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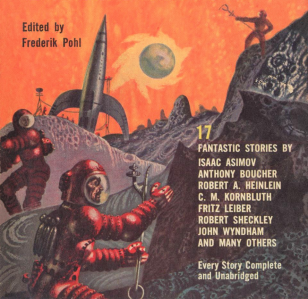
SHADOW OF TOMORROW

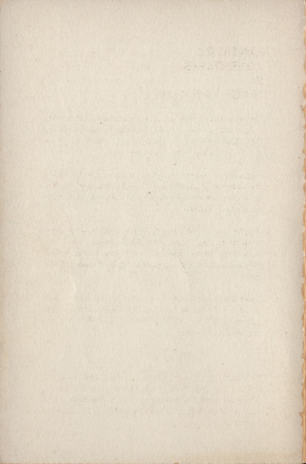
Edited by
Frederik Pohl

17

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17

**GREAT
SCIENCE FICTION
STORIES**

SHADOW OF

TOMORROW

EDITED

AND WITH AN INTRODUCTION

BY -

Frederik Pohl

PERMABOOKS

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Introduction

I KNOW a man who reads science fiction. This is not so very unusual; I might as truthfully have said that I know a thousand men who read science fiction, and perhaps I might even be honestly able to say that I know no one who does not, in this era of box-top rocket guns and Martian movies. But this particular man is a special case: He has read a great deal of it over a good many years; he reads it because he enjoys it and not because he writes it, wants to write it, or is married to someone who writes it; and he is, moreover, a graduate chemist in his early thirties, a class which John Campbell has found to be the embodiment of the average reader of *Astounding Science Fiction*, the magazine he edits. For these reasons, among others, when my friend chooses to deliver an opinion on science fiction, I listen.

My friend's most recent opinion worried me a little. He said, in the precise and pontifical tones of a man who has put away three Manhattans in three-quarters of an hour: "Science fiction is getting pretty gloomy. Every other story is about atomic war or the end of the world. Now, when I was a boy—"

And, when you stop to think about it, in a way my friend is right. For science fiction has changed a great deal in recent years. And it is interesting to note that, *mutatis mutandis*, it has changed *back* to the first forms of science fiction—the prayerful Utopias of More, Bellamy and the Greeks—but with the other side of the coin uppermost, so to speak.

It was as a vehicle for social commentary that science fiction was first conceived. Even as recent a master as H.G. Wells adventured into the future or the other dimensions only in order to find such perfect worlds as to point out the flaws in our own. There is a marked resemblance among all the stories of science fiction before the beginning of the Twentieth Century; one has a mental picture of the writers, repelled by the world around them, capable, under other

circumstances, of fighting a holy war or running for Congress on a platform of sweeping reform, setting down on paper their visions of societies where every man had freedom and every man had enough to eat.

The trouble with *that* sort of science fiction is something which has troubled the field a great many times in a great many ways: Those visions, by and large, came true.

At which point, for the better part of a half-century, science fiction veered off on a totally different course: The emphasis was on the science, the gadgetry, the sense of wonder and adventure. (You'll find precious little social commentary in *A Princess of Mars* or *The Skylark of Space*, to name a couple of the most successful science-fiction stories of a couple of decades ago.)

And when the aforesaid John Campbell, very nearly single-handed, decided that science fiction could be literature and as such required content and meaning as well as form and gimmickry, he was in actuality returning it to its purest form. And, when he simultaneously demanded that the stories be *entertaining*, he presented his writers with a problem that takes a large degree of talent to solve.

For the nature of story-writing is such that tangible things are the easiest to depict. If Joe Sciencefictionwriter has to tell a story about a different world than the one around us, he can do it most vividly by showing the physical circumstances of that world.

At the risk of having my last name taken to be a contraction for "Pollyanna", let me go on record as saying that I, at least, regard the physical circumstances of this world as pretty wonderful. Like just about everyone I know or you know, I get plenty to eat; I am seldom in pain, and when I am there is usually something that can be done about it; I might have unpopular views, but they are not likely to result in my being burned at the stake or fed to the lions. It is true that things might be even better, in that I might get even more to eat or live even longer, but compared with everything that has gone before, in a physical sense we've got Utopia.

This puts Joe Sciencefictionwriter on a spot. Insofar as he

is a social critic, think of him as a doctor with the world for his patient. When the world was ill, Dr. H.G. Wells could prescribe his medicine and paint beautiful pictures of the cure. But the patient took that medicine in copious doses; eight-year-olds no longer work at looms from dawn to dusk, and you and I don't have to strangle ourselves with Victorian starched collars.

So, having a "healthy" patient (a healthy patient is defined as one who is not yet critically ill), Joe Sciencefictionwriter is charged with prophylaxis instead of therapy: His stories don't so much show us what to work toward as what to avoid. For a few sample prescriptions, consult Drs. Eisner, Leiber, Evans, Sheckley, Heinlein and Kornbluth herein.

Of course, a science-fiction story is by definition an answer to the question "What would happen, *if*-?", and the "if"-situation is not always cosmic in scope. (For instance, the specimens which follow by Messrs. Wyndham, Asimov, Wilson and Piper.) But, cosmic or personal, "gloomy" or gay, I have enjoyed all of these stories very much, and I think you will too.

If so, a special vote of thanks is due to H.L. Gold, not only for advice and encouragement but for having been responsible, in his *Galaxy Science Fiction*, for the first appearance of a clear majority of the stories in this book.

—Frederik Pohl

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ROBERT A. HEINLEIN

On anyone's list of the five best science-fiction writers, you're likely to notice Isaac Asimov; you'll probably find Ray Bradbury; and you may encounter any of a dozen or more others. But one name you will find on just about every list, and that name is Robert A. Heinlein. Over a decade and a half he has managed to produce a dozen first-rate books, a vast number of stories that spread out from the specialist magazines into such wider markets as Argosy, Collier's and The Saturday Evening Post, and such by-blows of a prodigious writing career as the story for Destination Moon, one of the best science-fiction motion pictures ever to hit the screen. His secret? It's simple. To match Bob Heinlein's record of accomplishment, all one has to do is sit down at the typewriter and turn out as fresh, skillful and absorbing a story as—

The Year of the Jackpot

AT FIRST Potiphar Breen did not notice the girl who was undressing.

She was standing at a bus stop only ten feet away. He was indoors, but that would not have kept him from noticing; he was seated in a drugstore booth adjacent to the bus stop; there was nothing between Potiphar and the young lady but plate glass and an occasional pedestrian.

Nevertheless he did not look up when she began to peel. Propped up in front of him was a Los Angeles Times; beside it, still unopened, were the Herald-Express and the Daily News. He was scanning the newspaper carefully, but the headline stories got only a passing glance.

He noted the maximum and minimum temperatures in

THE YEAR OF THE JACKPOT by Robert A. Heinlein. Copyright, 1951, by Galaxy Publishing Corp.; reprinted by permission of the author and his agent, Lurton Blassingame.

Brownsville, Texas, and entered them in a neat black notebook. He did the same with the closing prices of three blue chips and two dogs on the New York Exchange, as well as the total number of shares.

He then began a rapid sifting of minor news stories, from time to time entering briefs of them in his little book.

The items he recorded seemed randomly unrelated—among them a publicity release in which Miss National Cottage Cheese Week announced that she intended to marry and have twelve children by a man who could prove that he had been a lifelong vegetarian, a circumstantial but wildly unlikely Flying Saucer report, and a call for prayers for rain throughout Southern California.

Potiphar had just written down the names and addresses of three residents of Watts, California, who had been miraculously healed at a tent meeting of the God-is-All First Truth Brethren by the Reverend Dickie Bottomley, the eight-year-old evangelist, and was preparing to tackle the *Herald-Express*, when he glanced over his reading glasses and saw the amateur ecodysiast on the street corner outside.

He stood up, placed his glasses in their case, folded the newspapers and put them carefully in his right coat pocket, counted out the exact amount of his check and added fifteen per cent. He then took his raincoat from a hook, placed it over his arm, and went outside.

By now the girl was practically down to the buff. It seemed to Potiphar Breen that she had quite a lot of buff, yet she had not pulled much of a house. The corner newsboy had stopped hawking his disasters and was grinning at her, and a mixed pair of transvestites who were apparently waiting for the bus had their eyes on her. None of the passers-by stopped. They glanced at her, and then, with the self-conscious indifference to the unusual of the true Southern Californian, they went on their various ways.

The transvestites were frankly staring. The male member of the team wore a frilly feminine blouse, but his skirt was a conservative Scottish kilt. His female companion wore a

business suit and Homburg hat; she stared with lively interest.

As Breen approached, the girl hung a scrap of nylon on the bus stop bench, then reached for her shoes. A police officer, looking hot and unhappy, crossed with the lights and came up to them.

"Okay," he said in a tired voice, "that'll be all, lady. Get them duds back on and clear out of here."

The female transvestite took a cigar out of her mouth. "Just what business is it of yours, officer?" she asked.

The cop turned to her. "Keep out of this!" He ran his eyes over her getup, and that of her companion. "I ought to run both of you in, too."

The transvestite raised her eyebrows. "Arrest us for being clothed, arrest her for not being. I think I'm going to like this." She turned to the girl, who was standing still and saying nothing, as if she were puzzled by what was going on. "I'm a lawyer, dear." She pulled a card from her vest pocket. "If this uniformed Neanderthal persists in annoying you, I'll be delighted to handle him."

The man in kilts said, "Grace! Please!"

She shook him off. "Quiet, Norman. This is our business." She went on to the policeman, "Well? Call the wagon. In the meantime, my client will answer no questions."

The official looked unhappy enough to cry and his face was getting dangerously red. Breen quietly stepped forward and slipped his raincoat around the shoulders of the girl.

She looked startled and spoke for the first time. "Uh—thanks." She pulled the coat about her, cape fashion.

The female attorney glanced at Breen then back to the cop. "Well, officer? Ready to arrest us?"

He shoved his face close to hers. "I ain't going to give you the satisfaction!" He sighed and added, "Thanks, Mr. Breen. You know this lady?"

"I'll take care of her. You can forget it, Kawonski."

"I sure hope so. If she's with you, I'll do just that. But get her out of here, Mr. Breen—please!"

The lawyer interrupted. "Just a moment. You're interfering with my client."

Kawonski said, "Shut up, you! You heard Mr. Breen—she's with him. Right, Mr. Breen?"

"Well—yes. I'm a friend. I'll take care of her."

The transvestite said suspiciously. "I didn't hear *her* say that."

Her companion said, "Grace! There's our bus."

"And I didn't hear her say she was your client," the cop retorted. "You look like a—" his words were drowned out by the bus brakes—"and besides that, if you don't climb on that bus and get off my territory, I'll . . . I'll . . ."

"You'll what?"

"Grace! We'll miss our bus."

"Just a moment, Norman. Dear, is this man really a friend of yours? Are you with him?"

The girl looked uncertainly at Breen, then said in a low voice, "Uh, yes. He is. I am."

"Well . . ." The lawyer's companion pulled at her arm. She shoved her card into Breen's hand and got on the bus. It pulled away.

Breen pocketed the card.

Kawonski wiped his forehead. "Why did you do it, lady?" he said peevishly.

The girl looked puzzled. "I—I don't know."

"You hear that, Mr. Breen? That's what they all say. And if you pull 'em in, there's six more the next day. The Chief said—" He sighed. "The Chief said—well, if I had arrested her like that female shyster wanted me to, I'd be out at a Hundred and Ninety-sixth and Ploughed Ground tomorrow morning, thinking about retirement. So get her out of here, will you?"

