn't have happened if I hadn't encouraged that spurt of exertion."

Perhaps she was right, the physicist granted hopefully. After all, reaction could only be expected to become reflexive to a certain degree during physical activity.

Still, he went back to the station wagon, opened the glove compartment, took out the hypodermic syringe case and put it in his hip pocket.

EARLY that evening, while Sanderson was fanning the coals in the brazier, McNaught and Miss Connerly returned from a twilight walk along the beach.

They stood on the other side of the fire for a long while, letting the lambent glow cast a mantle of ruddiness across their features.

"I think we're making excellent headway," the physicist enthused, spearing three wieners with a fork and subjecting them to the heat of the coals. "I particularly like the way you're showing restraint. By this time Watterman was hopping all over the country."

With satisfaction, he thought back over the experiments he had put McNaught through late that afternoon. He had negotiated leaps to the island, to a point several miles down the beach and to Colonel Vickers' office and back. And, unlike the first two subjects, the sergeant had still shown no further tendency toward impulsive teleportation.

Sanderson looked hastily over at the couple, realizing

only then that there was a tense silence between them. And now he saw that their faces were strained with uncertain expressions.

"It—happened again," the girl said awkwardly.

Sanderson let the wieners drop to the sand. "Another involuntary hop? Where to this time?"

"I just couldn't help it," McNaught apologized. "I was thinking about home—on the West Coast. We've got a beach just like this. And suddenly I was standing on it. I would not even have known the difference if it hadn't been for the fact that the sun was still shining over there."

"That settles it!" the physicist exclaimed. "Let's get him back to the base, Kate. He's going to sit out the rest of his phase with a few hundred cc of pentothal!"

McNaught gripped Sanderson's sleeve. "I'll be all right. Let me stick it out—for a few more hours, at least."

"I think Dr. Sanderson is right," the girl said. "It's best to play it safe." She went over to retrieve her robe.

McNaught, however, only stood staring down at the glowing coals. A large moth buzzed against his face, but even that failed to snap him from his thoughts. Sanderson reached out and took him urgently by the arm.

But the sergeant pulled free, brushing the insect away at the same time. "No, wait! I think—"

He paused and his eyes were vivid with sudden apprehension. "I think I know what happened to Watterman and Fisher!"

The physicist laced him with a questioning stare.

McNaught lurched back. "No!" he shouted. "Don't ask me! I *can't* talk about it!"

Sanderson lunged for him. But he vanished, reappeared a few feet away, moonlight glistening on his trembling shoulders.

Kate raced toward him and he disappeared again, materializing this time close to the physicist. And Sanderson was ready with the hypodermic.

THE next morning the physicist's drawn face showed the effects of a sleepless night as he called down for coffee and shaved in the lavatory adjoining his office.

When he went back to his desk, Vickers was in the room, looking haggard and nervous. The colonel's tie was askew, and around his bald crown, his peripheral fringe of hair was ragged, like the leaves of a Roman chaplet.

He dropped into a chair opposite the desk. "At least I got rid of Peabody. He's gone back to Washington."

Sanderson tensed. "You tell him what happened?"

"Of course not. I simply explained that we cut the experi-

ment short to evaluate what we've observed thus far."

The physicist thrust his hands in his pockets and went to the window, looked out blindly, turned and came back. "I don't understand it. I can't imagine what unnerved McNaught so completely last night."

"You should have pressed him for an explanation."

"No," Sanderson disagreed. "I think that might have been disastrous. When he materialized next to me—don't you see?—he must have *wanted* that injection."

Vickers spread his hands. "What do we do now?"

"Keep him under sedation until the effects of the frequency exposure wear off. We only have a little more than a day to sit it out. Then I'm going to re-examine *every inch* of theory."

He went over to his desk, opened the record book and wrote four or five lines. Then he looked up as Miss Connerly entered with the coffee he had requested.

"I'm glad you're here, Kate," he said, relieved. "When did you give McNaught that last injection? It was three o'clock, wasn't it?"

Pen poised over the next blank line, he waited for her answer. When he looked up finally, he saw only dismay on her face.

"I thought—" she began. "Didn't you say—I mean, you told me just after midnight that the *other* nurse would take care of it, didn't you?"

Sanderson sprang up. "I said she would *prepare* it! She went off duty at two-thirty!"

Lunging for the door, he brushed against her, jolted the tray and sent coffee sloshing over the brims of the two cups. Vickers stayed close at his heels all the way down the corridor.

McNaught's room was empty.

The top sheet on his bed had been carelessly thrown back. An overturned glass of water, its puddle still dripping off the edge of the night table's surface, suggested that he had only recently awakened. His robe was gone, as was one of his slippers. Sole up, the other lay halfway between the bed and the reading table.

Sunlight splotched the single sheet of writing paper on the table. With an unsteady hand, Sanderson picked up the scrawled note:

How can I warn anybody without even thinking about it? The urge to teleport can sneak up on you. It can also be an overpowering compulsion. But how can I tell you? How can I keep myself from thinking about something, and at the same time write about what it is I'm not supposed to think about? I know what happened to Watterman and Fisher. They wen

The writing ended abruptly, as though the pen had been snatched cleanly up and away from the paper.

IT WAS almost midnight that same day when Vickers, having searched Sanderson's quarters and the hospital for the physicist, tried the laboratory on the strength of a hunch.

In the doorway, the whining surge of energy in the excitation circuits drew a startled breath from the colonel. He plunged on into the room, racing past the restless generators, past the towering banks of rectifiers and oscillators, past the ultra-frequency converters.

"You fool!" he shouted as he covered the remaining distance to the excitation chair and began snatching electrodes from the band that circled Sanderson's forehead.

He knocked aside the final three glowing parabolic reflectors. "You damned silly fool! What are you trying to do?"

Sanderson felt no immediate effects from the exposure, despite the fact that there had been no anesthetic.

"It had to be done," he said evenly.

"Why? So you could go the same way Watterman and Fisher and McNaught went?"

"I've got to know what happened to them."

"It doesn't make any difference now." Vickers appeared to be growing even more perturbed. "The Bureau's going to shut down the project anyway!"

Sanderson rose and passed a hand over his forehead, fingering the impression left by the electrode band. "That's just it. They'll shut us down and we'll never know what became of McNaught and the others."

"What do you expect to do?"

"The same things they did, I guess," the physicist said, shrugging. "I don't suppose I'll have any trouble duplicating their final experience."

He stared at a cleared space in the opposite corner of the laboratory. And even before he could completely summon the intent to leap, he found himself at once on the other side of the room.

Aghast, Vickers raced after him. "Sanderson—*don't!* You aren't even conditioned against impulsive jumps!"

"That's the way I want it," the physicist said impassively. "All the preparations we went through with McNaught did no good. He still hopped—three times that we know of. So maybe I don't care about self-restraint."

He leaped again, this time popping up in the doorway to his office.

Hands spread in a supplicating gesture, Colonel Vickers followed. "Watterman was not interested in restraining

himself. He leaped as much as he wanted. And he finally vanished too."

"I don't give a hang if I *do* disappear." Sanderson turned away. "I'm going to find out where those others went. And the only way to do it is to take the same course they took and see what happens."

He flicked out of sight and ended the leap in the corridor outside his office.

"SANDERSON!" The colonel's voice came excitedly from within the room. Then the door swung open and Vickers burst into the hall. "Call this crazy thing off! Look, I have an idea. In teleporting from one place to another, you have to go *through* something, even though it seems instantaneous. Through some other plane of existence, perhaps. And maybe when you don't come back—when the others didn't come back—it was because they got stuck in between!"

Sanderson turned his back. Immediately the corridor was erased from his vision, only to be replaced in the next instant by the ponderous railing of a concrete bridge and, beyond, a river whose dark waters sent wisps of mist into the chill air. On his left, the bridge abutment clung to the shore of the *Ile de la Cité* and, farther in the distance, the Cathedral of Notre Dame's great, slender spire rose against the pink-gray dawn sky.

A startled Parisian, witnessing the materialization, shouted a fervent "Mon Dieu!" and promptly got his foot caught in the spokes of his bicycle, catapulting over the handle bars.

At once Sanderson was back in the hallway with Vickers, who was shouting for Miss Connerly.

The colonel lunged for him but missed as Sanderson teleported to a new position behind him.

"For God's sake!" Vickers shouted. "Stop it—just for a minute, anyway! I have another theory. What if the protective reflex doesn't always work? Maybe Fisher was just lucky when he was able to leap out of space immediately! Suppose he returned to space later—*and panicked before he remembered he could jump back to safety!*"

A sudden assault of violent suction and intense cold sprang in on Sanderson, as though he had been snatched up in a giant's hand. In a shutterlike glimpse, he was fleetingly aware of a broad sweep of blackness, spangled with a myriad brilliant stars, of a vast, shadowy surface hundreds of miles below that shone softly in the light of a full moon.

In the next instant he was standing on the beach not far from the spot where he had

picnicked with McNaught and Kate the day before. The same moon sent its light down to embrace him and he stood there in silent concentration.

The last leap, he realized, had *not* been voluntary. Vickers had merely spoken about space and, on the strength of that suggestion, Sanderson had unintentionally duplicated Fisher's experience.

So it *had* been spontaneous. So what? Maybe that was where they had made their mistake all along—in thinking that impulsive teleportation must be rigorously avoided. Maybe he should let himself go completely—leap whenever and as often as he could, with or without his volition, wherever his fancy led.

Complete surrender to the impulse, wearing himself out in wild overindulgence—that might be the formula for establishing teleportation on a totally conscious and controllable plane. If you filled a man with food, it was only logical that he would have no appetite, wasn't it?

Abruptly he was back in the hospital corridor. Only it was empty now.

But not for long.

VICKERS darted out from the room that Fisher had occupied. "Miss Conn—"

He spied Sanderson, paused, then came forward cautiously. But the physicist had already seen the hypodermic syringe which Vickers was now trying to hide behind his back.

There was a furtive sound in the other direction and Sanderson spun around. Kate was closing in on him from the rear with another hypodermic.

But the visual impression of the nurse was blotted out and immediately replaced by a blaze of lights that sparkled against a background of glistening wet buildings and dripping sky. Then, in the fierce glow of a lightning bolt, Times Square stood out in eerie white clarity. Hunched under an umbrella, a man and woman in formal dress brushed past him and continued on down a Broadway that was almost deserted in the thunderstorm.

Leaping to New York, Sanderson assured himself, had not been involuntary. This time he had predetermined his destination.

And in a quick follow-up to establish the self-impelled nature of his movements, he teleported to the base of the Washington Monument, noting that there was no storm in the nation's capital; to Fisherman's Wharf in San Francisco, where the moon was noticeably lower in the sky; to State Street in the Chicago Loop, which he left as soon as he felt the first cold drops of rain.

Then suddenly he was back

in the quiet of Fisher's room in the hospital, only now beginning to feel the first sensations of exuberance over his far-ranging travels. But he repressed it, remembering his resolve to reject a sensation of exhilaration. If he was to learn what had happened to Watterman, Fisher and McNaught, *and return to tell about it,* his attitude would have to be one of scientific objectivity.

With a sudden rebirth of determination, he set out again—to a desolate polar ice field, remaining there until the severe cold pierced his clothing like dagger points of fire —to the crest of the Koolau Mountain Range on Oahu, looking down first on sprawling Honolulu and then at the sun sinking in the ocean beyond—to London, where he stood at the base of Lord Nelson's Column in Trafalgar Square and watched the first faint splashes of dawn appear in the eastern sky—to a rugged peak in the Rockies, from which he enjoyed an enchanting view of the artificial, geometric brilliance of Denver.

Exhausted, finally, he let himself return to the hospital room and took one final leap to the bed. He stretched himself across its tightly drawn sheet and fell quickly asleep.

CERTAIN that it must have been at least half an eternity later, Sanderson finally opened his eyes and turned his face away from the bright sunlight that was falling on his pillow.

He reached over and rubbed his arm, realizing at once that it was sore from a number of needle punctures over a considerable period of time.

He had thrown himself across the bed fully dressed, but he was now in a hospital gown and lay under the sheet. Someone, perhaps as a result of anxious waiting, had kept the desk calendar up to date. And he noted, as he had previously suspected, that it was not the day after his exposure to the ultra-frequency excitation, but rather three days later.

Still groggy, he reached over to the night table and poured himself a drink of water. Then, trying to keep his mind on immediate considerations, he sat up.

Colonel Vickers strode briskly into the room and grinned when he saw Sanderson awake. "It's about time you came around."

"I suppose you think I ought to thank you for pulling the rug out from under me the other night," grumbled Sanderson.

Vickers shrugged. "Doesn't matter."

"Suppose I'm not cured?" Sanderson suggested warily. "What if I decide to put myself through another excitation treatment?"

"That doesn't matter either —what you decide, I mean. Peabody's been back. He ordered the laboratory apparatus dismantled."

"And has it been?" the physicist asked.

Vickers nodded, giving no indication that he had detected the note of amusement in Sanderson's voice.

He came over and gripped Sanderson's shoulder. "I know you're pretty wobbly, so take it easy. Get up and around whenever you think you're up to it. I'll have a light breakfast sent in as a starter."

After the colonel had gone, Sanderson allowed himself a smug smile. It had all happened as he had planned. First the exhausting workout during his initial couple of hours of teleporting. Then the long rest with its total lack of mental activity to allow time for him to become psychically attuned to the new ability without any further chance of overdoing it.

And now here he was—conscious and fresh and ready to embark on the second stage of his plan to learn what had happened to the other three subjects. He wondered how long it would be before Vickers found out he had given himself a strong enough exposure to the ultra-frequencies to insure a *six*-day teleportive period instead of the usual three.

But he was not ready for any more leaps now. He wanted time to think—to evaluate his experiences and attitude, to compare them with those of Watterman and Fisher and McNaught. Then he would apply logic to the overall phenomenon and see whether some obscure explanation of the disappearances wouldn't suggest itself.

Eventually, an orderly brought in the breakfast tray with its tomato juice, soft-boiled eggs, toast and coffee, and Sanderson dived voraciously into the meal.

AFTER he had finished, he complimented himself on the fact that he had not teleported involuntarily since his awakening. And this strengthened the hope that his theory had been correct—that by allowing himself free rein with both deliberate and impulsive teleportation, he had exhausted his inclination to unintentional leaping.

He pushed the tray aside, put on his robe and slippers and walked over to the window. And he stood there staring out through the brilliant morning glare at the handful of patients in deck chairs who were drinking in the sunlight on the convalescent porch.

McNaught, he remembered quite clearly now, had solved the enigma. But in trying to get the warning across, he had somehow only hastened his final disappearance.

Abruptly Sanderson was thinking back to the night before the sergeant had penned his last frenzied words—to the beach scene in which the youth had practically gone berserk and had begged not to be pressed for his theory on what had happened to Watterman and Fisher.

Something—something that had occurred just before then, or perhaps it was merely something he had thought about—must have inspired the sergeant's comprehension.

Sanderson reached desperately into his memory of that night, trying to recall in detail what McNaught had said and done. But it was almost as though his mind were a blank. He was trying too hard, he supposed. And he longed for a cigarette so he could relieve his mind momentarily of the self-inflicted ordeal.

Instantly, he was standing before the night table and looking down at his pack of cigarettes. And his hope and confidence were immediately shattered. He hadn't, after all, succeeded in quelling involuntary teleportation. He was no better off, he sensed, than the other three had been before their disappearances.

He felt a persistent desperation closing in on him. It was quite possible, he realized dismally, that he might soon face the necessity of solving the puzzle as the sole means of saving himself.

The window of an automobile, driving along the road in front of the hospital, flashed an intense reflection into the room. Sanderson shielded his eyes against the sudden burst of light.

And abruptly he was thinking of McNaught again—on the beach, bending over the hot coals, insensitive to the fluttering of a moth in his face, finally becoming aware of the insect and then curiously following its swirling flight around the brazier.

Sanderson fell back against the bed, astonished and terrified.

Good God! It wasn't—it *couldn't* be—

Not that!

Even as his thoughts turned entranced toward the concept, he lashed them down with a frantic surge of resistance.

He wouldn't think about it!

The mere approach of the idea to his consciousness would mean the end. Yet he knew that ultimately it would be impossible to keep the hypnotically compelling thought from his mind.

He forced his concentration into another channel—to McNaught's note that had hopelessly asked:

. . . How can I keep myself from thinking about something and, at the same time, write about what it is I'm not supposed to think about? . . .

There was only despair in the realization that now he, too, faced the same paradoxical predicament. Not that he intended writing a warning; that wasn't necessary, since there would be no more experimental subjects. But he would have to find a way of getting a message across if he was going to save himself.

ONCE more, the forbidden thought assailed the fringe of his consciousness and he barely succeeded in driving it back into obscurity again. But how long could he keep it up?

He stood paralyzed beside the bed, afraid that even the slightest movement would somehow trip the trigger that was hidden so close to the surface of his thought stream.

If he could only find some way of letting them know he was in danger! Naturally, he wouldn't be able to say what the peril was. For he would have to bring it to the surface of his mind first. And that, in itself, would be fatal.

But if they knew he was still in the teleportive phase, and if they saw the perspiration on his face and his expression of horror, then they would certainly realize the immediate need for sedation.

One simple sentence would do it. And he could pen that message without skirting too close to the forbidden thought.

Cautiously, he made his way to the writing table. As though he were sitting on an explosive that might go off with any one of his next movements, he gingerly wrote:

I exposed myself for a six-day period!

The door opened and he turned slowly to watch Kate Connerly enter. He waved the sheet of paper so that she might see it and come read what he had written. He would have shouted the message, but just then he was frantically fighting off an impulse to open his mind to the thought that would send him on his last impulsive leap.

He tried to make a noise in his throat. But nothing came out.

He stared terrified at the chair and the blanket that was draped across her other arm and he wanted to shout: *Not that! Not that!*

But even thinking about the protest invited a return of the disastrous thought.

She took a quick glance in his direction, not really seeing enough to sense that something was wrong, and began wrestling the chair again.

And even before she said them, he knew that she would speak the fatal suggestive words:

"It's *such* a beautiful day outside, Dr. Sanderson. You're going to go bask in the sun."

END

Worlds of if

Book Reviews by Frederik Pohl

TWO of the most complicated brains recently applied to science fiction are to be found in the skulls of Robert A. W. Lowndes and James Blish. Blish in his own right has produced a dozen science fiction books, most good, some outstanding. If Lowndes has been less prolific, it is because he has spent the last twenty years editing science fiction (and other) magazines, thus putting most of his creative thought into other people's stories.

In their first collaboration novel, *The Duplicated Man* (Avalon), these two have brewed such a mash of invention and imagination as has not been seen since van Vogt. The distillate is raw, but it is dizzying and sometimes very sweet. We have every reason to believe that Blish-Lowndes wrote this novel with tongues in cheek; certainly at least a part of their intention was to caricature the smirking stick figures which so impossibly triumph in a typical van Vogt work (which are—has anyone noticed?—the same soulless, pointless totems as populate the works of Ayn Rand). In this they succeeded. But they did more. They produced a novel.

Their central character is Paul Danton. He is the Duplicated Man. Blish and Lowndes describe him as a cardboard figure: he is a dedicated revolutionary but a totally ineffective one; he hates the world state, but can find no better tactic to use against it than joining an underground conspiracy which has yet to achieve its first success of any kind. This doesn't matter. Blish-Lowndes need Danton only to serve as a canvas on whom they can paint half a dozen other characters, each part Danton and part someone else. The interplay of the seven duplicated Dantons is one of the great merits of the book.

The action of the story concerns (among much else) a sort of planned cold war between Earth and Venus, a war that is based on deception and sustained by fraud. The ruling bodies of each planet are all working at cross purposes, each individual councilor trying to achieve his own cryptic aims, both groups honeycombed with espionage and riddled with disloyalty. There

is always an overt purpose (irrelevant) and a real purpose (concealed) for every act. When the interplanetary war finally hots up, it is waged with nearly Nexialist strategy. Floods of nuclear missiles are mere diversions. The ultimate victorious stroke consists of rolling an empty barrel down a long flight of stairs.

The Duplicated Man is a fantastically complicated book. In inept hands, it would be utterly tiresome. In the hands of Blish and Lowndes, it is—amazingly!—clear, logical and gripping. It possesses cascades of inventive detail, big (the marvelous immortal, Geoffrey Thomas) and little (the characteristic smudged lips of the Venusians, caused by the folk belief that ballpoint pens write better under water). It is a rewarding work. In the age of the Disposable Science Fiction Novel, designed like Kleenex to be used once and thrown away, *The Duplicated Man* is a story which improves with re-reading. Astonishing, but there it is.

ARTHUR C. CLARKE has a sharp mind and a disciplined typewriter and his stories of space exploration have that rare and satisfying quality, the feel of being the authentic reminiscences of an Old Space Dog. In *The Challenge of the Space Ship* (Harper), he is permitted to cast off the fiction format and present some two hundred pages of pure fact and speculation—why aliens haven't come to Earth, and what a summer-resort satellite may be like; whether climate control is feasible, and how to travel between the stars.

What is good about these essays is very, very good. When he speaks of wartime radar and of "FIDO" (the R.A.F. fog-dispersal system used to get bombers safely down from the thick British skies), we all can afford to listen. He was on the spot. He has had five sightings of UFOs himself; in explaining them, he explains away nearly all of the case the flying-saucerites have so laboriously built up. Where he writes of the probable shape of a sleeping compartment on a Mars-bound rocket, he is discussing a subject to which he has given much thought and a great deal of study. His guess is still only a guess, but it has become the informed guess of an expert.

There are ten or twelve pieces as good as these in *The Challenge of the Space Ship*. Unfortunately there are also ten or twelve others. In "The Men on the Moon," Clarke identifies for us several dozen historical figures after whom lunar craters have been named; surely this is only tepidly exciting to anyone. In "The Star of the Magi," he

tries to explain the Star that led the wise men to Bethlehem and arrives at the conclusion that it was a supernova (which it surely was not. If the star-gazers of Egypt, China and India had somehow missed it, those of Rome would not. We know that one of Rome's greatest astrologers, Thrasyllus, was in Asia Minor at the time). In "Question Time," the subject for discussion is not science at all but that quite different topic, the problems of lecturing on science. The final piece in the book, "Of Space and the Spirit," is a diffuse gather-all which touches on everything and covers nothing.

These sections, and one or two others, are the dross in *The Challenge of the Space Ship*. They do not dim the luster of the gold that appears elsewhere in the book, but they make one wish that the publisher had been a more selective miner.

A MORE rewarding Clarke—and probably the biggest science fiction book of recent years—is his *Across the Sea of Stars* (Harcourt, Brace), which contains eighteen short stories and two complete novels, or rather more than the wordage of three ordinary books, in one binding and at one single price. This is a bargain.

It is also a first-rate introduction to Clarke's work, if the reader who needs one happens to exist.

The novels are *Earthlight* (a peculiarly plausible interplanetary war between Earth and its scatter of solar colonies) and *Childhood's End* (concerning the supercession of the human race by its own evolved children). The short stories do not include all of Clarke's best—"The Nine Billion Names of God" is missing, and so is "The Star"—but they show his ways and moods. Arthur Clarke finds it irritating to be told that "Rescue Party" is his best story because it was his very first. Therefore that fact will not be commented upon at this time, but it is here, and it is a magnificent yarn, and there are many others very nearly as good.

DAMON KNIGHT possesses wit and invention, and displays both in *Masters of Evolution*, as his book publishers (Ace) have retitled his old *Galaxy* novella. City folk and country folk hate each other and no longer have any peaceable contact with each other. So as not to confuse the reader with on-the-other-hands, Knight has made it a premise that there is nothing useful, good or desirable about any machine—*any* machine—and the only satisfactory way of life for humanity is biological.

To document it, Knight has invented some splendidly

evolved plants and animals—parrot sort of things for storing data and transmitting messages, ferriferous bushes whose fruits are Bowie knives, etc. The merely technological cities get the worst of it, but Knight convinces you that to put them out of their misery is entirely a kindnes, as he describes the crushing load of absolutely essential labor-saving devices that each city dweller must drag about. This one is fun.

THE OTHER half of the double volume is *Fire in the Heavens,* in which George O. Smith rids nuclear physics of that pesky little problem, the neutrino. There isn't any neutrino, Smith says. What made physicists think there was such a thing is the previously undiscovered fact that every time energy is expended, a little bit of it drains off to make trouble in the Sun. That is how stars go nova, and that's what our heroes have to prevent in *Fire in the Heavens.*

Smith has written a lot of science fiction stories very like this one. As he is an engineer by profession, his gadgets give the enjoyable illusion of working, which is a plus. Still, because he concentrates on the gadgetry to the exclusion of the development of the characters, this is a very serious minus. Not only by gadgetry but by cocktail-hour dialogue and by action, the reader is entertained, but he is almost never made to *feel.*

What's wrong with that? Why, nothing much, but it is a surprise all the same to find that after two decades George O. Smith can surprise us with as warm and moving a story as another new book under his byline, *The Fourth R* (Ballantine).

In *The Fourth R,* Smith turns his back on gum-chewing electronic technicians and dauntless space voyages. His hero is a boy, Jimmy Holden. Jimmy was conceived and brought to birth because his parents, both scientists, needed a child for their researches into mechanical education. Their researches succeeded, but the parents died abruptly, leaving young Jimmy, six years old, with an adult education but a child's brain, a world of knowledge but a body just four feet tall. Worse, Jimmy is utterly alone. He dares confide in no one, and he dares not stay with his guardian—whose interest in the mechanical educator was extreme, and dangerous.

Smith has written Jimmy's story with inventiveness and thought, and, above all, with sympathetic understanding of young Jimmy Holden. It is a splendid job. The person who doesn't much like science fiction will enjoy this book, and so will the person who does.

Prolific Smith has still another book for us this month

—and still another publisher. *Path of Unreason* comes out under the Gnome Press imprint. James Forrest Carroll, Smith's hero, is either a catatonic suffering from overwork and deep-seated psychic flaws, or the victim of a plot on the part of alien invaders of Earth. Either premise might make a useful and entertaining book, but as Smith has meticulously refused to distinguish between the lady and the tiger for 185 pages, and thumbs his nose at our ignorance in an epilogue, the effect is more mystifying than amusing.

ADAM CHASE'S *The Golden Ape* (Avalon) concerns a peculiar young giant who commutes between worlds, fighting duels like a very John Carter and rescuing a girl very like Dejah Thoris from quite Barsoomian perils. It has a great deal of action and color, but it also has a great deal of tripe. Hank Searls's first novel, *The Big X* (Harper), is a first-rate, fast-moving, technically reliable story of a test pilot flying the last-but-one ancestor of the spaceship. *The Big X* is science fiction, but only just; in another year or so, it will be history. Yet it contains more of the challenge of the unknown than any dozen routine intergalactic blood-baths.