The girl said, "But—"

"No 'buts', lady. Just be glad a real gentleman like Mr. Breen is willing to help you." He gathered up her clothes, handed them to her. When she reached for them, she again exposed an uncusomary amount of skin. Kawonski hastily gave the clothing to Breen instead, who crowded them into his coat pockets.

She let Breen lead her to where his car was parked, got in and tucked the raincoat around her so that she was rather more dressed than a girl usually is. She looked at him.

She saw a medium-sized and undistinguished man who was slipping down the wrong side of thirty-five and looked older. His eyes had that mild and slightly naked look of the habitual spectacles-wearer who is not at the moment with glasses. His hair was gray at the temples and thin on top. His herringbone suit, black shoes, white shirt, and neat tie smacked more of the East than of California.

He saw a face which he classified as "pretty" and "wholesome" rather than "beautiful" and "glamorous." It was topped by a healthy mop of light brown hair. He set her age at twenty-five, give or take eighteen months. He smiled gently, climbed in without speaking and started his car.

He turned up Doheny Drive and east on Sunset. Near La Cienega, he slowed down. "Feeling better?"

"Uh, I guess so Mr.—Breen?"

"Call me Potiphar. What's your name? Don't tell me if you don't want to."

"Me? I'm—I'm Meade Barstow."

"Thank you, Meade. Where do you want to go? Home?"

"I suppose so. Oh, my, no. I can't go home like *this*." She clutched the coat tightly to her.

"Parents?"

"No. My landlady. She'd be shocked to death."

"Where, then?"

She thought. "Maybe we could stop at a filling station and I could sneak into the ladies' room."

"Maybe. See here, Meade—my house is six blocks from here and has a garage entrance. You could get inside without being seen."

She stared. "You don't look like a wolf!"

"Oh, but I am! The worst sort." He whistled and gnashed his teeth. "See? But Wednesday is my day off."

She looked at him and dimpled. "Oh, well! I'd rather wrestle with you than with Mrs. Megeath. Let's go."

He turned up into the hills. His bachelor diggings were one of the many little frame houses clinging like fungus to the brown slopes of the Santa Monica Mountains. The garage was notched into this hill; the house sat on it.

He drove in, cut the ignition, and led her up a teetery inside stairway into the living room.

"In there," he said, pointing. "Help yourself." He pulled her clothes out of his coat pockets and handed them to her.

She blushed and took them, disappeared into his bedroom. He heard her turn the key in the lock. He settled down in his easy chair, took out his notebook, and started with the *Herald-Express*.

He was finishing the *Daily News* and had added several notes to his collection when she came out. Her hair was neatly rolled; her face was restored; she had brushed most of the wrinkles out of her skirt. Her sweater was neither too tight nor deep cut, but it was pleasantly filled. She reminded him of well water and farm breakfasts.

He took his raincoat from her, hung it up, and said, "Sit down, Meade."

She said uncertainly, "I had better go."

"If you must, but I had hoped to talk with you."

"Well—" She sat down on the edge of his couch and looked around. The room was small, but as neat as his necktie and as clean as his collar. The fireplace was swept; the floor was bare and polished. Books crowded bookshelves in every possible space. One corner was filled by an elderly flat-top desk; the papers on it were neatly in order. Near it, on its own stand, was a small electric calculator. To her right, french windows gave out on a tiny porch over the garage. Beyond it she could see the sprawling city, where a few neon signs were already blinking.

She sat back a little. "This is a nice room—Potiphar. It looks like you."

"I take that as a compliment. Thank you." She did not answer; he went on, "Would you like a drink?"

"Oh, would I?" She shivered. "I guess I've got the jitters."

He stood up. "Not surprising. What'll it be?"

She took Scotch and water, no ice; he was a Bourbon-and-gingerale man. She soaked up half her highball in silence, then put it down, squared her shoulders and said, "Potiphar?"

"Yes, Meade?"

"Look, if you brought me here to make a pass, I wish you'd go ahead and make it. It won't do you a bit of good, but it makes me nervous to wait."

He said nothing and did not change his expression.

She went on uneasily, "Not that I'd blame you for trying—under the circumstances. And I *am* grateful. But . . . well, it's just that I don't—"

He came over and took both her hands. "I haven't the slightest thought of making a pass at you. Nor need you feel grateful. I butted in because I was interested in your case."

"My case? Are you a doctor? A psychiatrist?"

He shook his head. "I'm a mathematician. A statistician, to be precise."

"Huh? I don't get it."

"Don't worry about it. But I would like to ask some questions. May I?"

"Oh, sure! Of course! I owe you that much—and then some."

"You owe me nothing. Want your drink sweetened?"

She gulped the balance and handed him her glass, then followed him out into the kitchen. He did an exact job of measuring and gave it back.

"Now tell me why you took your clothes off," he said.

She frowned. "I don't know. I *don't* know. I don't *know*. I guess I just went crazy." She added, round-eyed, "But I don't feel crazy. Could I go off my rocker and not know it?"

"You're not crazy . . . not more so than the rest of us," he amended. "Tell me, where did you see someone else do this?"

"Huh? I never have."

"Where did you read about it?"

"But I haven't. Wait a minute—those people up in Canada. Dooka-somethings."

"Doukbobors. That's all? No bareskin swimming parties? No strip poker?"

She shook her head. "No. You may not believe it, but I was the kind of a little girl who undressed under her nightie." She colored and added, "I still do—unless I remember to tell myself it's silly."

"I believe it. No news stories?"

"No. Yes, there was! About two weeks ago, I think it was. Some girl in a theater—in the audience, I mean. But I thought it was just publicity. You know the stunts they pull here."

He shook his head. "It wasn't. February 3rd, the Grand Theater, Mrs. Alvin Copley. Charges dismissed."

"How did you know?"

"Excuse me." He went to his desk, dialed the City News Bureau. "Alf? This is Pot Breen. They still sitting on that story? . . . Yes, the Gypsy Rose file. Any new ones today?"

He waited. Meade thought that she could make out swearing.

"Take it easy, Alf—this hot weather can't last forever. Nine, eh? Well, add another—Santa Monica Boulevard, late this afternoon. No arrest." He added, "Nope, nobody got her name. A middle-aged woman with a cast in one eye. I happened to see it . . . who, me? Why would I want to get mixed up? But it's rounding into a very, very interesting picture."

He put the phone down.

Meade said, "Cast in one eye, indeed!"

"Shall I call him back and give him your name?"

"Oh, no!"

"Very well. Now, Meade, we seemed to have located the point of contagion in your case—Mrs. Copley. What I'd like to know next is how you felt, what you were thinking about, when you did it.

She was frowning intently. "Wait a minute, Potiphar. Do I understand that *nine other girls* have pulled the stunt I pulled?"

"Oh, no. Nine others *today*. You are—" he paused briefly—"the three hundred and nineteenth case in Los Angeles

County since the first of the year. I don't have figures on the rest of the country, but the suggestion to clamp down on the stories came from the eastern news services when the papers here put our first cases on the wire. That proves that it's a problem elsewhere, too."

"You mean that women all over the country are peeling off their clothes in public? Why, how shocking!"

He said nothing. She blushed again and insisted, "Well, it is shocking, even if it was me, this time."

"No, Meade. One case is shocking; over three hundred makes it scientifically interesting. That's why I want to know how it felt. Tell me about it."

"But—all right, I'll try. I told you I don't know why I did it; I still don't. I—"

"You remember it?"

"Oh, yes! I remember getting up off the bench and pulling up my sweater. I remember unzipping my skirt. I remember thinking I would have to hurry because I could see my bus stopped two blocks down the street. I remember how good it felt when I finally—" She paused and looked puzzled. "But I still don't know why."

"What were you thinking about just before you stood up?"

"I don't remember."

"Visualize the street. What was passing by? Where were your hands? Were your legs crossed or uncrossed? Was there anybody near you? What were you thinking about?"

"Nobody was on the bench with me. I had my hands in my lap. Those characters in the mixed-up clothes were standing nearby, but I wasn't paying attention. I wasn't thinking much except that my feet hurt and I wanted to get home—and how unbearably hot and sultry the weather was. Then—" her eyes became distant—"suddenly I knew what I had to do and it was very urgent that I do it. So I stood up and I—and I—" Her voice became shrill.

"Take it easy!" he said sharply. "Don't do it again."

"Huh? Why, Mr. Breen! I wouldn't do anything like that."

"Of course not. Then what happened after you undressed?"

"Why, you put your raincoat around me and you know the rest." She faced him. "Say Potiphar, what were you doing with a raincoat? It hasn't rained in weeks. This is the driest, hottest rainy season in years."

"In sixty-eight years, to be exact."

"Sixty—"

"I carry a raincoat anyhow. Just a notion of mine, but I feel that when it does rain, it's going to rain awfully hard." He added, "Forty days and forty nights, maybe."

She decided that he was being humorous and laughed.

He went on, "Can you remember how you got the idea of undressing?"

She swirled her glass and thought. "I simply don't know."

He nodded. "That's what I expected."

"I don't understand—unless you think I'm crazy. Do you?"

"No. I think you had to do it and could not help it and don't know why and can't know why."

"But you know." She said it accusingly.

"Maybe. At least I have some figures. Ever take any interest in statistics, Meade?"

She shook her head. "Figures confuse me. Never mind statistics—I want to know *why I did what I did!*"

He looked at her very soberly. "I think we're lemmings, Meade."

She looked puzzled, then horrified. "You mean those little furry mouselike creatures? The ones that—"

"Yes. The ones that periodically make a death migration, until millions, hundreds of millions of them drown themselves in the sea. Ask a lemming why he does it. If you could get him to slow up his rush toward death, even money says he would rationalize his answer as well as any college graduate. But he does it because he has to—and so do we."

"That's a horrid idea, Potiphar."

"Maybe. Come here, Meade. I'll show you figures that confuse me, too." He went to his desk and opened a drawer, took out a packet of cards. "Here's one. Two weeks ago, a man sues an entire state legislature for alienation of his wife's

affection—and the judge lets the suit be tried. Or this one—a patent application for a device to lay the globe over on its side and warm up the arctic regions. Patent denied, but the inventor took in over three hundred thousand dollars in down payments on North Pole real estate before the postal authorities stepped in. Now he's fighting the case and it looks as if he might win. And here—prominent bishop proposes applied courses in the so-called facts of life in high schools."

He put the card away hastily. "Here's a dilly—a bill introduced in the Alabama lower house to repeal the laws of atomic energy. Not the present statutes, but the natural laws concerning nuclear physics; the wording makes that plain." He shrugged. "How silly can you get?"

"They're crazy."

"No, Meade. One like that might be crazy; a lot of them becomes a lemming death march. No, don't object—I've plotted them on a curve. The last time we had anything like this was the so-called Era of Wonderful Nonsense. But this one is much worse." He delved into a lower drawer, hauled out a graph. "The amplitude is more than twice as great and we haven't reached peak. What the peak will be, I don't dare guess—three separate rhythms, reinforcing."

She peered at the curves. "You mean that the lad with the arctic real estate deal is somewhere on this line?"

"He adds to it. And back here on the last crest are the flagpole sitters and the goldfish swallowers and the Ponzi hoax and the marathon dancers and the man who pushed a peanut up Pikes Peak with his nose. You're on the new crest—or you will be when I add you in."

She made a face. "I don't like it."

"Neither do I. But it's as clear as a bank statement. This year the human race is letting down its hair, flipping its lip with a finger, and saying, 'Wubba, wubba, wubba.'"

She shivered. "Do you suppose I could have another drink? Then I'll go."

"I have a better idea. I owe you a dinner for answering questions. Pick a place and we'll have a cocktail before."

She chewed her lip. "You don't owe me anything. And I

don't feel up to facing a restaurant crowd. I might—I might—"

"No, you wouldn't," he said sharply. "It doesn't hit twice."

"You're sure? Anyhow, I don't want to face a crowd." She glanced at his kitchen door. "Have you anything to eat in there? I can cook."

"Um, breakfast things. And there's a pound of ground top round in the freezer compartment and some rolls. I sometimes make hamburgers when I don't want to go out."

She headed for the kitchen. "Drunk or sober, fully dressed or—or naked, I can cook. You'll see."

He did see. Open-faced sandwiches with the meat married to toasted buns and the flavor garnished rather than suppressed by scraped Bermuda onion and thin-sliced dill, a salad made from things she had scrounged out of his refrigerator, potatoes crisp but not vulcanized. They ate it on the tiny balcony, sopping it down with cold beer.

He sighed and wiped his mouth. "Yes, Meade, you can cook."

"Some day I'll arrive with proper materials and pay you back. Then I'll prove it."

"You've already proved it. Nevertheless, I accept. But I tell you three times—which makes it true, of course—that you owe me nothing."

"No? If you hadn't been a Boy Scout, I'd be in jail."

Breen shook his head. "The police have orders to keep it quiet at all costs—to keep it from growing. You saw that. And, my dear, you weren't a person to me at the time. I didn't even see your face."

"You saw plenty else!"

"Truthfully, I didn't look. You were just a—a statistic."

She toyed with her knife and said puzzled, "I'm not sure, but I think I've just been insulted. In all the twenty-five years that I've fought men off, more or less successfully, I've been called a lot of names—but a 'statistic?' Why, I ought to take your slide rule and beat you to death with it."

"My dear young lady—"

"I'm not a lady, that's for sure. But I'm *not* a statistic, either."

"My dear Meade, then. I wanted to tell you, before you did anything hasty, that in college I wrestled varsity middle-weight."

She grinned and dimpled. "That's more the talk a girl likes to hear. I was beginning to be afraid you had been assembled in an adding machine factory. Potty, you're really a dear."

"If that is a diminutive of my given name, I like it. But if it refers to my waist line, I definitely resent it."

She reached across and patted his stomach. "I like your waist line; lean and hungry men are difficult. If I were cooking for you regularly, I'd really pad it."

"Is that a proposal?"

"Let it lie, let it lie. Potty, do you really think the whole country is losing its buttons?"

He sobered at once. "It's worse than that."

"Huh?"

"Come inside. I'll show you."

They gathered up dishes and dumped them in the sink, Breen talking all the while.

"As a kid, I was fascinated by numbers. Numbers are pretty things and they combine in such interesting configurations. I took my degree in math, of course, and got a job as a junior actuary with Midwestern Mutual—the insurance outfit. That was fun. No way on Earth to tell when a particular man is going to die, but an absolute certainty that so many men of a certain age group would die before a certain date. The curves were so lovely—and they always worked out. Always. You didn't have to know *why*; you could predict with dead certainty and never know why. The equations worked; the curves were right.

"I was interested in astronomy, too; it was the one science where individual figures worked out neatly, completely, and accurately, down to the last decimal point that the instruments were good for. Compared with astronomy, the other sciences were mere carpentry and kitchen chemistry.

"I found there were nooks and crannies in astronomy where individual numbers won't do, where you have to go over

to statistics, and I became even more interested. I joined the Variable Star Association and I might have gone into astronomy professionally, instead of what I'm in now—business consultation—if I hadn't gotten interested in something else."

"Business consultation?" repeated Meade. "Income tax work?"

"Oh, no. That's too elementary. I'm the numbers boy for a firm of industrial engineers. I can tell a rancher exactly how many of his Hereford bull calves will be sterile. Or I can tell a motion picture producer how much rain insurance to carry on location. Or maybe how big a company in a particular line must be to carry its own risk in industrial accidents. And I'm right. I'm always right."

"Wait a minute. Seems to me a big company would *have* to have insurance."

"Contrariwise. A really big corporation begins to resemble a statistical universe."

"Huh?"

"Never mind. I got interested in something else—cycles. Cycles are everything, Meade. And everywhere. The tides. The seasons. Wars. Love. Everybody knows that in the spring the young man's fancy lightly turns to what the girls never stopped thinking about, but did you know that it runs in an eighteen-year-plus cycle as well? And that a girl born at the wrong swing of the curve doesn't stand nearly as good a chance as her older or younger sister?"

"Is *that* why I'm still a doddering old maid?"

"You're twenty-five?" He pondered. "Maybe, but your chances are improving again; the curve is swinging up. Anyhow, remember you are just one statistic; the curve applies to the group. Some girls get married every year."

"Don't call me a statistic," she repeated firmly.

"Sorry. And marriages match up with acreage planted to wheat, with wheat cresting ahead. You could almost say that planting wheat makes people get married."

"Sounds silly."

"It is silly. The whole notion of cause-and-effect is prob-

ably superstition. But the same cycle shows a peak in house building right after a peak in marriages."

"Now that makes sense."

"Does it? How many newlyweds do you know who can afford to build a house? You might as well blame it on wheat acreage. We don't know *why*; it just is."

"Sun spots, maybe?"

"You can correlate Sun spots with stock prices, or Columbia River salmon, or woman's skirts. And you are just as much justified in blaming short skirts for Sun spots as you are in blaming Sun spots for salmon. We don't know. But the curves go on just the same."

"But there has to be some *reason* behind it."

"Does there? That's mere assumption. A fact has no 'why.' There it stands, self-demonstrating. Why did you take your clothes off today?"

She frowned. "That's not fair."

"Maybe not. But I want to show you why I'm worried."

He went into the bedroom, came out with a large roll of tracing paper.

"We'll spread it on the floor. Here they are, all of them. The 54-year cycle—see the Civil War there? See how it matches in? The eighteen and one-third-year cycle, the 9-plus cycle, the 41-month shorty, the three rhythms of Sun spots—everything, all combined in one grand chart. Mississippi River floods, fur catches in Canada, stock market prices, marriages, epidemics, freight-car loadings, bank clearings, locust plagues, divorces, tree growth, wars, rainfall, Earth magnetism, building construction, patents applied for, murders—you name it; I've got it there."

She stared at the bewildering array of wavy lines. "But, Potty, what does it mean?"

"It means that these things all happen, in regular rhythm, whether we like it or not. It means that when skirts are due to go up, all the stylists in Paris can't make 'em go down. It means that when prices are going down, all the controls

and supports and government planning can't make 'em go up." He pointed to a curve. "Take a look at the grocery ads. Then turn to the financial page and read how the Big Brains try to double-talk their way out of it. It means that when an epidemic is due, it happens, despite all the public health efforts. It means we're lemmings."

She pulled her lip. "I don't like it. 'I am the master of my fate,' and so forth. I've got free will, Potty. I know I have—I can feel it."

"I imagine every little neutron in an atom bomb feels the same way. He can go *spung!* or he can sit still, just as he pleases. But statistical mechanics work out all the same and the bomb goes off—which is what I'm leading up to. See anything odd there, Meade?"

She studied the chart, trying not to let the curving lines confuse her.

"They sort of bunch up over at the right end."

"You're dern tootin' they do! See that dotted vertical line? That's right now—and things are bad enough. But take a look at that solid vertical; that's about six months from now—and that's when we get it. Look at the cycles—the long ones, the short ones, all of them. Every single last one of them reaches either a trough or a crest exactly on—or almost on—that line."

"That's bad?"

"What do you think. Three of the big ones troughed back in 1929 and the depression almost ruined us . . . even with the big 54-year cycle supporting things. Now we've got the big one troughing—and the few crests are not things that help. I mean to say, tent caterpillars and influenza don't do us any good. Meade, if statistics mean anything, this tired old planet hasn't seen a trend like this since Eve went into the apple business. I'm scared."

She searched his face. "Potty, you're not simply having fun with me? You know I can't check up on you."

"I wish to heaven I were. No, Meade, I can't fool about numbers; I wouldn't know how. This is it. —The Year of the Jackpot."

Meade was very silent as he drove her home. When they approached West Los Angeles, she said, "Potty?"

"Yes, Meade?"

"What do we *do* about it?"

"What do you do about a hurricane? You pull in your ears. What can you do about an atom bomb? You try to outguess it, not be there when it goes off. What else can you do?"

"Oh." She was silent for a few moments, then added, "Potty, will you tell me which way to jump?"

"Huh? Oh, sure! If I can figure it out."

He took her to her door, turned to go.

She said, "Potty!"

He faced her. "Yes, Meade?"

She grabbed his head, shook it—then kissed him fiercely on the mouth. "There, is that just a statistic?"

"Uh, no."

"It had better not be," she said dangerously. "Potty, I think I'm going to have to change your curve."

2.

RUSSIANS REJECT UN NOTE

MISSOURI FLOOD DAMAGE

EXCEEDS RECORD

MISSISSIPPI MESSIAH DEFIES

COURT

NUDIST CONVENTION STORMS

BAILEY'S BEACH

BRITISH-IRAN TALKS

STILL DEAD-LOCKED

FASTER-TILAN-LIGHT

WEAPON PROMISED

TYPHOON DOUBLING

BACK ON MANILA

MARRIAGE SOLEMNIZED ON

FLOOR OF HUDSON

New York, 13 July—In a specially constructed diving suit

built for two, Merydith Smithe, cafe society headline girl, and Prince Augie Schleswieg of New York and the Riviera were united today by Bishop Dalton in a service televised with the aid of the Navy's ultra-new—

As the Year of the Jackpot progressed, Breen took melancholy pleasure in adding to the data which proved that the curve was sagging as predicted. The undeclared World War continued its bloody, blundering way at half a dozen spots around a tortured globe. Breen did not chart it; the headlines were there for anyone to read. He concentrated on the odd facts in the other pages of the papers, facts which, taken singly, meant nothing, but taken together showed a disastrous trend.

He listed stock market prices, rainfall, wheat futures, but the "silly season" items were what fascinated him. To be sure, some humans were always doing silly things—but at what point had prime damfoolishness become commonplace? When, for example, had the zombie-like professional models become accepted ideals of American womanhood? What were the gradations between National Cancer Week and National Athlete's Foot Week? On what day had the American people finally taken leave of horse sense?

Take transvestism. Male-and-female dress customs were arbitrary, but they had seemed to be deeply rooted in the culture. When did the breakdown start? With Marlene Dietrich's tailored suits? By the late nineteen-forties, there was no "male" article of clothing that a woman could not wear in public—but when had men started to slip over the line? Should he count the psychological cripples who had made the word "drag" a by-word in Greenwich Village and Hollywood long before this outbreak? Or were they "wild shots" not belonging on the curve? Did it start with some unknown normal man attending a masquerade and there discovering that skirts actually were more comfortable and practical than trousers? Or had it started with the resurgence of Scottish nationalism reflected in the wearing of kilts by many Scottish-Americans?