In *The Stars Are Too High* (Random House), Agnew H. Bahnson, Jr., proposes a secretly built spaceship which its inventors use to pretend the Earth is being explored by aliens, so as to unite mankind and end war. This theme has been so well explored by others, principally Theodore Sturgeon, that only great skill and inventive detail could justify another handling. These elements do not occur in *The Stars Are Too High.* It is an inferior book; what's worse, its publishers have claimed for it the status of a classic, which is disgraceful.

Bombs in Orbit, by Jeff Sutton, is an Ace original concerning a Russian hydrogen-bomb satellite project and an American rocket pilot's fight to nullify it. Sometimes the reasoning is thin, but most of the detail is excellent, the suspense is lushly troweled on and the pace never lets up.

Murray Leinster quietly goes on and on writing first-rate science fiction stories, as he has done since 1926. (If he did not appear in a science fiction magazine before that year, it is only because there was no science fiction magazine to appear in.) Apparently he will go on forever. This is an attractive prospect. In *Monsters and Such* (Avon), an unprepossessing title has been given to a fine collection of his more recent stories. Only "Proxima Centuari" (1935) goes back more than a decade, but it is well worth

reviving; and all the others in the book are worth keeping alive indefinitely.

Jerry Sohl has two novels for us at once. The first is a reprint of his Rinehart novel, *The Transcendent Man* (Bantam), which lets us in on the well-kept secret of Man's rapid evolutionary rise. Capellans are behind it. They drive us upward, for they live on our brain power; unfortunately, they are about to leave us and we will then rapidly revert to the animal. Sohl's hero must decide what to do about all this.

In *One Against Herculum* (Ace), Sohl invents for us a future city-colony in which crime and violence are kept under control by licensing the privilege of criminal activity. The idea has its merits, but Sohl has made almost no use of it, preferring to drop that notion and get on with another underground revolt against a dictatorial state, and so the story quickly confines itself to routine shoot-and-be-shot. This is a double volume, of which the flip side is *Secret of the Lost Race,* by Andre Norton, a competent time-killer concerning evil exploiters of a frontier planet. Our hero (who, you will hardly fail to guess, turns out to be one of the Lost Race himself) sets everything straight in a few knockdown brawls.

Miss Norton also offers *The Beast Master* (Harcourt, Brace), which gives us a demolished Earth and a dispersed handful of humans scattered among the non-human civilized planets of the Galaxy. Her hero is a Navajo who, in the war that destroyed Earth, was a commando leader of a squad of animals trained to help wage war.

In *Seed of Light* (Ballantine), Edmund Cooper spans many centuries and many light-years and yet manages to maintain a continuity of narrative while, generation after generation, his characters are born, grow and die. Earth is self-destroyed; only ten humans survive, in a rocket headed for a hoped-for planet of Alpha Centauri. But Alpha Centauri is barren; the ship wheels around it and heads for Sirius. If there is no planet circling Sirius, they will try Procyon; if not Procyon, then Vega . . . then Altair . . . The handful of men, women and babies in the ship are all of humanity, and they will not let themselves be destroyed.

Talbot Mundy's celebrated series concerning the adventures of Prince Tros aren't really science fiction, but they are fun. In *Tros of Samothrace* (Fantasy Classic Library), the prince battles Norsemen, pre-Roman Britons and Julius Caesar. In *Purple Pirate,* he tackles Cleopatra in intrigue, her sister in love, and Mark Antony in

battle. Tros is always exciting. What's more, Mundy always does his homework—if his historical facts are sometimes false, it is because of license, not ignorance.

Robot Hunt (Avalon), by Roger Lee Vernon, opens into the middle of a complicated and pulse-stirring spy hunt in a future Paris. It is pure Keystone Kops chase, but it succeeds in catching the interest at once and the pace is sustained to the very end. Vernon conceives an Earth in which each sovereign nation has its shield of impenetrable force screens, thus neutralizing all weapons and ending war forever—until someone discovers a way through the screens. Then, of course, the whole bloody fuss starts all over again. *Robot Hunt* is composed of ingredients which have produced dozens of the worst literary clinkers of our times, but Vernon stirs in thought.

In *Starman's Quest* (Gnome), Robert Silverberg proposes to entertain the teenage audience with a story about a 300-year-old hero coeval with his readers. (He has spent most of his life in near-light-speed space travel. Under relativity law, his objective-time age is only seventeen.) Silverberg no sooner settles on this theme than he abandons it in favor of a travelogue on an implausible future Earth, populated by unlikely nuts.

Gnome also gives us *The Dawning Light* by Robert Randall, a sequel to *The Shrouded Planet*. There are strange sights and events, but you must not linger to examine them, for the skin of solid plot and thought that sustains the story is only millimeters thick, and if you pause to reflect, you will plunge through the crust.

For the younger ones, Clifford B. Hicks's *First Boy on the Moon* (Winston) undertakes to initiate children from eight to ten into the excitement of interplanetary travel. A boy named Mike and a boy named Mud stow away on a rocket piloted by Mike's daddy; and, winked at by an utterly incredible space-station commander, are allowed to participate in the first lunar landing. Being very young, they may not be very critical, so the worn and rudimentary plot may get by.

Readers who wish to contrast practice with theory in the case of the undersigned may wish to avail themselves of two new Ballantine titles: *Wolfbane* (a novel, in collaboration with the late C. M. Kornbluth) and *Tomorrow Times Seven* (a collection of short stories). In a field where a reviewer is a writer is an editor is a fan, the author considers himself mighty brave in speaking so forthrightly of the work of his colleagues.

END

To Each His Own

By JACK SHARKEY

A world ideal for life will have life on it—

but don't expect ideal life!

ON SEPTEMBER the 24th, 1965, the Venusian spaceship *Investigator* floated gently to Earth in Times Square.

The sleek metal belly of the ship touched feather-light upon the asphalt "X" of Broadway and Seventh Avenue, and stubby stabilizing legs extended from ports along the sides of the hull, bracing the ship's mass against dangerous rolling, leaving it hulking there like some metallic beetle at rest.

The sun was almost directly overhead, sending yellow-gold serpentine glints wriggling on the gleaming surface of the ship. After the very slight thumping as the ship settled into place, there was no sound throughout the nearby streets of New York.

Absent was the noise of traffic, the hubbub of voices, the hurry-scurry of pedestrians. Nothing but heavy, oppressive silence everywhere outside the body of the ship. No apprehensive eye appeared at a window to stare at the visitor from the nearest planet. No telephone was picked up in nervous haste to warn the authorities of the possible menace to the peoples of Earth. Just the silence and the dancing sunlight.

Inside the spaceship, there was swift, practiced activity.

The Venusians were a picked, trained crew. This, the first contact with the third planet, called for quick reaction, accurate evaluation, and competent decision.

Each of the five aboard had a job to do immediately upon landing. With no conversation, they were all at their tasks. It was an operation they'd prac-

ticed many times over, back at their home base on Venus. They were sick of the thing even before being sent to Earth. But their training had paid well, for now their motions were automatic, each separate action swift, sure and precise.

Gwann, the pilot, his heavy-lidded eyes narrowed with the intensity of concentration, checked and re-checked his instruments and gauges. His nimble three-digited hands, with their long, flat palms, flickered from button to switch to dial. He locked the stabilizing legs into position, once each leg had made its contact securely with the surface outside. He dampered the power of the interplanetary drive, leaving its deadly emanations at a low, and therefore safe, degree of pulsation. He checked the release valves of the individual skimmers, making certain at the same time that, should the atmosphere outside be hostile to Venusian breathing, the tanks were filled and the cockpit seals were tight and break-free.

DROG, the navigator, used compass, ruler and stylus upon the scant, almost rudimentary Earth map, to determine the exact point of contact with the third planet. Venusian telescopes were able to see—very indistinctly—continental outlines at the twenty-million-mile distance to their neighbor planet. But the foggy overhang that shrouded their home planet had made sharp topographical drawing well-nigh impossible.

Volval, as Drog passed him the information, relayed the findings by light-beam back to their home base. The geographical location, coded into the tight beam, sped outward from the surface of Earth toward Venus, where it would not be received for at least a minute and a half. Volval, having transmitted the data, waited impatiently while the Venusian biochemist tested the outside surface against their leaving the ship.

Jorik, the biochemist, revolved the small metal "cage" with its quivering, burbling Venusian life-forms on it back into the space over his worktable. The animals seemed unharmed by their exposure to the alien planet, but he began more definitive tests upon the samplings of atmosphere and soil and vegetation brought back by a tiny robo-skimmer that had searched throughout a three-mile radius of the ship immediately after the landing, and had returned by homing beam to its tiny access port in the thick metal side of the ship.

While Volval waited in increasing irritation, and Jorik ran his tests, Klendro, the most expendable member of the expedition, studied his speech over and over, his

three-valved heart squirting its watery blood through his tiny, hairlike arteries and veins.

Klendro was almost a social outcast with these others, these real spacemen, though his job, he felt, was the most important. Klendro was the Venusian ambassador to the governments of Earth. He went over his speech again, hoping that the Earth broadcasts picked up now and then on Venus had been accurate enough for the Venusian linguists to write him a speech that wouldn't embarrass the Earth people by its inane misuses of their tongue.

Broadcasts had indicated that the major powers on Earth were the United States —whatever those were—of America and Soviet Russia. The Russian broadcasts, however, being nothing more than a series of eulogies declaring the happiness of life in Russia, had been too lacking in breadth to give the linguists much to work on. They had therefore chosen English as the tongue in which Klendro was to make his speech.

He lifted the scroll once more and began reading his speech half aloud, having a bit of trouble, as usual, in controlling the square-tipped surface of his tongue in forming the unfamiliar syllables.

"Pipple of Arth," he said, slowly and with much effort, "it is with grett plazzer that we mek this, tha farst contact with arr nebber planet. We are from tha second planet from yer—or mebbe Uh shudd seh *arr*—sun. Tha planet you knaw as Venus. We feel that we can share with arr nebber planet the froots of arr—of arr—" Klendro braced himself, then forced out awkwardly, "moot-yoo-ull sa-yan-tific ri-sarch . . ."

He refolded the long coil of the scroll and stuffed it into his belt-sack. Well, he told himself, for better or worse, I've got to give this speech. He wished he were anywhere but here.

SOME of the broadcasts had indicated a certain belligerency in the inhabitants of this alien planet. He wondered, with a kind of sick fright, if he would ever have the opportunity to deliver the speech, even *badly*. Some of the more esoteric phrasings of the Earth broadcasts had eluded the interpretations of the Venusian linguists. One of the more recurrent phrases was a "slug in the guts." They were not sure exactly what this entailed, but, from the context, the linguists were certain that it was something dire, possibly fatal.

Klendro was a very unhappy Venusian.

"Volval!" Klendro heard Drog cry out. "Did you send that stuff?"

"Yes," the light-beam oper-

ator called back. "I'm waiting on Jorik now."

"All set here," called Jorik, coming into Volval's compartment, followed by Gwann. "The atmosphere is breathable. A little heavy on the oxygen and light on the carbon dioxide, but that was expected before we took off. If we take deep inhales and periodic radiation, we should be all right."

"Fine," said Gwann, the pilot and leader, as Klendro came into the room with the others. "Better keep your guns loose in their holsters, though. You know what they've told us about the Earthmen."

"Hot-headed." Volval nodded.

"Will we take the skimmers?" asked Jorik. "Or do you think the Earthmen would prefer being met without the barrier-screens around us?"

"*They'd* prefer it, all right!" said Drog. "However, in *my* opinion—"

"We're going to have to chance it sooner or later without the screens," said Gwann. "The batteries in the skimmers won't last forever. We might as well go out there as we are."

"Who goes first?" asked Jorik.

"Well," Gwann shrugged, "if the crowds look hostile, *I* should go, as your leader. If they seem merely curious, then it's up to Klendro, as our ambassador, to make his speech."

Jorik frowned. "Now, wait, Gwann. Perhaps I ought to tell you. The sight records on the robo-skimmer showed no evidence of Earthmen outside the ship."

"That's ridiculous," said Gwann, his eyes flashing. "Venus reports this city is one of the most populous."

Jorik smiled wryly. "Then the populace certainly ducked out of sight quickly when they saw the robo-skimmer coming."

Gwann seemed on the point of making a sharp retort, and instead turned away toward the exit lock. "Since things seem suspicious, I'd best go first."

"Sir," said Volval, laying a hand upon his leader's arm.

"Yes?" queried Gwann, pausing.

"Good luck, sir," Volval faltered, drawing his hand back.

"Thanks," said Gwann, not unkindly. "For Venus," he added.

"For Venus," the others echoed.

Gwann released the safety lock on the circular metal door and turned the valve handle. Slowly, the door recessed itself in the metal pocket in the ship's wall, and Gwann went out into the yellow glow of the sunlight glittering in Times Square.

THE sun was glowing crimson on the horizon when the five Venusians met once

more at the door of their ship.

"Nothing—no clue, no people," said Jorik, his face wrinkled with puzzlement. "I can't understand it."

"Perhaps some holocaust . . . ?" Volval began weakly.

"Or a war?" Drog hinted gravely.

"Impossible!" said Gwann, leaning against one of the legs of the gigantic ship. "There is a conspicuous absence of anything that might be construed as a weapon of war. There are no bodies in the buildings or in the streets. No wreckage anywhere."

"Perhaps they have been frightened by our appearance and have gone into hiding?" asked Klendro, fingering the edge of his now futile scroll where it protruded from his belt-sack.

"Nonsense," said their leader. "From all we've learned of the Earthmen, fright would only make them aggressive. They would not have hidden from us; they'd have tried to shoot us down when we emerged from the ship."

"There was *one* thing . . ." said Jorik slowly. "I almost did not see it, but its shadow passed close by me on the side of one of the buildings, and I looked up barely in time to get a glimpse of it before it vanished."

"What was it like?" asked Gwann quickly.

"Some sort of animal, probably carnivorous," said Jorik. "I cannot be *certain,* of course, but I saw a mouth with teeth bespeaking flesh-eating. Quite a—" he repressed a shudder—"quite a large mouth."

"Strange," said Gwann. "Exceedingly strange. You saw only the one?"

Jorik nodded.

"Well," said Gwann, "one carnivore cannot have accounted for a population that runs into the millions. Besides, the Earthmen would be able to deal with mere animal life."

KLENDRO remembered the "slug in the guts" and blanched.

"What should we do, sir?" asked Volval. "Our orders were to make peaceful contact with the Earthmen. If there *are* no Earthmen—?"

"Calm yourself, Volval." Gwann smiled, patting the younger man upon the shoulder. "If there are Earthmen to contact, we'll make that contact. I have an idea."

"What, sir?" asked Drog.

"We shall each take one of the skimmers and investigate the surface of the planet. Now, while our maps are incomplete, I feel that Drog can draw us up competent enough maps to guide us over the surface of Earth."

"I can try, sir," said Drog.

"We'll meet back here at the ship in five days," said Gwann. "All of you take along enough supplies for five days, plus an

extra day's rations in case of emergency. The homing beam on our ship will bring you safely back if you get lost."

"One thing, sir," said Jorik, his brow creased in a frown. "We'd best all take along extra ammunition for the guns."

"The carnivores?"

The biochemist nodded. "Where there's one, there are bound to be others. That one I saw was large enough to bite a chunk out of a skimmer."

Klendro, pale already, lost more color.

EACH was assigned a continent to check. Of the two extra continents, Drog took one, and Gwann the other, the consensus being that the pilot and navigator could better cover extra territory than the others, who were less used to piloting the sleek skimmers.

Volval was to go to the Europe - Asia land mass, Gwann to Africa and Antarctica, Klendro to Australia, Jorik to South America, and Drog to Arctica, after first checking over the North American Continent on which they had landed.

"Something exceedingly strange," said Jorik, before they separated, "about the consolidation of their civilization. So much wasted land area."

"The sooner I get back to Venus, the happier I'll be," said Gwann, keeping his voice down so that only Jorik, the biochemist, could hear him. "This place is eerie. It's—it's like a ghost planet."

"And there's something wrong about the buildings. They are abominably inefficient. I can barely conceive the uses of some of the artifacts."

"Maybe," said Gwann suddenly, "we never *will* know!"

"Sir," said Volval, approaching the pilot, "I've discovered some maps." He held out a packet of papers, tinted blue and brown.

"Good work, Volval," said Gwann, taking the packet. "Where did you find them?"

"In one of those small shops, not far from the ship, sir. I cannot read the designations, of course, but I thought that, by a comparison with the maps from Venus Observatory, we might—"

"That's intelligent thinking," said Gwann, nodding. "Their maps are bound to be similar to ours. Klendro! What can you make of these?"

The ambassador came over and took the thick packet. The paper of the maps, as he did so, tore apart, and bits and pieces of the soft, pulpy edges dropped in a shower to the street.

"Not very substantial material, is it?" he muttered, unfolding the topmost of the maps. He looked over the colored line drawings on the page in some bewilderment. The letters spelling out "Rand McNally" meant nothing to his

alien eyes. The map itself was a mercator projection of the globe, the extreme northern and southern continents being somewhat distorted. After a few moments, he shook his head.

"I'm sorry. All the Earth broadcasts that we intercepted gave me a working knowledge of the *spoken* word, sir, but I'm afraid their actual word symbols are beyond me. It would take trained linguists months, perhaps years, to get a correlation between the sound of the word and its written image."

"Drog?" said Gwann, turning to the navigator.

Drog took the rotting sheet in his hands and studied the configurations of the continents. After a bit, he brightened.

"Sir, I think I can figure this out. According to our landing calculations, we are here." He jabbed a digit at one section of the page, and was distressed when it went right through. "The material seems to be falling apart, sir."

"Perhaps," Jorik suggested, "it is undergoing some unnatural stress—possibly tied up somehow with whatever it was that depopulated this city?"

"A good point, Jorik," said Gwann.

A LONG black shadow slid across the pavement near their feet and the five Venusians, very much startled, looked overhead. They were barely in time to see the huge gray form of the carnivore before it vanished behind a sign atop a nearby building which bore the mystifying information "Pepsi-Cola."

"There, sir!" cried Jorik. "That's exactly like the one I saw earlier!"

"Those *teeth*!" Klendro whimpered. "They could bite one of us in two!"

"And what they could do to us, they could do to an Earthman," Gwann said speculatively. "From the sizes of the doorways in these buildings, and the clothing on display in the shop windows, the Earthmen could not have been much larger than us."

"Sir," said Drog, holding up the map so that the leader could see it, "look here. This blue section that runs all over the map. You see, it's marked circle-arc-fork-cone-zigzag."

"Yes," said Gwann. "I see. What about it?"

"Well, sir, it recurs on the map, but each time it has a new group of symbols in front of it. What can it mean?"

Gwann frowned and studied the five symbols: O-C-E-A-N.

"Seems to suggest a similarity between all of them," said Jorik. "Perhaps the first symbol only means that the section is in a different place."

All five Venusians studied A-R-C-T-I-C, A-N-T-A-R-C-T-I-C, I-N-D-I-A-N, and the other symbols that were used

in conjunction with the mysterious O-C-E-A-N.

"A tribal tabu!" exclaimed Jorik.

"What are you talking about, Jorik?" said Gwann impatiently.

"You recall I said there seemed something strange about the consolidation of the populace in certain areas? The wasted land space?"

"Yes, yes. What about it?"

"All these sections marked O-C-E-A-N are the unused areas. There must have been some sort of tribal superstition about dwelling in those areas. That would explain why all the people lived on the higher ground here."

"I—I would have expected to find something *blue* in that area," said Gwann uncertainly. "Or else why is it so marked?"

"Sir," said Jorik respectfully, "some sections are colored very oddly—even in red. Yet no such colors were found anywhere on the planet by our telescopes, were they? And none of these large blue areas shows population centers. Tabu areas, obviously—not to be inhabited."

Gwann shivered. "The longer I stay here, the less I like it. Come on. Each of you take one of these maps. Drog, you assign us to a specific sector by these maps, rather than by ours. We'll meet back here at the ship in five days."

One by one, the Venusians got aboard their skimmers, making sure the protective barriers were working, and then glided off to investigate the ghost planet.

DROG, sliding in his trim craft over the North American continent, stopped many times, at each large city he discovered, but the story was the same as in New York. Empty buildings, no particular damages except what could be accounted for by decay and long disuse. Every so often—more often than he enjoyed—a flock of the huge carnivores soared above his skimmer, their long, dark shadows slithering over the cockpit in the dancing yellow sunlight.

Once, one of them broke away from the group and spiraled down to investigate his craft. Drog jabbed the button of the nose-gun hastily, and a lance of metal sped with a flicker of light into the thick hide of the oncoming monster.

A thick spray of blood gushed from the wound, as the great beast writhed in torment before sliding down through the atmosphere toward the distant ground. Its blood hung in a grisly trail over it as it plunged, marking its passage, then began to fall slowly after the beast.

Drog was by now almost a mile beyond the point where he had fired at the carnivore, but he wasn't too far away to see its hungry companions

swoop down after it and begin rending it even before it reached the ground.

He shuddered and looked away.

As he soared onward, he determined to keep the barrier on all night long, while he slept. If he *could* sleep . . .

North America taken care of, as well as possible in his limited time, Drog headed northward for the continent of Arctica.

Nothing but bare land and ocean bottom met his eye.

Feeling increasingly queasy, he nosed the skimmer around and set it swishing back toward New York.

JORIK watched the shadow of his skimmer pacing his own motion over the tops of the tangled jungle trees below. He inclined the nose of the craft downward, and began a shallow glide toward a clearing in the midst of the dense undergrowth.

Braking the skimmer gently, he let it settle slowly into the resilient grip of the tall yellow-brown grass in the clearing. Making sure his gun was loaded and the safety catch off, he slid open the cockpit and eased himself out.

He was—though of course he didn't know it—deep in the Matto Grosso of South America. Everywhere he looked, violent flares of color peeped at him through the twisted, swaying vines that clung everywhere. Nature had run riot in the jungle. No subtleties of shading or form here. Long, sharp leaves gleamed greenly on all sides of the biochemist. Radiant reds glowed from the shadowy depths of forest beyond the small clearing. Golden streamers hung in profusion from each crooked elbow of the chaotically twisted tree branches all about him.

Despite the brilliance and beauty of it, Jorik sensed a hidden menace in the place. He should, at that spot, have been hearing shrieking, roaring, bleating, grunting of animals, the cries of birds and skittering of insects. There was nothing but that all-pervading silence.

Jorik moved slowly away from the skimmer and approached the nearest tree, his scientist's eye pondering something not-quite-right-looking about it. As he got to it, and touched it, the thick, corrugated bark fell into powder between his fingers. He pressed, pried, thumped and tugged at the tree. It was dead. Dead and rotting.

His heart fluttered annoyingly in his breast. There was something frightening about the way things were going. He could understand a war destroying human life, even civilization, but this—this was primeval territory. The beasts, the plants, the lower forms of life—these should have survived.

But they hadn't.

Suddenly afraid, he rushed back to his skimmer, slid into the cockpit and took off, rising at a swift vertical angle from the dead jungle.

Toward the eastern coast of South America, he saw many fine hotels, with magnificent curves of beaches following the perimeter of the land mass on which the people had lived —already he was thinking of them in the past tense—and Jorik wondered at the absence of the blue O-C-E-A-N that should have bordered those beaches.

But as he glided outward from the coast, curving steadily northward toward New York, he saw that the beaches, with their pale silver sands, extended outward and downward toward only more land, soon becoming rocky, then turning at last into mud and ooze, with a sprinkling of blackish-green weeds. But no visible trace of the mysterious O-C-E-A-N.

GWANN, searching throughout Africa, fared no better. Only the silence, the rotting vegetation, and the absence of landlocked life. Higher in the atmosphere of the ghost planet, he saw many of the carnivores, but also smaller animals, soaring in gloriously colored groups, and seemingly harmless. There were times when he had to pass through literal clouds of these smaller beasts, whizzing and bobbing and gliding past him by the millions, only to vanish in the hazy distance with a blaze of color.

Africa having proven fruitless, Gwann directed the skimmer toward the opposite polar region from that which Drog was to investigate.

Like Drog, he found only land there, and no continent. The land was ocean bottom. He consulted his map, but there was nothing below his skimmer that corresponded with the cryptic markings: A-N-T-A-R-C-T-I-C O-C-E-A-N.

He turned his skimmer around and started back for New York.

VOLVAL, CRUISING from the Alps to the steppes and back again, found nothing to explain the disappearance of the Earthmen. Many cities, many lands, hamlets and villages, huts and palaces . . . It was the same every place. Silence. Fleeting glimpses of the carnivores and sometimes tinier-but-similar beasts. But no Earthmen.

KLENDRO HAD passed over the surface of Australia fifty times in his five alloted days without discovering life of any sort other than the carnivores. And they, for some reason, were unusually well represented in that region. They had come at his skimmer in grin-

ning swarms, but the barrier held firm, and the unlucky nearer ones spun away with scorched flesh glowing red, to be torn to pieces by their companions.

When he decided further investigation was useless, Klendro was very glad to leave that place. A group of the carnivores gave chase, but Klendro spun his ship about long enough to shoot metal darts into two of them. As the others swerved back to begin an impromptu feast on their wounded companions, Klendro turned the skimmer up to full speed and made quick connection with the homing device on the ship, back in New York.

"I DON'T understand it," said Gwann, on the night of the fifth day. The Venusians were all back in the ship in Times Square, having a meal together that was partly to satisfy their appetites, partly to celebrate being together again with their friends.

"It's incredible, all right," said Jorik. "A whole planet—and of a high degree of civilization, too—wiped out. The very vegetation dying. And that's the frightening part of it: Not *dead,* mind you, *dying.* That means that whatever happened here happened *recently.*"

"And those constructions in the buildings," said Volval, staring bemusedly at the wall, "the ones marked S-t-a-i-r-w-a-y. I wonder what they were for."

"Obviously they were decorations added by the architect," said Drog. "Any fool can see they served no purpose. If anything, they *hindered* the use of the access slots to the various levels of the buildings."

"Well," said Gwann, "our work here is through. We'd better be heading back to Venus."

"And your report?" asked Jorik.

"Positive," said Gwann. "Favorable for immediate possession and colonization."

"It's a good little planet." Jorik nodded. "But why do you suppose the Earthmen all vanished?"

"We'll probably never know," Volval sighed.