Ask a lemming to state his motives! The outcome was in front of him, a news story. Transvestism by draft dodgers had at last resulted in a mass arrest in Chicago which was to have ended in a giant joint trial—only to have the deputy prosecutor show up in a pinafore and defy the judge to submit to an examination to determine the judge's true sex. The judge suffered a stroke and died and the trial was postponed—postponed forever, in Breen's opinion; he doubted that this particular blue law would ever again be enforced.

Or the laws about indecent exposure, for that matter. The attempt to limit the Gypsy Rose syndrome by ignoring it had taken the starch out of enforcement. Now here was a report about the All Souls Community Church of Springfield; the pastor had reinstituted ceremonial nudity. Probably the first time this thousand years, Breen thought, aside from some screwball cults in Los Angeles. The reverend gentleman claimed that the ceremony was identical with the "dance of the high priestess" in the ancient temple of Karnak.

Could be, but Breen had private information that the "priestess" had been working the burlesque and nightclub circuit before her present engagement. In any case, the holy leader was packing them in and had not been arrested.

Two weeks later a hundred and nine churches in thirty-three states offered equivalent attractions. Breen entered them on his curves.

This queasy oddity seemed to him to have no relation to the startling rise in the dissident evangelical cults throughout the country. These churches were sincere, earnest and poor—but growing, ever since the War. Now they were multiplying like yeast.

It seemed a statistical cinch that the United States was about to become godstruck again. He correlated it with Transcendentalism and the trek of the Latter Day Saints. Hmm, yes, it fitted. And the curve was pushing toward a crest.

Billions in war bonds were now falling due; wartime marriages were reflected in the swollen peak of the Los Angeles

school population. The Colorado River was a record low and the towers in Lake Mead stood high out of the water. But the Angelenos committed communal suicide by watering lawns as usual. The Metropolitan Water District commissioners tried to stop it. It fell between the stools of the police powers of fifty "sovereign" cities. The taps remained open, trickling away the life blood of the desert paradise.

The four regular party conventions—Dixiecrats, Regular Republicans, the Regular Regular Republicans, and the Democrats—attracted scant attention, because the Know-Nothings had not yet met. The fact that the "American Rally," as the Know-Nothings preferred to be called, claimed not to be a party but an educational society did not detract from their strength. But what was their strength? Their beginnings had been so obscure that Breen had had to go back and dig into the files, yet he had been approached twice this very week to join them, right inside his own office—once by his boss, once by the janitor.

He hadn't been able to chart the Know-Nothings. They gave him chills in his spines. He kept column-inches on them, found that their publicity was shrinking while their numbers were obviously zooming.

Krakatoa blew up on July 18th. It provided the first important transPacific TV-cast. Its effect on sunsets, on solar constant, on mean temperature, and on rainfall would not be felt until later in the year.

The San Andreas fault, its stresses unrelieved since the Long Beach disaster of 1933, continued to build up imbalance—an unhealed wound running the full length of the West Coast.

Pele and Etna erupted. Mauna Loa was still quiet.

Flying Saucers seemed to be landing daily in every state. Nobody had exhibited one on the ground—or had the Department of Defense sat on them? Breen was unsatisfied with the off-the-record reports he had been able to get; the alcoholic content of some of them had been high. But the sea serpent on Ventura Beach was real; he had seen it. The troglodyte in Tennessee he was not in a position to verify.

Thirty-one domestic air crashes the last week in July . . . was it sabotage, or was it a sagging curve on a chart? And that neopolio epidemic that skipped from Seattle to New York? Time for a big epidemic? Breen's chart said it was. But how about bacteriological warfare? Could a chart know that a Slav biochemist would perfect an efficient virus-and-vector at the right time?

Nonsense!

But the curves, if they meant anything at all, included "free will"; they averaged in all the individual "wills" of a statistical universe—and came out as a smooth function. Every morning, three million "free wills" flowed toward the center of the New York megapolis; every evening, they flowed out again—all by "free will" and on a smooth and predictable curve.

Ask a lemming! Ask *all* the lemmings, dead and alive. Let them take a vote on it!

Breen tossed his notebook aside and phoned Meade. "Is this my favorite statistic?"

"Potty! I was thinking about you."

"Naturally. This is your night off."

"Yes, but another reason, too. Potiphar, have you ever taken a look at the Great Pyramid?"

"I haven't even been to Niagara Falls. I'm looking for a rich woman, so I can travel."

"I'll let you know when I get my first million, but—"

"That's the first time you've proposed to me this week."

"Shut up. Have you ever looked into the prophecies they found inside the pyramid?"

"Look, Meade, that's in the same class with astrology—strictly for the squirrels. Grow up."

"Yes, of course. But, Potty, I thought you were interested in anything odd. This is odd."

"Oh. Sorry. If it's 'silly season' stuff, let's see it."

"All right. Am I cooking for you tonight?"

"It's Wednesday, isn't it?"

"How soon will you get here?"

He glanced at his watch. "Pick you up in eleven minutes." He felt his whiskers. "No, twelve and a half."

"I'll be ready. Mrs. Megeath says these regular dates mean that you're going to marry me."

"Pay no attention to her. She's just a statistic and I'm a wild datum."

"Oh well, I've got two hundred and forty-seven dollars toward that million. 'By!"

Meade's prize to show him was the usual Rosicrucian comeon, elaborately printed, and including a photograph (retouched, he was sure) of the much disputed line on the corridor wall which was alleged to prophesy, by its various discontinuities, the entire future. This one had an unusual time scale, but the major events were all marked on it—the fall of Rome, the Norman Invasion, the Discovery of America, Napoleon, the World Wars.

What made it interesting was that it suddenly stopped—now.

"What about it, Potty?"

"I guess the stonecutter got tired. Or got fired. Or they hired a new head priest with new ideas." He tucked it into his desk. "Thanks. I'll think about how to list it."

But he got it out again, applied dividers and a magnifying glass.

"It says here," he announced, "that the end comes late in August—unless that's a fly speck."

"Morning or afternoon? I have to know how to dress."

"Shoes will be worn. All God's chilluns got shoes." He put it away.

She was silent for a moment, then said, "Potty, isn't it about time to jump?"

"Huh? Girl, don't let *that* thing affect you! That's 'silly season' stuff."

"Yes. But take a look at *your* chart."

Nevertheless, he took the next afternoon off, spent it in the reference room of the main library, confirmed his opinion of soothsayers. Nostradamus was pretentiously silly, Mother

Shippey was worse. In any of them you could find whatever you looked for.

He did find one item in Nostradamus that he liked: "The Oriental shall come forth from his seat . . . he shall pass through the sky, through the waters and the snow, and he shall strike each one with his weapon."

That sounded like what the Department of Defense expected the commies to try to do to the Western Allies.

But it was also a description of every invasion that had come out of the "heartland" in the memory of mankind.

Nuts!

When he got home, he found himself taking down his father's Bible and turning to Revelations. He could not find anything he could understand, but he got fascinated by the recurring use of precise numbers. Presently he thumbed through the Book.

His eye lit on: "Boast not thyself of tomorrow; for thou knowest not what a day may bring forth."

He put the Book away, feeling humbled, but not cheered.

The rains started the next morning.

The Master Plumbers elected Miss Star Morning "Miss Sanitary Engineering" on the same day that the morticians designated her as "The Body I Would Like Best to Prepare," and her option was dropped by Fragrant Features.

Congress voted \$1.37 to compensate Thomas Jefferson Meeks for losses incurred while an emergency postman for the Christmas rush of 1936, approved the appointment of five lieutenant generals and one ambassador and adjourned in less than eight minutes.

The fire extinguishers in the midwest orphanage turned out to be filled with nothing but air.

The chancellor of the leading football institution sponsored a fund to send peace messages and vitamins to the Politburo.

The stock market slumped nineteen points and the tickers ran two hours late.

Wichita, Kansas, remained flooded while Phoenix, Arizona, cut off drinking water to areas outside city limits.

And Potiphar Breen found that he had left his raincoat at Meade Barstow's rooming house.

He phoned her landlady, but Mrs. Megeath turned him over to Meade.

"What are you doing home on a Friday?" he demanded.

"The theater manager laid me off. Now you'll have to marry me."

"You can't afford me. Meade—seriously, baby, what happened?"

"I was ready to leave the dump anyway. For the last six weeks the popcorn machine has been carrying the place. Today I sat through *The Lana Turner Story* twice. Nothing to do."

"I'll be along."

"Eleven minutes?"

"It's raining. Twenty—with luck."

It was more nearly sixty. Santa Monica Boulevard was a navigable stream; Sunset Boulevard was a subway jam. When he tried to ford the streams leading to Mrs. Megeath's house, he found that changing tires with the wheel wedged against a storm drain presented problems.

"Potty!" she exclaimed when he squished in. "You look like a drowned rat."

He found himself suddenly wrapped in a blanket robe belonging to the late Mr. Megeath and sipping hot cocoa while Mrs. Megeath dried his clothing in the kitchen.

"Meade, I'm 'at liberty' too."

"Huh? You quit your job?"

"Not exactly. Old Man Wiley and I have been having differences of opinion about my answers for months—too much 'Jackpot factor' in the figures I give him to turn over to clients. Not that I call it that, but he has felt that I was unduly pessimistic."

"But you were right!"

"Since when has being right endeared a man to his boss? But that wasn't why he fired me; it was just the excuse. He wants a man willing to back up the Know-Nothing program

with scientific double-talk and I wouldn't join." He went to the window. "It's raining harder."

"But the Know-Nothings haven't got any program."

"I know that."

"Potty, you should have joined. It doesn't mean anything. I joined three months ago."

"The hell you did!"

She shrugged. "You pay your dollar and you turn up for two meetings and they leave you alone. It kept my job for another three months. What of it?"

"Well, I'm sorry you did it; that's all. Forget it. Meade, the water is over the curbs out there."

"You had better stay here overnight."

"Mmm . . . I don't like to leave *Entropy* parked out in this stuff all night. Meade?"

"Yes, Potty?"

"We've both out of jobs. How would you like to duck north into the Mojave and find a dry spot?"

"I'd love it. But look, Potty, is this a proposal or just a proposition?"

"Don't pull that 'either-or' stuff on me. It's just a suggestion for a vacation. Do you want to take a chaperone?"

"No."

"Then pack a bag."

"Right away. But pack a bag *how*? Are you trying to tell me it's *time to jump*?"

He faced her, then looked back at the window.

"I don't know," he said slowly, "but this rain might go on quite a while. Don't take anything you don't have to have—but don't leave anything behind you can't get along without."

He repossessed his clothing from Mrs. Megeath while Meade was upstairs. She came down dressed in slacks and carrying two large bags; under one arm was a battered and rakish teddy bear.

"This is Winnie," she said.

"Winnie the Pooh?"

"No, Winnie Churchill. When I feel bad, he promises me blood, sweat, and tears; then I feel better. You did say to

bring anything I couldn't do without, didn't you?" She looked at him anxiously.

"Right."

He took the bags. Mrs. Megeath had seemed satisfied with his explanation that they were going to visit his (mythical) aunt in Bakersfield before looking for jobs. Nevertheless, she embarrassed him by kissing him good-by and telling him to "take care of my little girl."

Santa Monica Boulevard was blocked off from use. While stalled in traffic in Beverly Hills, he fiddled with the car radio, getting squawks and crackling noises, then finally one station nearby: "—in effect," a harsh, high, staccato voice was saying, "the Kremlin has given us till sundown to get out of town. This is your New York reporter, who thinks that in days like these every American must personally keep his powder dry. And now for a word from—"

Breen switched it off and glanced at her face. "Don't worry," he said. "They've been talking that way for years."