"Not unless," said Klendro, indicating a bale of salvaged Earth materials, "our linguists and archeologists can make some sense out of this junk here."

"Let's hope so," Gwann said. "The mysteriousness of this whole thing is going to drive me crazy if they don't."

"Well, sir," said Drog, consulting his charts, "if we're going to take advantage of juxtaposition of the two planets—"

"Right," said Gwann, turning and making his way toward the pilot's compartment. "We'll depart from Earth in ten minutes. Secure all hatches

and loose objects until we get into space."

The crew hurried to their tasks.

HALFWAY to Venus, Volval, paging idly through one of the rotting books from Earth, gave a shout.

"What is it?" said Gwann, coming into the light-beam operator's compartment, stretching to ease the muscle cramps from his long stint in the pilot's cabin.

"I've found a picture of the carnivore, sir!" said Volval proudly. "Look, sir."

"Hmm," said Gwann, studying the fading illustration. "I believe you're right. Jorik!"

The biochemist popped into the compartment, his face curious. "Yes, sir? What is it?"

"Isn't this one of your carnivores, Jorik?" asked Gwann, giving him the book.

Jorik, reaching for the book, nudged one of the newspapers atop the stack near the cabin wall, and the front page fluttered unnoticed to the floor. Across its surface were spread the incomprehensible—to Venusian eyes—words:

LITHIUM BOMB TEST
COULD DESTROY WORLD

Noted Scientist Declares Danger of Polar Experiment;
Melted Polar Caps
May Flood Entire Globe

Jorik studied the picture carefully, his gills trickling a faint stream of bubbles as he concentrated on the image of the carnivore. "Yes, that's one of them, sure enough. I wish I could read Earth writing. I wonder just what a T-i-g-e-r-s-h-a-r-k is."

Volval bobbed up from his place and floated to a port in the ceiling, through which he could see the tiny, glittering ball of Earth, its blue-green surface sparkling like a star against the black backdrop of empty space.

"I can't understand what killed them," he said. "Living conditions were ideal."

END

THE AUTUMN AFTER NEXT

By MARGARET ST. CLAIR

Being a wizard missionary to the Free'l

needed more than magic—

it called for a miracle!

THE spell the Free'l were casting ought to have drawn the moon down from the heavens, made water run uphill, and inverted the order of the seasons. But, since they had got broor's blood instead of newt's, were using alganon instead of vervet juice, and were three days later than the solstice anyhow, nothing happened.

Neeshan watched their antics with a bitter smile.

He'd tried hard with them. The Free'l were really a challenge to evangelical wizardry. They had some natural talent for magic, as was evinced by the frequent attempts they made to perform it, and they were interested in what he told them about its capacities. But they simply wouldn't take the trouble to do it right.

How long had they been stamping around in their circle, anyhow? Since early moonset, and it was now almost dawn. No doubt they

would go on stamping all next day, if not interrupted. It was time to call a halt.

Neeshan strode into the middle of the circle. Rhn, the village chief, looked up from his drumming.

"Go away," he said. "You'll spoil the charm."

"What charm? Can't you see by now, Rhn, that it isn't going to work?"

"Of course it will. It just takes time."

"Hell it will. Hell it does. Watch."

Neeshan pushed Rhn to one side and squatted down in the center of the circle. From the pockets of his black robe he produced stylus, dragon's blood, oil of anointing, and salt.

He drew a design on the ground with the stylus, dropped dragon's blood at the corners of the parallelogram, and touched the inner cusps with the oil. Then, sighting carefully at the double red and white sun, which was just coming up, he touched the *outer* cusps with salt. An intense smoke sprang up.

WHEN the smoke died away, a small lizardlike creature was visible in the parallelogram.

"Tell the demon what you want," Neeshan ordered the Free'l.

The Free'l hesitated. They had few wants, after all, which was one of the things that made teaching them magic difficult.

"Two big dyla melons," one of the younger ones said at last.

"A new andana necklace," said another.

"A tooter like the one you have," said Rhn, who was ambitious.

"Straw for a new roof on my hut," said one of the older females.

"That's enough for now," Neeshan interrupted. "The demon can't bring you a tooter, Rhn—you have to ask another sort of demon for that. The other things he can get. Sammel, to work!"

The lizard in the parallelogram twitched its tail. It disappeared, and returned almost immediately with melons, a handsome necklace, and an enormous heap of straw.

"Can I go now?" it asked.

"Yes." Neeshan turned to the Free'l, who were sharing the dyla melons out around their circle. "You see? *That's* how it ought to be. You cast a spell. You're careful with it. And it works. Right away."

"When you do it, it works," Rhn answered.

"Magic works when *anybody* does it. But you have to do it right."

Rhn raised his mud-plastered shoulders in a shrug. "It's such a lot of dreeze, doing it that way. Magic ought to be fun." He walked away, munching on a slice of the

melon the demon had brought.

Neeshan stared after him, his eyes hot. "Dreeze" was a Free'l word that referred originally to the nasal drip that accompanied that race's virulent head colds. It had been extended to mean almost anything annoying. The Free'l, who spent much of their time sitting in the rain, had a lot of colds in the head.

Wasn't there anything to be done with these people? Even the simplest spell was too dreezish for them to bother with.

He was getting a headache. He'd better perform a headache-removing spell.

He retired to the hut the Free'l had assigned to him. The spell worked, of course, but it left him feeling soggy and dispirited. He was still standing in the hut, wondering what he should do next, when his big black-and-gold tooter in the corner gave a faint "woof." That meant headquarters wanted to communicate with him.

Neeshan carefully aligned the tooter, which is basically a sort of lens for focusing neural force, with the rising double suns. He moved his couch out into a parallel position and lay down on it. In a minute or two he was deep in a cataleptic trance.

The message from headquarters was long, circuitous, and couched in the elaborate, ego-caressing ceremonial of high magic, but its gist was clear enough.

"Your report received," it boiled down to. "We are glad to hear that you are keeping on with the Free'l. We do not expect you to succeed with them—none of the other magical missionaries we have sent out ever has. But if you *should* succeed, by any chance, you would get your senior warlock's rating immediately. It would be no exaggeration, in fact, to say that the highest offices in the Brotherhood would be open to you."

NEESHAN came out of his trance. His eyes were round with wonder and cupidity. His senior warlock's rating—why, he wasn't due to get that for nearly four more six hundred-and-five-day years. And the higest offices in the Brotherhood—that could mean anything. Anything! He hadn't realized the Brotherhood set such store on converting the Free'l. Well, now, a reward like that was worth going to some trouble for.

Neeshan sat down on his couch, his elbows on his knees, his fists pressed against his forehead, and tried to think.

The Free'l liked magic, but they were lazy. Anything that involved accuracy impressed them as dreezish. And they didn't want anything. That was the biggest difficulty. Magic had nothing to offer

them. He had never, Neeshan thought, heard one of the Free'l express a want.

Wait, though. There was Rhn.

He had shown a definite interest in Neeshan's tooter. Something in its intricate, florid black-and-gold curves seemed to fascinate him. True, he hadn't been interested in it for its legitimate uses, which were to extend and develop a magician's spiritual power. He probably thought that having it would give him more prestige and influence among his people. But for one of the Free'l to say "I wish I had that" about anything whatever meant that he could be worked on. Could the tooter be used as a bribe?

Neeshan sighed heavily. Getting a tooter was painful and laborious. A tooter was carefully fitted to an individual magician's personality; in a sense, it was a part of his personality, and if Neeshan let Rhn have his tooter, he would be letting him have a part of himself. But the stakes were enormous.

Neeshan got up from his couch. It had begun to rain, but he didn't want to spend time performing a rain-repelling spell. He wanted to find Rhn.

Rhn was standing at the edge of the swamp, luxuriating in the downpour. The mud had washed from his shoulders, and he was already sniffling. Neeshan came to the point directly.

"I'll give you my tooter," he said, almost choking over the words, "if you'll do a spell —a simple spell, mind you— exactly right."

Rhn hesitated. Neeshan felt an impulse to kick him. Then he said, "Well . . ."

Neeshan began his instructions. It wouldn't do for him to help Rhn too directly, but he was willing to do everything reasonable. Rhn listened, scratching himself in the armpits and sneezing from time to time.

After Neeshan had been through the directions twice, Rhn stopped him. "No, don't bother telling me again—it's just more dreeze. Give me the materials and I'll show you. Don't forget, you're giving me the tooter for this."

HE STARTED off, Neeshan after him, to the latter's hut. While Neeshan looked on tensely, Rhn began going through the actions Neeshan had told him. Halfway through the first decad, he forgot. He inverted the order of the hand-passes, sprinkled salt on the wrong point, and mispronounced the names in the invocation. When he pulled his hands apart at the end, only a tiny yellow flame sprang up.

Neeshan cursed bitterly. Rhn, however, was delighted. "Look at that, will you!" he

exclaimed, clapping his chapped, scabby little hands together. "It worked! I'll take the tooter home with me now."

"The tooter? For *that?* You didn't do the spell right."

Rhn stared at him indignantly. "You mean, you're not going to give me the tooter after all the trouble I went to? I only did it as a favor, really. Neeshan, I think it's very mean of you."

"Try the spell again."

"Oh, dreeze. You're too impatient. You never give anything time to work."

He got up and walked off.

For the next few days, everybody in the village avoided Neeshan. They all felt sorry for Rhn, who'd worked so hard, done everything he was told to, and been cheated out of his tooter by Neeshan. In the end the magician, cursing his own weakness, surrendered the tooter to Rhn. The accusatory atmosphere in the normally indifferent Free'l was intolerable.

But now what was he to do? He'd given up his tooter —he had to ask Rhn to lend it to him when he wanted to contact headquarters—and the senior rating was no nearer than before. His head ached constantly, and all the spells he performed to cure the pain left him feeling wretchedly tired out.

Magic, however, is an art of many resources, not all of them savory. Neeshan, in his desperation, began to invoke demons more disreputable than those he would ordinarily have consulted. In effect, he turned for help to the magical underworld.

His thuggish informants were none too consistent. One demon told him one thing, another something else. The consensus, though, was that while there was nothing the Free'l actually wanted enough to go to any trouble for it (they didn't even want to get rid of their nasal drip, for example—in a perverse way they were proud of it), there *was* one thing they disliked intensely—Neeshan himself.

The Free'l thought, the demons reported, that he was inconsiderate, tactless, officious, and a crashing bore. They regarded him as the psychological equivalent of the worst case of dreeze ever known, carried to the nth power. They wished he'd drop dead or hang himself.

Neeshan dismissed the last of the demons. His eyes had begun to shine. The Free'l thought he was a nuisance, did they? They thought he was the most annoying thing they'd encountered in the course of their racial history? Good. Fine. Splendid. Then he'd *really* annoy them.

He'd have to watch out for poison, of course. But in the end, they'd turn to magic to get rid of him. They'd have to.

And then he'd have them. They'd be caught.

One act of communal magic that really worked and they'd be sold on magic. He'd be sure of his senior rating.

NEESHAN began his campaign immediately. Where the Free'l were, there was he. He was always on hand with unwanted explanations, hypercritical objections, and maddening "wouldn't-it-be-betters."

Whereas earlier in his evangelical mission he had confined himself to pointing out how much easier magic would make life for the Free'l, he now counciled and advised them on every phase of their daily routine, from mud-smearing to rain-sitting, and from the time they got up until they went to bed. He even pursued them with advice *after* they got into bed, and told them how to run their sex lives—advice which the Free'l, who set quite as much store by their sex lives as anybody does, resented passionately.

But most of all he harped on their folly in putting up with nasal drip, and instructed them over and over again in the details of a charm—a quite simple charm—for getting rid of it. The charm would, he informed them, work equally well against anything—*or person* — that they found annoying.

The food the Free'l brought him began to have a highly peculiar taste. Neeshan grinned and hung a theriacal charm, a first-class antidote to poison, around his neck. The Free'l's distate for him bothered him, naturally, but he could stand it. When he had repeated the anti-annoyance charm to a group of Free'l last night, he had noticed that Rhn was listening eagerly. It wouldn't be much longer now.

On the morning of the day before the equinox, Neeshan was awakened from sleep by an odd prickling sensation in his ears. It was a sensation he'd experienced only once before in his life, during his novitiate, and it took him a moment to identify it. Then he realized what it was. Somebody was casting a spell against him.

At last! At last! It had worked!

Neeshan put on his robe and hurried to the door of the hut. The day seemed remarkably overcast, almost like night, but that was caused by the spell. This one happened to involve the optic nerves.

He began to grope his way cautiously toward the village center. He didn't want the Free'l to see him and get suspicious, but he did want to have the pleasure of seeing them cast their first accurate spell. (He was well protected against wind-damage from it,

of course.) When he was almost at the center, he took cover behind a hut. He peered out.

They were doing it *right*. Oh, what a satisfaction! Neeshan felt his chest expand with pride. And when the spell worked, when the big wind swooped down and blew him away, the Free'l would certainly receive a second magical missionary more kindly. Neeshan might even come back, well disguised, himself.

The ritual went on. The dancers made three circles to the left, three circles to the right. Cross over, and all sprinkle salt on the interstices of the star Rhn had traced on the ground with the point of a knife. Back to the circle. One to the left, one to right, while Rhn, in the center of the circle, dusted over the salt with—with *what?*

"Hey!" Neeshan yelled in sudden alarm. "Not brimstone! Watch out! You're not doing it ri—"

His chest contracted suddenly, as if a large, stony hand had seized his thorax above the waist. He couldn't breathe, he couldn't think, he couldn't even say "Ouch!" It felt as if his chest—no, his whole body—was being compressed in on itself and turning into something as hard as stone.

He tried to wave his tiny, heavy arms in a countercharm; he couldn't even inhale. The last emotion he experienced was one of bitterness. He might have *known* the Free'l couldn't get anything right.

THE Free'l take a dim view of the small stone image that now stands in the center of their village. It is much too heavy for them to move, and while it is not nearly so much of a nuisance as Neeshan was when he was alive, it inconveniences them. They have to make a detour around it when they do their magic dances.

They still hope, though, that the spells they are casting to get rid of him will work eventually. If he doesn't go away this autumn, he will the autumn after next. They have a good deal of faith in magic, when you come right down to it. And patience is their long suit. **END**

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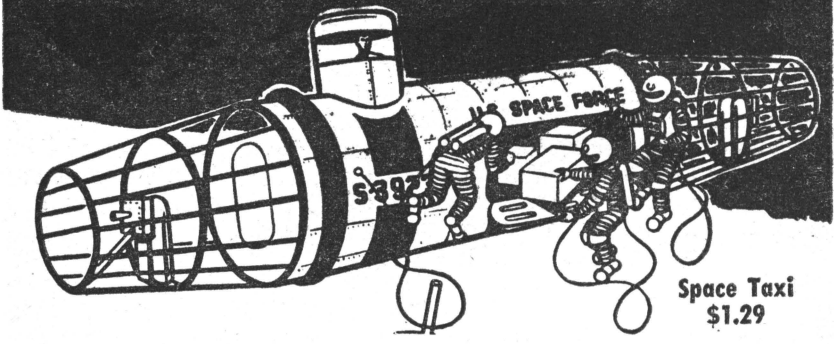

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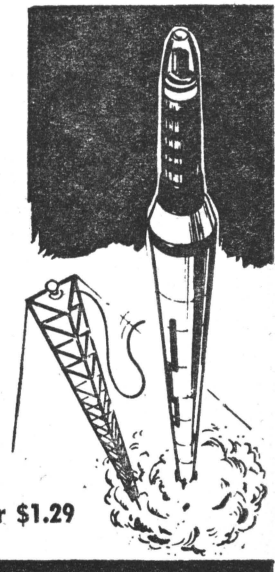

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Exchange

By J. F. BONE

How could any race look so ferocious and yet be peaceful — and devise so nasty a weapon?

I

I COULDN'T help listening to the big spaceman sitting alone at the corner table. He wasn't speaking to me—that was certain—nor was his flat, curiously uninflected voice directed at anyone else. With some surprise I realized that he was talking to himself. People don't do that nowadays. They're adjusted.

He noted my raised eyebrows and grinned, his square teeth white against the dark planes of his face. "I'm not psycho," he said. "It's just a bad habit I picked up on Lyrane."

"Lyrane?" I asked.

"It hasn't been entered on the charts yet. Just discovered." His voice was inflected now. And then it changed abruptly. "If you must know, this is ethanol—C_2H_5OH—

and I drink it." He looked at me with an embarrassed expression in his blue eyes. "It's just that I'm not used to it yet," he explained without explaining. "It's easier when I vocalize."

"You sure you're all right?" I asked. "Want me to call a psychologician?"

"No. I've just been certified by Decontamination. I have a paper to prove it."

"But—"

"Draw up a chair," he invited. "I hate to drink alone. And I'd like to talk to somebody."

I smiled. My talent was working as usual. I can't walk into a bar without someone telling me his life history. Nice old ladies buttonhole me at parties and tell me all about their childhoods. Boys tell me about girls. Girls tell me about boys. Politicians spill party secrets and pass me tips.

Something about me makes folks want to talk. It's a talent and in my business it's an asset. You see, I'm a freelance writer. Nothing fancy or significant, just news, popular stuff, adventure stories, problem yarns, romances, and mysteries. I'll never go down in history as a literary great, but it's a living—and besides I meet the damnedest characters.

So I sat down.

"I guess you're not contagious if you've been through Decontamination," I said.

HE LOOKED at me across the rim of an oversized brandy sniffer—a Napoleon, I think it's called—and waggled a long forefinger at my nose. "The trouble with you groundhogs is that you're always thinking we spacers are walking hotbeds of contagion all primed to wreck Earth. You should know better. Anything dangerous has about as much chance of getting through Decontamination as an ice cube has of getting through a nuclear furnace."

"There was Martian Fever," I reminded him.

"Three centuries ago and you still remember it," he said. "But has there been anything else since Decontamination was set up?"

"No," I admitted, "but that was enough, wasn't it? We still haven't reached the pre-Mars population level."

"Who wants to?" He sipped at the brownish fluid in the glass and a shudder rippled the heavy muscles of his chest and shoulders. He grinned nastily and took a bigger drink. "There, that ought to hold you," he muttered. He looked at me, that odd embarrassed look glinting in his eyes. "I think that did it. No tolerance for alcohol."

I gave him my puzzled and expectant look.

He countered with a gesture at the nearly empty brandy glass. I got the idea. I signaled autoservice—a conditioned re-

flex developed over years of pumping material out of spacemen—and slipped my ID into the check slot of the robot as it rolled up beside us and waited, humming expectantly.

"Rum," the spaceman said. "Demerara, four ounces."

"You are cautioned, sir," the autoservice said in a flat mechanical voice. "Demerara rum is one hundred fifty proof and is not meant to be ingested by terrestrial life-forms without prior dilution."

"Shut up and serve," I said.

The robot clicked disapprovingly, gurgled briefly inside its cubical interior and extruded a pony glass of brownish liquid. "Sir, you will undoubtedly end up in a drunkard's grave, dead of hepatic cirrhosis," it informed me virtuously as it returned my ID card. I glared as I pushed the glass across the table.

"Robots," I said contemptuously. It was lost on that metallic monstrosity. It was already rolling away toward another table.

The spaceman poured the pony glass into his Napoleon, sniffed appreciatively, sipped delicately and extended a meaty hand. "My name's Halsey," he said. "Captain Roger Halsey. I skipper the *Two Two Four*."

"The Bureau ship that landed this morning?"

He nodded. "Yeah. I'm one of the Bureau's brave boys." There was a faint sneer in his voice. "The good old Bureau of Extraterrestrial Exploration. The busy BEE." He failed to pronounce the individual letters. "You're a reporter, aren't you?" he asked suddenly.

"How'd you guess?"

"That little trick of not answering an introduction. Most of you sludge pumpers do it, but I never knew why."

"Libel and personal privacy laws," I said. "If you don't know who we are, you can't sue."

He grinned. "Okay. I don't care. Keep your privacy. All I want is someone to talk to."

I smiled inwardly.

"Think my job's exciting?" he asked. "Skipper of an exploration ship. Poking my nose into odd corners of the Galaxy. Seeing what's over the hill."

"Of course," I said.

"Well, you'd be wrong ninety-nine times out of a hundred. It's just a job. Most of it is checking—or did you know that only one sun in ten has planets, and only one in ten thousand has a spectrum that will support human life, and that only one in ten thousand planets has Earthlike qualities? So you can imagine how we felt when we ran across Lyrane." He grimaced wryly. "I had it on the log as Halsey's Planet for nearly two weeks before we discovered it was inhabited." He shrugged. "So the name was changed. Too bad. Always did want to

have a planet named after me. But I'll make it yet."

I clucked sympathetically. Capt. Halsey sighed, and this is what he told me.

II

IT'S a beautiful world, Lyrane is. Like Earth must have been before it got cluttered up with people. No cities, no smoke, no industrial complexes—just green plains, snowy mountains, dark forests, blue seas, and white polar caps all wrapped in cotton clouds swimming in the clearest atmosphere you ever saw. It made my eyes ache to look at it. And it affected the crew the same way.

We were wild to land. We came straight in along the equatorial plane until we hit the Van Allen Belt and the automatics took over. We stopped dead, matched intrinsics and skirted the outer band, checking the radiation quality and the shape of the Belt. It was a pure band that dipped down at the poles to form entry zones. There was not a sign of bulges or industrial contaminants.

Naturally we had everything trained on the planet while we made our sweeps—organic detectors, radar, spectroanalytic probes — all the gadgets the BEE equips us with to make analysis easy and complete. The readings were so homelike that every man was landsick. I wasn't any different from the rest of them, but I was in command and I had to be cautious about setting the *Two Two Four* down until we'd really wrung the analytic data dry.

So, while the crew grumbled about hanging outside on a skyhook, we kept swinging around in a polar orbit until we knew that world below us like a baby knows its mother. It checked clean to five decimal places, which is the limit of our gadgetry. Paradise, that's what it was—a paradise untrod by human foot. And every foot on the ship was itching.

"When we gonna land, Skipper?" Alex Baranov asked me. It was a gross breach of discipline, but I forgave him. Alex was the second engineer, an eager kid on his first flight out from Earth. Like most youngsters, he thought there was romance in space, but right now he was landsick. Even worse than most of us. And, like most kids, he'd leap where angels'd dread to walk on tiptoe.

"We'll land," I assured him. "You'll be down there pretty soon."

He hurried off to tell the others.

We set the ship down in the middle of one of the continental land masses in an open plain surrounded by forest and ran a few more tests before we stepped out, planted

the flag, and claimed the place for the Confederation. After that we had an impromptu celebration to thoroughly enjoy the solid feel of ground under our feet and open sky overhead. It lasted all of five minutes before we came to our senses and posted a guard.

It was five minutes too long. Alex Baranov had a chance to get out of sight and go exploring, and, like a kid, he took it. We didn't miss him for nearly ten minutes more, and in fifteen minutes a man can cover quite a bit of territory.

"Anyone see where he went?" I asked.

"He was wearing a menticom," one of the crew offered. "Said he wanted to look around."

"The idiot!" I snapped. "He had no business going off like that."

"Nobody told him not to," Dan Warren said. Dan was my executive officer, and a good hand in case of trouble, but he left the command decisions to me, and of course I figured that everybody knew the cardinal rule of first landings. The net result was that Alex had disappeared.

I went back into the ship and broke out another menticom.

"Alex!" I broadcasted. "Return to ship at once!"

"I can't, Skipper," Alex's projection came back to me. "I'm surrounded."

"By what? Where?"

"They look sorta human—bigger than us. I'm near the edge of the forest nearest the ship. I can't do anything. I didn't bring a blaster." There was panic in his thoughts. And then suddenly I saw two hairy bipeds flash across Alex's vision. Both of them were carrying spears. The nearest one jumped and lunged. The scene dissolved in a blaze of red panic and the projection cut off as though someone had turned a switch.

I had a fix now and turned to face a knob of forest jutting out into the plain. Near the forest's edge I saw a flurry of movement that vanished as I watched.

"Break out a 'copter," I ordered.

"Why?" Warren asked, and then I realized that I alone of all the crew had seen what had happened to Alex.

I told them.

THE search, of course, was unproductive. I didn't expect that it would be anything else. I was pretty certain that Alex was a casualty. I'd felt people die while wearing menticoms, and the same blank sense of emptiness had blotted out Alex. It was a bad deal all around. I liked that kid.

But Alex's death had provided data. This world was inhabited and the inhabitants weren't friendly. So I had the crew stake out a perimeter which we could energize with

the ship's engines, and activated a couple of autoguards for patrol duty. Alex wasn't a pleasant thought, but we weren't equipped to retrieve bodies. So I wrote him in the log as missing and let it go at that.

I had to correct the entry a week later when Alex came walking up to the perimeter as large as life and just as healthy, wearing a mild sunburn, a sheepish expression, and nothing else.

The autoguard announced his coming and I headed the delegation that met him. I read him the riot act, and after I'd finished chewing on him he was pinker than ever.

"Okay, sir—so I was a fool," he said. "But they didn't hurt me. Scared me half to death, but once they realized I was intelligent there was no trouble. They were fascinated by my clothes." Alex grinned ruefully. "And they're pretty strong. They peeled me."

"Obviously," I said coldly.

"They have a village back in the woods." He pointed vaguely behind him. "It'd pay to take a look at it."

"*Mister* Baranov," I said. "If I don't throw you in the brig for what you've done, it's only because you may have brought back some information we can use. What are these natives like? What did they do to you besides making you a strip-tease artist? What cultural level are they? How many of them do you estimate there are? What do they look like? Get up to the ship and report to Lieutenant Warren for interrogation and draw new clothing." I had the same half exasperated, half angry tone that a relieved mother has when one of her youngsters returns home late but unharmed.

ALEX must have recognized it, because he grinned as he went off.

I contacted Warren on the intercom. "Dan," I said, "Baranov's back—apparently unharmed. I want him given the works. When you've gotten everything you can get, have a man detailed to watch him. If he so much as looks suspicious, heave him in the brig."

Warren's answering projection had a laugh in it. "Always cautious, hey, Skipper? Okay, I'll see that he gets the business."

It turned out that Alex didn't have much real information except for a description of the natives, their village, and their attitude toward him. It was about what you'd expect from a kid, interesting but far from helpful.

The delegation of natives showed up a half hour later. They came walking across the open space between the ship and the forest as though they hadn't a care in the world. Four of them—big hairy humanoids, carrying spears.

They were naked as animals. Not that they needed clothes with all that hair, but just the same their appearance gave me a queasy feeling—like I was looking at man's early ancestors suddenly come to life.