"You think they are bluffing?"

"I didn't say that. I said, 'Don't worry.'"

But his own packing, with her help, was clearly on a "survival kit" basis—canned goods, all his warm clothing, a sporting rifle he had not fired in over two years, a first-aid kit and the contents of his medicine chest. He dumped the stuff from his desk into a carton, shoved it into the back seat along with cans and books and coats, and covered the plunder with all the blankets in the house. They went back up the rickety stairs for a last check.

"Potty, where's your chart?"

"Rolled up on the back seat shelf. I guess that's all—hey, wait a minute!" He went to a shelf over his desk and began taking down small, sober-looking magazines. "I dern near left behind my file of *The Western Astronomer* and the *Proceedings of the Variable Star Association*."

"Why take them?"

"I must be nearly a year behind on both of them. Now maybe I'll have time to read."

"Hrrm . . . Potty, watching you read professional journals is not my notion of a vacation."

"Quiet, woman! You took Winnie; I take these."

She shut up and helped him. He cast a longing eye at his electric calculator, but decided it was too much like the White Knight's mousetrap. He could get by with his slide rule.

As the car splashed out into the street, she said, "Potty, how are you fixed for cash?"

"Huh? Okay, I guess."

"I mean, leaving while the banks are closed and everything." She held up her purse. "Here's my bank. It isn't much, but we can use it."

He smiled and patted her knee. "Good gall! I'm sitting on my bank; I started turning everything to cash about the first of the year."

"Oh. I closed out my bank account right after we met."

"You did? You must have taken my maunderings seriously."

"I always take you seriously."

Mint Canyon was a five-mile-an-hour nightmare, with visibility limited to the tail lights of the truck ahead. When they stopped for coffee at Halfway, they confirmed what seemed evident: Cajon Pass was closed and long-haul traffic for Route 66 was being detoured through the secondary pass.

At long, long last they reached the Victorville cutoff and lost some of the traffic—a good thing, because the windshield wiper on his side had quit working and they were driving by the committee system.

Just short of Lancaster, she said suddenly, "Potty, is this buggy equipped with a snorkel?"

"Nope."

"Then we had better stop. I see a light off the road."

The light was an auto court. Meade settled the matter of economy versus convention by signing the book herself; they were placed in one cabin. He saw that it had twin beds and let the matter ride. Meade went to bed with her teddy bear

without even asking to be kissed good night. It was already gray, wet dawn.

They got up in the late afternoon and decided to stay over one more night, then push north toward Bakersfield. A high pressure area was alleged to be moving south, crowding the warm, wet mass that smothered Southern California. They wanted to get into it. Breen had the wiper repaired and bought two new tires to replace his ruined spare, added some camping items to his cargo, and bought for Meade a .32 automatic, a lady's social-purpose gun.

"What's this for?" she wanted to know.

"Well, you're carrying quite a bit of cash."

"Oh. I thought maybe I was to use it to fight you off."

"Now, Meade—"

"Never mind. Thanks, Potty."

They had finished supper and were packing the car with their afternoon's purchases when the quake struck. Five inches of rain in twenty-four hours, more than three billion tons of mass suddenly loaded on a fault already overstrained, all cut loose in one subsonic, stomach-twisting rumble.

Meade sat down on the wet ground very suddenly; Breen stayed upright by dancing like a log-roller. When the ground quieted down somewhat, thirty seconds later, he helped her up.

"You all right?"

"My slacks are soaked." She added pettishly, "But, Potty, it never quakes in wet weather. Never. You said so yourself."

"Keep quiet, can't you?" He opened the car door and switched on the radio, waited impatiently for it to warm up.

"—your Sunshine Station in Riverside, California. Keep tuned to this station for the latest developments. As of now it is impossible to tell the size of this disaster. The Colorado River aqueduct is broken; nothing is known of the extent of the damage nor how long it will take to repair it. So far as we know, the Owens River Valley aqueduct may be intact, but all persons in the Los Angeles area are advised to conserve

water. My personal advice is to stick your washtubs out into this rain.

"I now read from the standard disaster instructions, quote: 'Boil all water. Remain quietly in your homes and do not panic. Stay off the highways. Cooperate with the police and render—' Joel! Catch that phone! '—render aid where necessary. Do not use the telephone except for—' Flash! An unconfirmed report from Long Beach states that the Wilmington and San Pedro waterfront is under five feet of water. I repeat, this is unconfirmed. Here's a message from the commanding general, March Field: 'Official, all military personnel will report—'"

Breen switched it off. "Get in the car."

He stopped in the town, managed to buy six five-gallon tins and a jeep tank. He filled them with gasoline and packed them with blankets in the back seat, topping off the mess with a dozen cans of oil. Then they started rolling.

"What are we doing, Potiphar?"

"I want to get west of the valley highway."

"Any particular place west?"

"I think so. We'll see. You work the radio, but keep an eye on the road, too. That gas back there makes me nervous."

Through the town of Mojave and northwest on 466 into the Tehachapi Mountains—

Reception was poor in the pass, but what Meade could pick up confirmed the first impression—worse than the quake of '06, worse than San Francisco, Managua, and Long Beach lumped together.

When they got down out of the mountains, the weather was clearing locally; a few stars appeared. Breen swung left off the highway and ducked south of Bakersfield by the county road, reached the Route 99 super-highway just south of Greenfield. It was, as he had feared, already jammed with refugees. He was forced to go along with the flow for a couple of miles before he could cut west at Greenfield toward Taft. They stopped on the western outskirts of the town and ate at an all-night joint.

They were about to climb back into the car when there was suddenly "sunrise" due south. The rosy light swelled almost instantaneously, filled the sky, and died. Where it had been, a red-and-purple pillar of cloud was spreading to a mushroom top.

Breen stared at it, glanced at his watch, then said harshly, "Get in the car."

"Potty! That was—"

"That used to be Los Angeles. Get in the car!"

He drove silently for several minutes. Meade seemed to be in a state of shock, unable to speak. When the sound reached them, he again glanced at his watch.

"Six minutes and nineteen seconds. That's about right."

"Potty, *we should have brought Mrs. Megeath.*"

"How was I to know?" he said angrily. "Anyhow, you can't transplant an old tree. If she got it, she never knew it."

"Oh, I hope so!"

"We're going to have all we can do to take care of ourselves. Take the flashlight and check the map. I want to turn north at Taft and over toward the coast."

"Yes, Potiphar."

She quieted down and did as she was told. The radio gave nothing, not even the Riverside station; the whole broadcast range was covered by a curious static, like rain on a window.

He slowed down as they approached Taft, let her spot the turn north onto the state road, and turned into it. Almost at once a figure jumped out into the road in front of them, waved his arms violently. Breen tromped on the brake.

The man came up on the left side of the car, rapped on the window. Breen ran the glass down. Then he stared stupidly at the gun in the man's left hand.

"Out of the car," the stranger said sharply. "I've got to have it."

Meade reached across Breen, stuck her little lady's gun in the man's face and pulled the trigger. Breen could feel the flash on his own face, never noticed the report. The man

looked puzzled, with a neat, not-yet-bloody hole in his upper lip—then slowly sagged away from the car.

"Drive on!" Meade said in a high voice.

Breen caught his breath. "But you—"

"Drive on! *Get rolling!*"

They followed the state road through Los Padres National Forest, stopping once to fill the tank from their cans. They turned off onto a dirt road. Meade kept trying the radio, got San Francisco once, but it was too jammed with static to read. Then she got Salt Lake City, faint but clear;

"—since there are no reports of anything passing our radar screen, the Kansas City bomb must be assumed to have been planted rather than delivered. This is a tentative theory, but—"

They passed into a deep cut and lost the rest.

When the squawk box again came to life, it was a crisp new voice: "Air Defense Command, coming to you over the combined networks. The rumor that Los Angeles has been hit by an atom bomb is totally unfounded. It is true that the western metropolis has suffered a severe earthquake shock, but that is all. Government officials and the Red Cross are on the spot to care for the victims, but—and I repeat—there has been no *atomic bombing*. So relax and stay in your homes. Such wild rumors can damage the United States quite as much as enemy bombs. Stay off the highways and listen for—"

Breen snapped it off. "Somebody," he said bitterly, "has again decided that 'Mama knows best.' They won't tell us any bad news."

"Potiphar," Meade said sharply, "that was an atom bomb, wasn't it?"

"It was. And now we don't know whether it was just Los Angeles—and Kansas City—or every big city in the country. All we know is that they are lying to us."

He concentrated on driving. The road was very bad.

As it began to get light, she said, "Potty, do you know where we're going? Are we just keeping out of cities?"

"I think I know. If I'm not lost." He stared around them. "Nope, it's all right. See that hill up forward with the triple gendarmes on its profile?"

"Gendarmes?"

"Big rock pillars. That's a sure landmark. I'm looking for a private road now. It leads to a hunting lodge belonging to two of my friends—an old ranch house actually, but as a ranch it didn't pay."

"They won't mind us using it?"

He shrugged. "If they show up, we'll ask them. *If* they show up. They lived in Los Angeles."

The private road had once been a poor grade of wagon trail; now it was almost impassable. But they finally topped a hogback from which they could see almost to the Pacific, then dropped down into a sheltered bowl where the cabin was.

"All out, girl. End of the line."

Meade sighed. "It looks heavenly."

"Think you can rustle breakfast while I unload? There's probably wood in the shed. Or can you manage a wood range?"

"Just try me."

Two hours later Breen was standing on the hogback, smoking a cigarette and staring off down to the west. He wondered if that was a mushroom cloud up San Francisco way. Probably his imagination, he decided, in view of the distance. Certainly there was nothing to be seen to the south.

Meade came out of the cabin. "Potty!"

"Up here."

She joined him, took his hand and smiled, then snatched his cigarette and took a deep drag. She exhaled it and said, "I know it's sinful of me, but I feel more peaceful than I have in months."

"I know."

"Did you see the canned goods in that pantry? We could pull through a hard winter here."

"We might have to."

"I suppose. I wish we had a cow."

"What would you do with a cow?"

"I used to milk four of them before I caught the school bus, every morning. I can butcher a hog, too."

"I'll try to find you a hog."

"You do and I'll manage to smoke it." She yawned. "I'm suddenly terribly sleepy."

"So am I. And small wonder."

"Let's go to bed."

"Uh, yes. Meade?"

"Yes, Potty?"

"We may be here quite a while. You know that, don't you?"

"Yes, Potty."

"In fact, it might be smart to stay put until those curves all start turning up again. They should, you know."

"Yes. I had figured that out."

He hesitated, then went on, "Meade, will you marry me?"

"Yes." She moved up to him.

After a time he pushed her gently away and said, "My dear, my very dear—uh—we could drive down and find a minister in some little town."

She looked at him steadily. "That wouldn't be very bright, would it? I mean, nobody knows we're here and that's the way we want it. Besides, your car might not make it back up that road."

"No, it wouldn't be very bright. But I want to do the right thing."

"It's all right, Potty. It's all *right*."

"Well, then . . . kneel down here with me. We'll say them together."

"Yes, Potiphar." She knelt and he took her hand. He closed his eyes and prayed wordlessly.

When he opened them he said, "What's the matter?"

"The gravel hurts my knees."

"We'll stand up, then."

"No. Look, Potty, why don't we just go in the house and say them there?"