If you can imagine a furry humanoid seven feet tall, with the face of an intelligent gorilla and the braincase of a man, you'll have a rough idea of what they looked like—except for their teeth. The canines would have fitted better in the face of a tiger, and showed at the corners of their wide, thin-lipped mouths, giving them an expression of ferocity.

They came trotting straight across the plain, moving with grace and power. All external signs pointed to them being a carnivorous, primitive race. Hunters, probably. The muscles of my scalp twitched as some deep-buried instinct inside me whispered, *"Competition!"*

I'VE met plenty of humanoids, but these were the first that roused any emotion other than curiosity. Perhaps it was their fierce appearance, or the bright, half-contemptuous intelligence in their eyes, or the confident arrogance in their approach, or merely that they looked more like us than the others I had met. Whatever it was, it was strong, and I had the impression that the feeling was mutual.

"Stop!" I said as they approached the periphery.

"Why should we?" the foremost native replied in perfect Terran.

"Because that barrier'll burn you to a nice crisp cinder if you don't."

"That's a good reason," the native said, nodding.

Then the delayed reaction took over and the shock nearly floored me, until I saw that he was wearing Alex's menticom. Well, that explained the language and the feeling of mutual distrust—and it could explain why I thought Alex had died back there in the jungle. A mental communicator snatched from its wearer's head can give that impression.

But it raised an entirely new set of questions. Where did this savage learn to operate the circlet and how did he recognize its purpose? I guess I wasn't too smart, because the native was tuned to me and I wasn't shielding my thoughts at all.

He chuckled—it sounded like the purr of a cat. "We are not stupid, Earthman."

"So I see," I said uneasily.

"I am K'wan, chief of this segment. I wish to know why you are here."

"To survey your world. We are members of the Bureau of Extraterrestrial Exploration. It is our job to make surveys of planets."

"Why?"

"For trade, colonization,

and exploitation," I answered. There was no sense in giving him a dishonest explanation. With him wearing that communicator, it would have done no good to try.

"And what have you decided about us?"

"That's not our job. We just investigate and report. What happens next is not our affair. But if you're worrying—don't. There are plenty of worlds available without bothering inhabited places. Since you are intelligent, we would probably like to trade with you, if you have anything to trade—but that, of course, is up to you. We never intrude where we are not wanted, as long as we are treated with respect. If we are attacked, however, that is a different story." It was the old respect-and-threat routine that worked with primitive races. But I wasn't at all sure it was working now.

"Strange," K'wan said. "I would have sworn you were a predatory race. You are enough like us to be our little cousins." He scratched his head with a surprisingly human gesture. "In your position I would have attacked to show my power and inspire respect. Perhaps you are telling the truth."

"A predator can grow soft when he has too much prey," I said.

"Aye, there is truth in that. But what is too easy and how much is too much? And does a man change his habits of eating just because he is fat?"

"You can find out."

"I do not think that would be wise," the native said. "Although you are physically weak, you sound confident. Therefore you are strong. And strength is to be respected. Let us be friends. We will make an agreement with you."

I SHOOK my head. "It is not our place to make agreements. We only observe."

"You have not done much of that," he said pointedly. "You sit here and send your machines over our seas and forests, but you do not see for yourselves. You cannot learn this way."

"We learn enough," I said shortly.

"We have talked of you at our council," K'wan continued, "and we think that you should know more before you depart. So we have come to make you an offer. Let four of your men come with me, and four of mine will stay with you. We will exchange—and you can see our ways while we see yours. That would help us understand each other."

It sounded reasonable. An exchange of hostages—or call it a cultural exchange, if you'd prefer. I told him that I'd think it over and to come back tomorrow. He nodded, turned, and together with his retinue disappeared into the jungle.

WE HASHED K'wan's proposal over at a board meeting that night and decided that we'd take it. The exact status of Lyranian culture worried us. It is a cardinal rule never to underestimate an alien culture or to judge it by surface appearances. So we organized a team that would form our part of the "cultural exchange."

I would go, of course. If K'wan could visit us, I could hardly stay back. Alex was selected partly because he was an engineer, mostly because he'd been over the ground before. Ed Barger, our ecologist, and Patrick Allardyce, our biologist, made up the remainder of the party. I'd have liked to take the padre and Doc, but Doc was more valuable at base, and if I could have only four men, I wanted fighting men.

"Now," I said, "we'll take along a tight-beam communicator. Coupled to our menticoms, it should be able to reach the ship and put what we see and what happens on permanent record." Then I turned to Dan Warren. "If anything goes wrong, don't try to rescue us. Finish your observations and get out. You understand? And get those exchange natives into Interrogation. Condition them to the eyeballs with cooperation dogma. We may need some friends here when the second echelon makes a landfall."

Warren nodded. I didn't have to elaborate.

The native village was about what I expected from our reconnaissance flights. It was beautifully camouflaged. You couldn't tell it from the rest of the forest except that the trees were larger and were hollow—apparently hewn out with patient care to make a comfortable living space inside. Lyranians lived in one place, if what I could see of their dwellings was any criterion. I wanted to look inside, but K'wan hustled us down the irregular "street" that wound through the grove of giant trees until we finally came to the granddaddy of them all, a trunk nearly forty feet in diameter.

K'wan gestured at the tree. "Your house while you are here. We made it for you Earthmen." His voice came over my menticom and was duly recorded on the ship, since we were in constant contact, giving our impressions of the place. So far it was strictly SOP.

"Thanks," I said. "We appreciate it." I was really touched at this tribute. K'wan had probably evacuated his own house to furnish us quarters where we could be together. The size of it indicated that it must be the chief's residence. But like all primitives he had to lie a little and the fiction of making this place for us was a way of salvaging

pride in the face of our technological superiority.

He walked inside and we followed, expecting to find a gloomy hole—but instead the room glowed with a soft light that came from the walls themselves. The air was cool and comfortable, a pleasing contrast to the heat outside.

"What the—" I began, but Allardyce was already peering at the walls.

"A type of luminous fungus," he said. "A saprophyte. Lives on the wood of this tree and gives off light. Clever."

I shut my mouth and looked around. There were other rooms opening off this one and along one wall a knobby imitation of a staircase led upward to a hole overhead.

"Hmmm, a regular skyscraper," Ed Barger commented, noting the direction of my gaze. "Well, we should not be crowded, at any rate."

I had been noticing something was wrong without realizing it. You know the feeling you get when you've lost something, but can't quite remember what it was. Then my neurons made connections and I realized that the communicator and the menticom were both as dead as if we were in a lead box.

Quietly I moved to the door—and Dan's voice hammered in my ears: "Skipper! Answer me! What's wrong?"

"Nothing, Dan," I said. "We just went into the quarters they assigned us. Something about them blocks transmission and reception. We're all fine."

"Oh." Dan sounded relieved. "For a minute I was worried."

"One of the boys'll call in every two hours," I assured him. "If you don't hear from us then, it'll be time to do something."

"Okay, Skipper, but what'll I do?"

"That'll be your decision," I said. "You'll be ranking officer."

Dan's chuckle was humorless. "Thanks, but I hope we keep on hearing from you."

"Don't worry—you will. These people look worse than they really are. At least they have been nice so far."

"They'd better stay that way," Dan replied grimly.

It was my turn to chuckle. "Keep calm and keep your blasters dry. I'm going inside now. You'll hear from us in two hours."

ED BARGER looked at me a trifle oddly as I came through the doorway. "A while ago you were laughing at that story K'wan was telling us about making this house for us. I caught your undertone."

"Sure. What about it?"

"Well, I'm not so sure he was lying."

"Huh?"

"Take a look around you."

I did. It was a nice room, considering its origin—low benches around the walls, a table and four chairs in the center, a soft, thick floor covering that was a pleasure to the feet.

"See anything unusual?" Ed asked.

"No," I said.

"What about those benches?"

"They're part of the walls," I said, "cut out of the tree when it was hollowed out."

"Cut to *our* size?"

I did a double take. Barger was right. The Lyranians were seven feet tall and long-legged, but the benches were precisely right for human sitting, and the table in the center was only three feet above the gray floor. Suddenly I didn't feel so good.

"And those rooms—there are four of them—scaled to people *our* size?"

I shrugged. "So they modified the joint for us."

"You still don't get it. This place is *living*. It's *growing*. Nothing here except those chairs isn't part of this tree, and I'm not sure that they weren't. Besides, how did they know that there'd be four of us?"

"They could have been hopeful, or maybe four is their idea of a delegation. Remember there were four of them that visited us, and they suggested that four of us visit them."

"It's obvious," Allardyce added, "that this place *has* been made for us. K'wan wasn't lying."

Barger shook his head. "I still don't like it. I think we'd better get out of here. If they are as good biologists as this tree indicates, they're a Class VI civilization at least—and we're not set up to handle levels that high."

"I don't think that's necessary," Allardyce said. "They don't seem unfriendly, and until they do, we're better off sitting pat and playing the cards as they're dealt. We can always warn the ship in case anything goes wrong."

"Don't be jumpy," Alex broke in. "I told you they were all right. They grew the place for me. It's just grown a little since."

I made a noncommittal noise.

"It's true," Alex said. "While I was here I needed quarters and nobody wanted me in with them. They have some custom about not letting strangers in their houses after sunset. So they took a sapling and sprayed it with some sort of stuff and by the next afternoon I had a one-room house."

"Where did you stay that first night?" I demanded.

Alex shrugged. "In one of the trees down the street," he said, pointing through the door. "It was some sort of a storage warehouse. No air conditioning and blacker than

the inside of the Coal Sack. It rains pretty bad at night and they had to give me some shelter."

He was right on time with his last statement, because the skies opened up and started to pour. The four-hour evening rain had begun. It had fascinated us at first, the regularity with which the evening showers arrived and left, but our meteorologist assured us that it was a perfectly natural phenomenon in a planet with no axial tilt.

"But growing a tree in a day is fantastic," I said. "What's more, it's unbelievable, a downright—"

"Not so fantastic," Allardyce interrupted. "This really isn't a tree. It's a cycad—related to the horsetail ferns back on Earth. They grow pretty fast anyway and they might grow faster here. Besides, the Lyranians could have some really potent growth stimulants. In our hydroponics stations we use delta-gibberelin. That'll grow tomatoes from seed in a week, and forage crops in three days. It could be that they have something better that'll do the job in hours."

"And one that makes a tree grow *rooms*?" I scoffed.

ALLARDYCE nodded. "It's possible, but I hate to think of the science behind it —it makes me feel like a blind baby fumbling in the dark—and I'm supposed to be a good biologist." He shivered. "Their science'll be centuries ahead of ours if that is true."

"Not necessarily," Barger said. "They could be good biologists or botanists and nothing much else. We've run into that sort of uneven culture before."

"Ha!" Allardyce snorted. "That shows how little you know about experimental biology. Anybody able to do with plants what these people do would have to know genetics and growth principles, biochemistry, mathematics, engineering and physics."

"Maybe they had it once and lost most of it," I suggested. "They wouldn't be the first culture that's gone retrograde. We did it after the Atomic Wars and we were several thousand years recovering. But we hadn't lost the skills—they just degenerated into rituals administered by witch doctors who handed the formulas and techniques down from father to son. Maybe it's like that here. Certainly these people give no evidence of an advanced civilization other than these trees and their native intelligence. Civilized people don't hunt with spears or live in tribal groups."

Barger nodded. "That's a good point, Skipper."

"Well, there's no sense speculating about it; maybe we'll know if we wait and see," Allardyce summed up.

I set sentries, three hours on and nine off, to keep Dan informed of our situation, and since rank has its privileges, I took the first watch. We were all tired from our walk through the woods; the others turned in readily enough. I was sufficiently worried about the hints and implications in the native culture to keep alert —but nothing happened. I checked in with Dan back at the ship and went to awaken Alex, who had drawn the second watch, and turned in to the bedroom allotted to me. Normally I can sleep anywhere, but I kept thinking about houses grown from trees and upholstery grown from fungus, about spear-carrying savages who understood the working principle of a menticom.

It was all wrong and my facile explanation of a regressed culture didn't satisfy me. Superior technology and savagery simply didn't go together. Even in our Interregnum Period, islands of culture and technology had remained, and men hadn't reverted to complete savagery. But there were no such islands on this world—or none that were apparent.

Such enclaves couldn't have escaped our search mechanisms, which are designed precisely to locate such things. And besides, an advanced biological technology would have no need for hunting or spears. They could grow all the food they needed. Any damn fool knew that. Then why the noble savage act? For if our analysis was right, it must be an act. Why were they trying to hoodwink us? The only answer was that there was a high civilization here that was being deliberately hidden from us. The only mistake they had made was in underestimating us—the old story of civilized men sneering at savages, but in reverse.

The trees, therefore, must be such old and primitive techniques that they thought nothing of them, deeming them so inconsequential that even savages like us would know of them and not be suspicious. At that, they probably didn't have too much time after they detected us orbiting and intending to land. And if that were true, there could be only one place where their civilization was hidden.

I TRIED to get to my feet, to warn the others—but I couldn't move and no sound came from my flaccid vocal cords. I was paralyzed, helpless, and K'wan's amused thought floated gently into my brain. "I told the others that you humans were an advanced race, but they couldn't believe an obviously warlike species that depended upon *machinery* could be anything but savages. And your man Alex confirmed their beliefs. So we tried to

meet you on your own ground —savage to savage, as it were. It seems as though we weren't as good at being savages as we thought." And K'wan stepped through an apparently solid section of tree trunk that parted to let him pass!