"Hub? Hell's bells, woman, we might forget to say them

entirely. Now repeat after me: I, Potiphar, take thee, Meade—"

3

OFFICIAL: STATIONS WITHIN RANGE RELAY TWICE. EXECUTIVE BULLETIN NUMBER NINE—ROAD LAWS PREVIOUSLY PUBLISHED HAVE BEEN IGNORED IN MANY INSTANCES. PATROLS ARE ORDERED TO SHOOT WITHOUT WARNING AND PROVOST MARSHALS ARE DIRECTED TO USE DEATH PENALTY FOR UNAUTHORIZED POSSESSION OF GASOLINE. BIOLOGICAL WARFARE AND RADIATION QUARANTINE REGULATIONS PREVIOUSLY ISSUED WILL BE RIGIDLY ENFORCED. LONG LIVE THE UNITED STATES! HARLEY J. NEAL, LIEUTENANT GENERAL, ACTING CHIEF OF GOVERNMENT. ALL STATIONS RELAY TWICE.

THIS IS THE FREE RADIO AMERICA RELAY NETWORK. PASS THIS ALONG, BOYS! GOVERNOR BRANDLEY WAS SWORN IN TODAY AS PRESIDENT BY ACTING CHIEF JUSTICE ROBERTS UNDER THE RULE-OF-SUCCESSION. THE PRESIDENT NAMED THOMAS DEWEY AS SECRETARY OF STATE AND PAUL DOUGLAS AS SECRETARY OF DEFENSE. HIS SECOND OFFICIAL ACT WAS TO STRIP THE RENEGADE NEAL OF RANK AND TO DIRECT HIS ARREST BY ANY CITIZEN OR OFFICIAL. MORE LATER. PASS THE WORD ALONG.

HELLO, CQ, CQ, CQ. THIS IS W5KMR, FREEPORT. QRR, QRR! ANYBODY READ ME? ANYBODY? WE'RE DYING LIKE FLIES DOWN HERE. WHAT'S HAPPENED? STARTS WITH FEVER AND A BURNING THIRST, BUT YOU CAN'T SWALLOW. WE NEED HELP. ANYBODY READ ME? HELLO, CQ 75, CQ 75 THIS IS W5 KING MIKE ROGER CALLING QRR AND CQ 75. BY FOR SOMEBODY. . . ANYBODY!

THIS IS THE LORD'S TIME, SPONSORED BY SWAN'S ELIXIR, THE TONIC THAT MAKES WAITING FOR THE KINGDOM OF GOD WORTHWHILE. YOU ARE ABOUT TO HEAR A MESSAGE OF CHEER FROM JUDGE BROOMFIELD, ANOINTED VICAR OF THE KINGDOM ON EARTH. BUT FIRST A BULLETIN—SEND YOUR CONTRIBUTIONS TO MESSIAH, CLINT, TEXAS. DON'T TRY TO MAIL THEM—SEND THEM BY A KINGDOM MESSENGER OR BY SOME PILGRIM JOUR-

NEYING THIS WAY. AND NOW THE TABERNACLE CHOIR FOLLOWED BY THE VOICE OF THE VICAR ON EARTH—

—THE FIRST SYMPTOM IS LITTLE RED SPOTS IN THE ARMPITS. THEY ITCH. PUT PATIENTS TO BED AT ONCE AND KEEP 'EM COVERED UP WARM. THEN GO SCRUB YOURSELF AND WEAR A MASK, WE DON'T KNOW YET HOW YOU CATCH IT. PASS IT ALONG, ED.

—NO NEW LANDINGS REPORTED ANYWHERE ON THIS CONTINENT. THE FEW PARATROOPERS WHO ESCAPED THE ORIGINAL SLAUGHTER ARE THOUGHT TO BE HIDING OUT IN THE POCONOS. SHOOT—BUT BE CAREFUL; IT MIGHT BE AUNT TESSIE. OFF AND CLEAR. UNTIL NOON TOMORROW—"

The statistical curves were turning up again. There was no longer doubt in Breen's mind about that. It might not even be necessary to stay up here in the Sierra Madres through the winter, though he rather thought they would. It would be silly to be mowed down by the tail of a dying epidemic, or be shot by a nervous vigilante, when a few months' wait would take care of everything.

He was headed out to the hogback to wait for sunset and do an hour's reading. He glanced at his car as he passed it, thinking that he would like to try the radio. He suppressed the yen; two-thirds of his reserve gasoline was gone already just from keeping the battery charged for the radio—and here it was only December. He really ought to cut it down to twice a week. But it meant a lot to catch the noon bulletin of Free America and then twiddle the dial a few minutes to see what else he could pick up.

But for the past three days Free America had not been on the air—solar static maybe, or perhaps just a power failure. But that rumor that President Brandley had been assassinated—it hadn't come from the Free radio and it hadn't been denied by them, either, which was a good sign.

Still, it worried him.

And that other story that lost Atlantis had pushed up dur-

ing the quake period and that the Azores were now a little continent—almost certainly a hangover of the "silly season"—but it would be nice to hear a followup.

Rather sheepishly, he let his feet carry him to the car. It wasn't fair to listen when Meade wasn't around. He warmed it up, slowly spun the dial, once around and back. Not a peep at full gain, nothing but a terrible amount of static.

Served him right.

He climbed the hogback, sat down on the bench he had dragged up there—their "memorial bench," sacred to the memory of the time Meade had bruised her knees on the gravel—sat down and sighed. His lean belly was stuffed with venison and corn fritters; he lacked only tobacco to make him completely happy.

The evening cloud colors were spectacularly beautiful and the weather was extremely balmy for December; both, he thought, caused by volcanic dust, with perhaps an assist from atom bombs.

Surprising how fast things went to pieces when they started to skid! And surprising how quickly they were going back together, judging by the signs. A curve reaches trough and then starts right back up.

World War III was the shortest big war on record—forty cities gone, counting Moscow and the other slave cities as well as the American ones—and then *whoosh!* neither side fit to fight.

Of course, the fact that both sides had thrown their Sunday punch over the North Pole through the most freakish arctic weather since Peary invented the place had a lot to do with it, he supposed.

It was amazing that any of the Russian paratroop transports had gotten through at all.

Breen sighed and pulled a copy of the Western Astronomer out of his pocket. Where was he? Oh, yes, *Some Notes on the Stability of G-Type Stars with Especial Reference to Sol*, by Dynkowski, Lenin Institute, translated by Heinrich Ley, F. R. A. S.

Good boy, Ski—sound mathematician. Very clever application of harmonic series and tightly reasoned.

Breen started to thumb for his place when he noticed a footnote that he had missed. Dynkowski's own name carried down to it: "This monograph was denounced by *Pravda* as 'romantic reactionaryism' shortly after it was published. Professor Dynkowski has been unreported since and must be presumed to be liquidated."

The poor geek! Well, he probably would have been atomized by now anyway, along with the goons who did him in. He wondered if the army really had gotten all the Russki paratroopers. He had killed his own quota; if he hadn't gotten that doc within a quarter-mile of the cabin and headed right back, Meade would have had a bad time. He had shot them in the back and buried them beyond the woodpile.

He settled down to some solid pleasure. Dynkowski was a treat. Of course, it was old stuff that a G-type star, such as the Sun, was potentially unstable; a G-O star could explode, slide right off the Russell diagram, and end up as a white dwarf. But no one before Dynkowski had defined the exact conditions for such a catastrophe, nor had anyone else devised mathematical means of diagnosing the instability and describing its progress.

He looked up to rest his eyes from the fine print and saw that the Sun was obscured by a thin low cloud—one of those unusual conditions where the filtering effect is just right to permit a man to view the Sun clearly with the naked eye. Probably volcanic dust in the air, he decided, acting almost like smoked glass.

He looked again. Either he had spots before his eyes or that was one fancy big Sun spot. He had heard of being able to see them with the naked eye, but it had never happened to him.

He longed for a telescope.

He blinked. Yep, it was still there, about three o'clock. A big spot—no wonder the car radio sounded like a Hitler speech.

He turned back and continued on to the end of the article, being anxious to finish before the light failed.

At first his mood was sheerest intellectual pleasure at the man's tight mathematical reasoning. A three per cent imbalance in the solar constant—yes, that was standard stuff; the Sun would nova with that much change. But Dynkowski went further. By means of a novel mathematical operator which he had dubbed "yokes," he bracketed the period in a star's history when this could happen and tied it down with secondary, tertiary, and quaternary yokes, showing exactly the time of highest probability.

Beautiful! Dynkowski even assigned dates to the extreme limit of his primary yoke, as a good statistician should.

But, as Breen went back and reviewed the equations, his mood changed from intellectual to personal. Dynkowski was not talking about just any G-O star. In the latter part, he meant old Sol himself, Breen's personal Sun—the big boy out there with the oversize freckle on his face.

That was one hell of a big freckle! It was a hole you could chuck Jupiter into and not make a splash. He could see it very clearly now.

Everybody talks about "when the stars grow old and the Sun grows cold," but it's an impersonal concept, like one's own death.

Breen started thinking about it very personally. How long would it take, from the instant the imbalance was triggered until the expanding wave front engulfed Earth? The mechanics couldn't be solved without a calculation, even though they were implicit in the equations in front of him. Half an hour, for a horseback guess, from incitement until the Earth went *phutt!*

It hit him with gentle melancholy. No more? Never again? Colorado on a cool morning . . . the Boston Post Road with autumn wood smoke tanging the air . . . Bucks County bursting with color in the spring. The wet smells of the Fulton Fish Market—no, that was gone already. Coffee at the *Morning Call*. No more wild strawberries on a hillside in Jersey, hot and sweet as lips. Dawn in the South Pacific with the light

airs cool velvet under your shirt and never a sound but the chuckling of the water against the sides of the old rust bucket—what was her name? That was a long time ago—the S. S. *Mary Brewster*.

No more Moon if the Earth was gone. Stars, but no one to gaze at them.

He looked back at the dates bracketing Dynkowski's probability yoke.

"Thine alabaster cities gleam, undimmed by—"

He suddenly felt the need for Meade and stood up.

She was coming out to meet him. "Hello, Potty! Safe to come in now—I've finished the dishes."

"I should help."

"You do the man's work; I'll do the woman's work. That's fair." She shaded her eyes. "What a sunset! We ought to have volcanoes blowing their tops every year."

"Sit down and we'll watch it."

She sat beside him.

"Notice the Sun spot? You can see it with your naked eye."

She stared. "Is that a Sun spot? It looks as if somebody had taken a bite out of it."

He squinted his eyes at it again. Damned if it didn't look bigger!

Meade shivered. "I'm chilly. Put your arm around me."

He did so with his free arm, continuing to hold hands with the other.

It was bigger. The spot was growing.

What good is the race of man? Monkeys, he thought, monkeys with a touch of poetry in them, clattering and wasting a second-string planet near a third-string star. But sometimes they finish in style.

She snuggled to him. "Keep me warm."

"It will be warmer soon—I mean I'll keep you warm."

"Dear Potty," She looked up. "Potty, something funny is happening to the sunset."

"No, darling—to the Sun."

He glanced down at the journal, still open beside him. He

did not need to add up the two dates and divide by two to reach the answer. Instead he clutched fiercely at her hand, knowing with an unexpected and overpowering burst of sorrow that this was THE END.

FRITZ LEIBER

The man who wrote such novels as Conjure Wife (Twayne) and Gather, Darkness! (Pellegrini & Cudahy) needs little more to be considered one of the best writers in imaginative literature today. But the astonishing truth about Fritz Leiber is that, brilliant though the novels undoubtedly are, the stories for which he is best known are the short and frighteningly convincing glimpses into tomorrow like Coming Attraction, Poor Superman and the present story. Your editor is second to none in the esteem in which he holds all of these named stories, and such other unforgettable Leibers as The Night He Cried and The Nice Girl with Five Husbands; for which reason it is with distinct trepidation that he puts himself on record as believing that the best story Fritz Leiber ever wrote is—

A Bad Day for Sales

THE BIG bright doors parted with a *whoosh* and Robie glided suavely onto Times Square. The crowd that had been watching the fifty-foot tall clothing-ad girl get dressed, or reading the latest news about the Hot Truce scrawl itself in yard-high script, hurried to look.

Robie was still a novelty. Robie was fun. For a little while yet he could steal the show.

But the attention did not make Robie proud. He had no more vanity than the pink plastic giantess, and she did not even flicker her blue mechanical eyes.

Robie radared the crowd, found that it surrounded him solidly, and stopped. With a calculated mysteriousness, he said nothing.

A BAD DAY FOR SALES by Fritz Leiber. Copyright, 1953, by Galaxy Publishing Corp.; reprinted by permission of the author.

"Say, ma, he doesn't look like a robot at all. He looks sort of like a turtle."

Which was not completely inaccurate. The lower part of Robie's body was a metal hemisphere hemmed with sponge rubber and not quite touching the sidewalk. The upper was a metal box with black holes in it. The box could swivel and duck.

A chromium-bright hoopskirt with a turret on top.

"Reminds me too much of the Little Joe Baratanks," a veteran of the Persian War muttered, and rapidly rolled himself away on wheels rather like Robie's.

His departure made it easier for some of those who knew about Robie to open a path in the crowd. Robie headed straight for the gap. The crowd whooped.

Robie glided very slowly down the path, deftly jogging aside whenever he got too close to ankles in skylon or sock-assins. The rubber buffer on his hoopskirt was merely an added safeguard.

The boy who had called Robie a turtle jumped in the middle of the path and stood his ground, grinning foxily.

Robie stopped two feet short of him. The turret ducked. The crowd got quiet.

"Hello, youngster," Robie said in a voice that was smooth as that of a TV star, and was in fact a recording of one.

The boy stopped smiling. "Hello," he whispered.

"How old are you?" Robie asked.

"Nine. No, eight."

"That's nice," Robie observed. A metal arm shot down from his neck, stopped just short of the boy. The boy jerked back.

"For you," Robie said gently.

The boy gingerly took the red polly-lop from the neatly-fashioned blunt metal claws. A gray-haired woman whose son was a paraplegic hurried on.

After a suitable pause Robie continued, "And how about a nice refreshing drink of Poppy Pop to go with your polly-lop?" The boy lifted his eyes but didn't stop licking the candy. Robie wiggled his claws ever so slightly. "Just give me a quarter and within five seconds—"

A little girl wriggled out of the forest of legs. "Give me a polly-lop too, Robie," she demanded.

"Rita, come back here," a woman in the third rank of the crowd called angrily.

Robie scanned the newcomer gravely. His reference silhouettes were not good enough to let him distinguish the sex of children, so he merely repeated, "Hello, youngster."

"Rital"

"Give me a polly-lop!"

Disregarding both remarks, for a good salesman is single-minded and does not waste bait, Robie said winningly, "I'll bet you read *Junior Space Killers*. Now I have here—"

"Uh-hhh, I'm a girl. *He* got a polly-lop."

At the word "girl" Robie broke off. Rather ponderously he said, "Then—" After another pause he continued, "I'll bet you read *Gee-Gee Jones, Space Stripper*. Now I have here the latest issue of that thrilling comic, not yet in the stationary vending machines. Just give me fifty cents and within five—"

"Please let me through. I'm her mother."

A young woman in the front rank drawled over her powder-sprayed shoulder, "I'll get her for you," and slithered out on six-inch platforms. "Run away, children," she said nonchalantly and lifting her arms behind her head, pirouetted slowly before Robie to show how much she did for her bolero half-jacket and her form-fitting slacks that melted into skylon just above the knees. The little girl glared at her. She ended the pirouette in profile.

At this age-level Robie's reference silhouettes permitted him to distinguish sex, though with occasional amusing and embarrassing miscalls. He whistled admiringly. The crowd cheered.

Someone remarked critically to his friend. "It would go better if he was built more like a real robot. You know, like a man."

The friend shook his head. "This way it's subtler."

No one in the crowd was watching the newsprint overhead as it scribbled, "Ice Pack for Hot Truce? Vanadin hints Russ may yield on Pakistan."

Robie was saying, ". . . in the savage new glamor-tint we have christened Mars Blood, complete with spray applicator and fit-all fingerstalls that mask each finger completely except for the nail. Just give me five dollars—uncrumpled bills may be fed into the revolving rollers you see beside my arm—and within five seconds,—"

"No thanks, Robie," the young woman yawned.

"Remember," Robie persisted, "for three more weeks seductivising Mars Blood will be unobtainable from any other robot or human vendor."

"No thanks."

Robie scanned the crowd resourcefully. "Is there any gentleman here . . ." he began just as a woman elbowed her way through the front rank.

"I told you to come back!" she snarled at the little girl.

"But I didn't get my polly-lop!"

". . . who would care to . . ."

"Rita!"

"Robie cheated. Owl!"

Meanwhile the young woman in the half bolero had scanned the nearby gentlemen on her own. Deciding that there was less than a fifty per cent chance of any of them accepting the proposition Robie seemed about to make, she took advantage of the scuffle to slither gracefully back into the ranks. Once again the path was clear before Robie.

He paused, however, for a brief recapitulation of the more magical properties of Mars Blood, including a telling phrase about "the passionate claws of a Martian sunrise."

But no one bought. It wasn't quite time yet. Soon enough silver coins would be clinking, bills going through the rollers faster than laundry, and five hundred people struggling for the privilege of having their money taken away from them by America's only genuine mobile sales-robot.

But now was too soon. There were still some tricks that Robie did free, and one certainly should enjoy those before starting the more expensive fun.

So Robie moved on until he reached the curb. The variation in level was instantly sensed by his under-scanners. He

stopped. His head began to swivel. The crowd watched in eager silence. This was Robie's best trick.

Robie's head stopped swiveling. His scanners had found the traffic light. It was green. Robie edged forward. But then it turned red. Robie stopped again, still on the curb. The crowd softly *ahed* its delight.

Oh, it was wonderful to be alive and watching Robie on such a wonderful day. Alive and amused in the fresh, weather-controlled air between the lines of bright skyscrapers with their winking windows and under a sky so blue you could almost call it dark.

(But way, way up, where the crowd could not see, the sky was darker still. Purple-dark, with stars showing. And in that purple-dark, a silver-green something, the color of a bud, plunged downward at better than three miles a second. The silver-green was a paint that foiled radar.)

Robie was saying, "While we wait for the light there's time for you youngsters to enjoy a nice refreshing Poppy Pop. Or for you adults—only those over five feet are eligible to buy—to enjoy an exciting Poppy Pop fizz. Just give me a quarter or—I'm licenced to dispense intoxicating liquors—in the case of adults one dollar and a quarter and within five seconds . . ."

But that was not cutting it quite fine enough. Just three seconds later the silver-green bud bloomed above Manhattan into a globular orange flower. The skyscrapers grew brighter and brighter still, the brightness of the inside of the sun. The windows winked white fire.

The crowd around Robie bloomed too. Their clothes puffed into petals of flame. Their heads of hair were torches.

The orange flower grew, stem and blossom. The blast came. The winking windows shattered tier by tier, became black holes. The walls bent, rocked, cracked. A stony dandruff dribbled from their cornices. The flaming flowers on the sidewalk were all leveled at once. Robie was shoved ten feet. His metal hoopskirt dimpled, regained its shape.

The blast ended. The orange flower, grown vast, vanished overhead on its huge, magic beanstalk. It grew dark and very

still. The cornice-dandruff pattered down. A few small fragments rebounded from the metal hoopskirt.

Robie made some small, uncertain movements, as if feeling for broken bones. He was hunting for the traffic light, but it no longer shone, red or green.

He slowly scanned a full circle. There was nothing anywhere to interest his reference silhouettes. Yet whenever he tried to move, his under-scanners warned him of low obstructions. It was very puzzling.

The silence was disturbed by moans and a crackling sound, faint at first as the scampering of rats.

A seared man, his charred clothes fuming where the blast had blown out the fire, rose from the curb. Robie scanned him.

"Good day, sir," Robie said. "Would you care for a smoke? A truly cool smoke? Now I have here a yet-unmarketed brand. . ."

But the customer had run away, screaming, and Robie never ran after customers, though he could follow them at a medium brisk roll. He worked his way along the curb where the man had sprawled, carefully keeping his distance from the low obstructions, some of which writhed now and then, forcing him to jog. Shortly he reached a fire hydrant. He scanned it. His electronic vision, though it still worked, had been somewhat blurred by the blast.

"Hello, youngster," Robie said. Then, after a long pause, "Cat got your tongue? Well, I've got a little present for you. A nice, lovely polly-lop." His metal arm snaked down.

"Take it, youngster," he said after another pause. "It's for you. Don't be afraid."

His attention was distracted by other customers, who began to rise up oddly here and there, twisting forms that confused his reference silhouettes and would not stay to be scanned properly. One cried, "Water," but no quarter clinked in Robie's claws when he caught the word and suggested, "How about a nice refreshing drink of Poppy Pop?"

The rat-crackling of the flames had become a jungle muttering. The blind windows began to wink fire again.

A little girl marched up, stepping neatly over arms and legs she did not look at. A white dress and the once taller bodies around her had shielded her from the brilliance and the blast. Her eyes were fixed on Robie. In them was the same imperious confidence, though none of the delight, with which she had watched him earlier.

"Help me, Robie," she said. "I want my mother."

"Hello, youngster," Robie said. "What would you like? Comics? Candy?"

"Where is she, Robie? Take me to her."

"Balloons? Would you like to watch me blow up a balloon?"

The little girl began to cry. The sound triggered off another of Robie's novelty circuits.

"Is something wrong?" he asked. "Are you in trouble? Are you lost?"

"Yes, Robie. Take me to my mother."

"Stay right here," Robie said reassuringly, "and don't be frightened. I will call a policeman." He whistled shrilly, twice.

Time passed. Robie whistled again. The windows flared and roared. The little girl begged, "Take me away, Robie," and jumped onto a little step in his hoopskirt.

"Give me a dime," Robie said. The little girl found one in her pocket and put it in his claws.

"Your weight," Robie said, "is fifty-four and one-half pounds, exactly."

"Have you seen my daughter, have you seen her?" a woman was crying somewhere. "I left her watching that thing while I stepped inside—Rita!"

"Robie helped me," the little girl was telling her moments later. "He knew I was lost. He even called a policeman, but he didn't come. He weighed me too. Didn't you, Robie?"

But Robie had gone off to peddle Poppy Pop to the members of a rescue squad which had just come around the corner, more robot-like than he in their fireproof clothing.

ISAAC ASIMOV

The purpose of an introduction is to let two strangers meet; but it is hard to believe that anyone who has ever read any science fiction can be a stranger to the author of Pebble in the Sky, The Stars, Like Dust and Currents in Space (Doubleday), I, Robot, Foundation, Foundation and Empire and The Second Foundation (Gnome Press), and several score magazine stories, long and short. Many writers have published a greater number of stories, but few have found every story as deservedly popular as the man who wrote the memorable—

C-Chute

EVEN FROM the cabin into which he and the other passengers had been herded, Colonel Anthony Windham could still catch the essence of the battle's progress. For a while, there was silence, no jolting, which meant the spaceships were fighting at astronomical distance in a duel of energy blasts and powerful force-field defenses.