This tree was nothing but a mousetrap, and we were the mice! Why hadn't one of us carried the discussion a bit further? Any idiot should know that biological agents were fully as deadly as physical ones. And these people were self-admittedly predatory. Contempt at my stupidity was the only emotion that filled my mind—that we would be trapped like a flock of brainless sheep and led bleating happily to slaughter. Raw anger surged through me, smothering my fear in a red blanket of rage.

K'wan shook his head. "Your reaction works against you. It's primitive—and, I think, dangerous. We cannot risk associating with a race that cannot control themselves. You have developed too fast—too soon. We are an old race and a slow race, and our warlike days are far behind us. The council was right. Something must be done about you or there will be more of your kind on Lyrane—hard, driving, uncontrolled, violent." He sighed—a very human sigh—half regret, half resignation.

"And you promised no harm would come to us if we came with you," I thought bitterly.

"I said you would come to no harm, nor will you. You'll just be changed a little."

"Like Alex?"

"Yes."

"What did you do to him?"

He grinned, exposing his long tusks. "You'll find out," he said. He sounded just like a villain in a cheap melodrama.

He took the menticom circlet off my head and all communication stopped. Two other Lyranians stepped through the wall, lifted me and carried me out like a shanghaied drunk from a spaceport bar. I wasn't particularly surprised at the laboratory that lay behind the wall. After all, an observation cage had to have its laboratory facilities.

These were good — very good indeed. Even though I knew hardly anything about biological laboratories, there was no doubt that here were the products of an advanced technology. I hated to admit it, but it looked as though we had run into what we had always feared but had never found—a civilization superior to ours. From the windowless appearance of the place, it was probably underground, and K'wan's look and nod seemed to confirm my guess.

They laid me out on a table, took blood and tissue samples and proceeded to forget me while they ran tests and analy-

ses. I kept trying to move, but it wasn't any use.

A group of about a dozen oldsters came in, looked at me and went away. The council, I guessed.

In a surprisingly short time K'wan came back, distinguishable by the menticom circlet. He was holding something that looked like a jet hypo in his hand. The barrel was full of a cloudy red liquid that swirled sluggishly behind the confining glass.

"This won't hurt," he said, his thoughts amplified by the circlet.

He lifted my arm, examined it and nodded. There was a high-pitched, sibilant hiss as he touched the trigger of the syringe and I felt a brief sting near my elbow.

"There—that's that!" he said. "Now we'll take you back and get the others."

I swore at him coldly and viciously.

He smiled.

Alex helped lay me back on my bed in the tree house. He looked down at me and grinned. It wasn't a pleasant grin. It reminded me of a crocodile.

NAKED, I was standing on an endless sandy plain. Off in the distance the *Two Two Four* stood on her landing jacks, a tall, needle-pointed tower of burnished silver metal. The sun beat down from a cobalt sky burning my bare back as I trudged painfully across the hot shifting sand. My feet, scorched and blistered, sent agony racing through me with every step I took toward the tall silver column that seemed to recede from me as fast as I approached. My throat was choked with dust and my mind filled with fear and pain.

I had to reach the ship. I *had* to. Yet I knew with dreadful certainty that I would not.

He came at me from a hollow in the sandy ground, a huge, furry Lyranian—bigger than any I had seen. His white tusks glittered in the sunlight as he leaped at me.

Twisting, I avoided him and turned to run. To fight that mountain of fanged flesh was futile. He could rip me apart with one hand. But I moved with viscid slowness, stumbling through the shifting sands.

In a moment he was upon me, clutching with his huge hands, snapping at my throat with his tusked mouth. Fear pumped adrenalin into my system and I fought as I had never fought before, breaking his holds, throwing jarring punches into his fanged face as he clawed and bit at me.

With a violent effort I broke away and ran again toward the safety of the distant ship. For a moment I left him behind as he scrambled to regain his feet and came running after me. He was on me

again, hands reaching for my throat. I couldn't get away. And again we fought, battering and clawing at each other, using fists, feet and teeth, biting and gouging. His strength was terrible and his hot, fetid breath was rank in my nostrils. With a grunt of triumph he tripped me and I fell on my back on the blazing sand. I screamed as my back struck the searing surface, but he held me helpless and immovable, pinned beneath his massive, crushing weight.

And then he began to eat me!

I felt his sharp fangs sink into my shoulder muscles and meet in my flesh. With a rush of frantic strength I threw him off again and again, ran stumbling across the plain. Once more he caught me and again we fought.

It went on endlessly—the fight, the temporary breakaway, the flight, the pursuit, and the recapture. I wondered dully why no one on the ship had seen us. Perhaps they were looking in the wrong direction, or perhaps they weren't even looking. If I survived this and found that they hadn't been on watch—I snarled and slammed my fist into the Lyranian's face.

Both of us were covered with blood, but he was visibly weaker. It was no longer a fight; we were too exhausted for that. We pawed at each other feebly, and I could detect something oddly like fear in him now. He couldn't hold me—but neither could I finish him.

I gathered my last remaining strength into one last blow. My torn fist smashed into his bloody face. He toppled to the ground and I fell beside him, too spent to move. I lay there panting, watching him.

He rose to his hands and knees and came crawling toward me, trembling with weakness. I felt his smothering weight pinning me as he fell across me. He twisted slowly, his fanged mouth gaping to bite again. His jaws closed on my arm. I was done—beaten—too weary and bruised to care. He had won. But his teeth couldn't break my skin. Like me, he was finished.

We lay there as the sun beat down, glaring at each other with fear and hate. And suddenly — over us — loomed the familiar faces of my crew and the tall tower of the *Two Two Four*.

Somehow I had reached the ship and safety!

I AWOKE. I was bathed with sweat. My muscles were aching and my head was a ball of fire. I looked around. Everything seemed normal. My menticom was on my head and I was lying on the bed in the tree house. Painfully I

rose to my feet and staggered into the main room.

"My God! Skipper, you look awful!" Allardyce's voice was sharp with concern. "What's wrong?"

"I don't know," I muttered. "My head's splitting."

"Here, sit down. Let me take a look at you." Allardyce produced a thermometer and stuck it in my mouth. "Mmmm," he said worriedly. "You've got fever."

"I feel like I've been through the mill," I said.

"We'd better get back to the ship. Doc should have a look at you."

I wanted nothing more than the familiar safety of the ship, away from these odd natives and exotic diseases that struck despite omnivaccination. And we should get back before the others fell sick.

"All right, Pat," I said. "Contact Dan. Have him send the big 'copter. We'll leave at once." I discounted the experience of last night as delirium, but just to make sure, I checked with Allardyce and Barger when they came in.

"Obviously fever," Barger said. "Nothing happened to me like you describe."

"Nor to me," Allardyce said.

I nodded. They were right, of course, unless the Lyranian in *their* dreams had eaten and absorbed them. Then—but that was sheer nonsense. I was being a suspicious fool. But that dream—all of it—had been damnably real.

We made our excuses to K'wan as the 'copter fluttered down into a nearby clearing.

"I'm sorry about this," K'wan said apologetically, "but I never thought of the possibility of diseases. We are all immune. We do have some biological skill, as you've surely guessed, but our engineering technology is far inferior to yours. We thought it would be better not to let you know about us until we had a chance to observe you. But you undoubtedly have seen enough to deduce our culture." He grinned—a ferocious grimace that exposed his long tusks. "I suppose we are rather bad liars. But then we're not accustomed to deception."

"I understand," I said. "You had no way of knowing what we were really like. We could have been the advance guard of a conquering space armada. You showed great courage to open relations with us."

"Not as great as yours. We had the opportunity of examining your man Alex. You had only his untried opinions to go by."

The 'copter came down with a flutter of rotor blades, and I shook hands with K'wan. For a moment I was tempted to call Dan and tell him to turn our hostages loose, but on second thought decided

that could wait. I slipped my menticom off. There was no point in broadcasting my thoughts, and without the gadget K'wan couldn't intercept them unless they were directed. After all, we were a minority on this world and Earth didn't even know where we were yet. A ship can cross hyper-space far more easily and quickly than the most powerful transmitter can broadcast across normal space. It would be a thousand years before Earth could hear from us by radio, even if they could distinguish our messages from stellar interference. While I felt oddly friendly, there was no reason to take chances, especially if there was any truth in that dream.

"You will be leaving soon?" K'wan asked. "You and the ship?"

"Yes," I said. "We have done all we can do here."

I looked up at him. He was standing there—*holding* the menticom in his *hand*—yet I understood him!

I didn't let the astonishment show on my face, nor the shock that coursed through my mind *when the Lyranian in my brain tried vainly to scream a warning!* Instead I took the circlet and turned to go.

"Remember what you are to do; the others will help," K'wan said.

"I will remember," I replied. *You're damn well right I'll remember,* I thought grimly.

The Lyranian was supposed to wreck the ship.

HE WAVED farewell as I turned to enter the 'copter. "Our thoughts go with you for your success," he said.

The Lyranian in my brain screamed and struggled, but I held him easily. I was his master, not he mine. There would be no sabotage on the *Two Two Four.* He wouldn't wreck my ship.

"Dan," I said as we went into orbit, "did Alex come aboard?"

"Of course."

"Where is he?"

"Down in the engine room, I suppose, or in his bunk. It's not his watch."

"Maybe you'd better check. But before you do—"

He waited for me to continue, and finally I was able to.

"Put Allardyce, Barger, and myself in the brig," I said. "Set a guard over us with instructions to shoot if we try to make a break. Then get Alex, if he's aboard. Frankly, I don't think you'll find him. They didn't need a ship's commander, a sociologist or a biologist, but they did need an engineer. Now get going. This is an order!"

Warren stiffened. "Yes, sir—sorry, sir!"

Inside my skull, the Lyran-

ian came to life—struggled briefly—and then quit. Barger, Allardyce and I spent the rest of the trip home in the air-conditioned, radiation-resistant, germproof, dustproof, escape-resistant brig. Alex, of course, wasn't aboard. There aren't many places on a starship where a man can hide, and the crew searched them all.

Even so, I kept worrying about the ship's safety all the way back. It was a miserable trip. I suppose it was just as miserable for the Lyranians in my two companions who kept worrying about how to destroy us. It didn't do them any good either. They never got a chance, and ultimately we reached Decontamination.

Barger and Allardyce are up there now. The medics think they can erase the Lyranians with insulin shock, but it'll take time. Mine, being a nice, tame one, was considered to be more valuable in me than out. We're going to have to know a lot about Lyrane in a hurry if we're going to do anything about those people, and my Lyranian can tell us plenty.

But I'll bet we'll find things different on Lyrane when we go back. They'll have at least ten years, and with the brains they've got—and Alex's brain to pick—they'll do just fine from an engineering point of view. I'll bet they'll even have spaceships.

From what I can gather from my alter ego, they checked Alex's brain and didn't like what they saw. That's the trouble with romantics. They always remember the wars and the fighting, never the stodgy, peaceful interims. But you simply don't spring that sort of stuff on a culture like Lyrane's. And I suppose my anger didn't help things any, but if not for that anger and my primitive bull-headedness, we might not be here.

III

CAPT. Halsey hurriedly downed the rum. "Skippers are picked because they're tough-minded and authoritarian. In space you need it occasionally. Fortunately I lived up to specifications. A peaceful sort like my Lyranian just couldn't take it—fortunately."

"Fortunately?" I asked.

"Sure. What else? Possibly those natives we conditioned would help our case, possibly not. And in the meantime the Lyranians would suck Alex dry. And with the *Two Two Four* gone it'd be maybe a couple of hundred years before we ran into them again, and by then they'd really be ready—loaded for bear with itchy trigger fingers—and we just might have a war on our hands. As it is we'll send out a battle fleet to give some au-

thority to our negotiators so no one will get hurt. They just shouldn't have picked Alex as typical of us. With his attitude and our weapons, they naturally got a lot of wrong ideas."

"Wrong?" I prompted the skipper.

Halsey chuckled. "Yes, that's what I said—wrong ideas," he said in that remote second voice. "Just because you've forgotten self-defense doesn't mean that other peaceful civilizations don't remember it."

END

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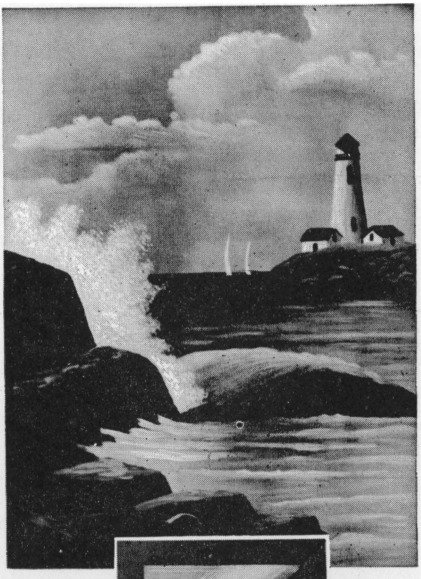

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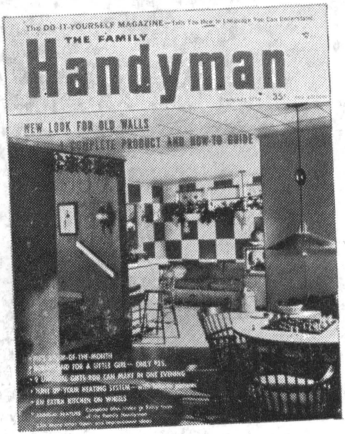

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