He knew that could have only one end. Their Earth ship was only an armed merchantman and his glimpse of the Kloro enemy just before he had been cleared off deck by the crew was sufficient to show it to be a light cruiser.

And in less than half an hour, there came those hard little shocks he was waiting for. The passengers swayed back and forth as the ship pitched and veered, as though it were an ocean liner in a storm. But space was calm and silent as ever. It was their pilot sending desperate bursts of steam through the steam-tubes, so that by reaction the ship would be sent rolling and tumbling. It could only mean that the inevitable

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had occurred. The Earth ship's screens had been drained and it no longer dared withstand a direct hit.

Colonel Windham tried to steady himself with his aluminum cane. He was thinking that he was an old man; that he had spent his life in the militia and had never seen a battle; that now, with a battle going on around him, he was old and fat and lame and had no men under his command.

They would be boarding soon, those Kloro monsters. It was their way of fighting. They would be handicapped by space-suits and their casualties would be high, but they wanted the Earth ship. Windham considered the passengers. For a moment, he thought, *if they were armed and I could lead them—*

He abandoned the thought. Porter was in an obvious state of funk and the young boy, Leblanc, was hardly better. The Polyorketes brothers—dash it, he *couldn't* tell them apart—huddled in a corner speaking only to one another. Mullen was a different matter. He sat perfectly erect, with no signs of fear or any other emotion in his face. But the man was just about five feet tall and had undoubtedly never held a gun of any sort in his hands in all his life. He could do nothing.

And there was Stuart, with his frozen half-smile and the high-pitched sarcasm which saturated all he said. Windham looked sidelong at Stuart now as Stuart sat there, pushing his dead-white hands through his sandy hair. With those artificial hands he was useless, anyway.

Windham felt the shuddering vibration of ship-to-ship contact; and in five minutes, there was the noise of the fight through the corridors. One of the Polyorketes brothers screamed and dashed for the door. The other called, "Aristides! Wait!" and hurried after.

It happened so quickly. Aristides was out the door and into the corridor, running in brainless panic. A carbonizer glowed briefly and there was never even a scream. Windham, from the doorway, turned in horror at the blackened stump of what was left. Strange—a lifetime in uniform and he had never before seen a man killed in violence.

It took the combined force of the rest to carry the other brother back struggling into the room.

The noise of battle subsided.

Stuart said, "That's it. They'll put a prize crew of two aboard and take us to one of their home planets. We're prisoners of war, naturally."

"Only two of the Kloros will stay aboard?" asked Windham, astonished.

Stuart said, "It is their custom. Why do you ask, Colonel? Thinking of leading a gallant raid to retake the ship?"

Windham flushed. "Simply a point of information, dash it." But the dignity and tone of authority he tried to assume failed him, he knew. He was simply an old man with a limp.

And Stuart was probably right. He had lived among the Kloros and knew their ways.

John Stuart had claimed from the beginning that the Kloros were gentlemen. Twenty-four hours of imprisonment had passed, and now he repeated the statement as he flexed the fingers of his hands and watched the crinkles come and go in the soft artoplasm.

He enjoyed the unpleasant reaction it aroused in the others. People were made to be punctured; windy bladders, all of them. And they had hands of the same stuff as their bodies.

There was Anthony Windham, in particular. Colonel Windham, he called himself, and Stuart was willing to believe it. A retired colonel who had probably drilled a home guard militia on a village green, forty years ago, with such lack of distinction that he was not called back to service in any capacity, even during the emergency of Earth's first interstellar war.

"Dashed unpleasant thing to be saying about the enemy, Stuart. Don't know that I like your attitude." Windham seemed to push the words through his clipped mustache. His head had been shaven, too, in imitation of the current military style, but now a gray stubble was beginning to show about a centered bald patch. His flabby cheeks dragged downward. That and the fine red lines on his thick nose gave him a somewhat undone appearance, as though he had been awakened too suddenly and too early in the morning.

Stuart said, "Nonsense. Just reverse the present situation.

Suppose an Earth warship had taken a Kloro liner. What do you think would have happened to any Kloro civilians aboard?"

"I'm sure the Earth fleet would observe all the interstellar rules of war," Windham said stiffly.

"Except that there aren't any. If we landed a prize crew on one of their ships, do you think we'd take the trouble to maintain a chlorine atmosphere for the benefit of the survivors; allow them to keep their non-contraband possessions; give them the use of the most comfortable stateroom, etcetera, etcetera, etcetera?"

Ben Porter said, "Oh, shut up, for God's sake. If I hear your etcetera, etcetera once again, I'll go nuts."

Stuart said, "Sorry!" He wasn't.

Porter was scarcely responsible. His thin face and beaky nose glistened with perspiration, and he kept biting the inside of his cheek until he suddenly winced. He put his tongue against the sore spot, which made him look even more clownish.

Stuart was growing weary of baiting them. Windham was too flabby a target and Porter could do nothing but writhe. The rest were silent. Demetrios Polyorketes was off in a world of silent internal grief for the moment. He had not slept the night before, most probably. At least, whenever Stuart woke to change his position—he himself had been rather restless—there had been Polyorketes' thick mumble from the next cot. It said many things, but the moan to which it returned over and over again was, "Oh, my brother!"

He sat dumbly on his cot now, his red eyes rolling at the other prisoners out of his broad swarthy, unshaven face. As Stuart watched, his face sank into calloused palms so that only his mop of crisp and curly black hair could be seen. He rocked gently, but now that they were all awake, he made no sound.

Claude Leblanc was trying very unsuccessfully, to read a letter. He was the youngest of the six, scarcely out of college, returning to Earth to get married. Stuart had found him that morning weeping quietly, his pink and white face flushed and

blotched as though it were a heartbroken child's. He was very fair, with almost a girl's beauty about his large blue eyes and full lips. Stuart wondered what kind of girl it was who had promised to be his wife. He had seen her picture. Who on the ship had not? She had the characterless prettiness that makes all pictures of fiancées indistinguishable. It seemed to Stuart that if he were a girl, however, he would want someone a little more pronouncedly masculine.

That left only Randolph Mullen. Stuart frankly did not have the least idea what to make of him. He was the only one of the six that had been on the Arcturian worlds for any length of time. Stuart, himself, for instance, had been there only long enough to give a series of lectures on astronautical engineering at the provincial engineering institute. Colonel Windham had been on a Cook's tour; Porter was trying to buy concentrated alien vegetables for his canneries on Earth; and the Polyorketes brothers had attempted to establish themselves in Arcturus as truck farmers and, after two growing seasons, gave it up, had somehow unloaded at a profit, and were returning to Earth.

Randolph Mullen, however, had been in the Arcturian system for seventeen years. How did voyagers discover so much about one another so quickly? As far as Stuart knew, the little man had scarcely spoken aboard ship. He was unfailingly polite, always stepped to one side to allow another to pass, but his entire vocabulary appeared to consist only of "Thank you" and "Pardon me." Yet the word had gone around that this was his first trip to Earth in seventeen years.

He was a little man, very precise, almost irritatingly so. Upon awaking that morning, he had made his cot neatly, shaved, bathed and dressed. The habit of years seemed not in the least disturbed by the fact that he was a prisoner of the Kloros now. He was unobtrusive about it, it had to be admitted, and gave no impression of disapproving of the sloppiness of the others. He simply sat there, almost apologetic, trussed in his overconservative clothing, and hands loosely clasped in his lap. The thin line of hair on his upper lip, far

from adding character to his face, absurdly increased its primness.

He looked like someone's idea of a caricature of a bookkeeper. And the queer thing about it all, Stuart thought, was that that was exactly what he was. He had noticed it on the registry—Randolph Fluellen Mullen; occupation, bookkeeper; employers, Prime Paper Box Co.; 27 Tobias Avenue, New Warsaw, Arcturus II.

"Mr. Stuart?"

Stuart looked up. It was Leblanc, his lower lip trembling slightly. Stuart tried to remember how one went about being gentle. He said, "What is it, Leblanc?"

"Tell me, when will they let us go?"

"How should I know?"

"Everyone says you lived on a Kloro planet, and just now you said they were gentlemen."

"Well, yes. But even gentlemen fight wars in order to win. Probably, we'll be interned for the duration."

"But that could be *years*! Margaret is waiting. She'll think I'm dead!"

"I suppose they'll allow messages to be sent through once we're on their planet."

Porter's hoarse voice sounded in agitation. "Look here, if you know so much about these devils, what will they do to us while we're interned? What will they feed us? Where will they get oxygen for us? They'll kill us, I tell you." And as an afterthought, "I've got a wife waiting for me, too," he added.

But Stuart had heard him speaking of his wife in the days before the attack. He wasn't impressed. Porter's nail-bitten fingers were pulling and plucking at Stuart's sleeve. Stuart drew away in sharp revulsion. He couldn't stand those ugly hands. It angered him to desperation that such monstrosities should be real while his own white and perfectly shaped hands were only mocking imitations grown out of an alien latex.

He said, "They won't kill us. If they were going to, they

would have done it before now. Look, we capture Kloros too, you know, and it's just a matter of common sense to treat your prisoners decently if you want the other side to be decent to your men. They'll do their best. The food may not be very good, but they're better chemists than we are. It's what they're best at. They'll know exactly what food factors we'll need and how many calories. We'll live. They'll see to that."

Windham rumbled, "You sound more and more like a blasted greenie sympathizer, Stuart. It turns my stomach to hear an Earthman speak well of the green fellas the way you've been doing. Burn, it, man, where's your loyalty?"

"My loyalty's where it belongs. With honesty and decency, regardless of the shape of the being it appears in." Stuart held up his hands. "See these? Kloros made them. I lived on one of their planets for six months. My hands were mangled in the conditioning machinery of my own quarters. I thought the oxygen supply they gave me was a little poor—it wasn't, by the way—and I tried making the adjustments on my own. It was my fault. You should never trust yourself with the machines of another culture. By the time someone among the Kloros could put on an atmosphere suit and get to me, it was too late to save my hands.

"They grew these artoplasm things for me and operated. You know what that meant? It meant designing equipment and nutrient solutions that would work in oxygen atmosphere. It meant that their surgeons had to perform a delicate operation while dressed in atmosphere suits. And now I've got hands again." He laughed harshly, and clenched them into weak fists. "Hands—"

Windham said, "And you'd sell your loyalty to Earth for that?"

"Sell my loyalty? You're mad. For years, I hated the Kloros for this. I was a master pilot on the Trans-Galactic Spacelines before it happened. Now? Desk job. Or an occasional lecture. It took me a long time to pin the fault on myself and to realize that the only role played by the Kloros was a decent one. They have their code of ethics, and it's as good as ours. If it weren't for the stupidity of some of their people—and, by God,

of some of ours—we wouldn't be at war. And after it's over—"

Polyorketes was on his feet. His thick fingers curved inward before him and his dark eyes glittered. "I don't like what you say, mister."

"Why don't you?"

"Because you talk too nice about these damned green bastards. The Kloros were good to you, eh? Well, they weren't good to my brother. They killed him. I think maybe I kill you, you damned greenie spy."

And he charged.

Stuart barely had time to raise his arms to meet the infuriated farmer. He gasped out, "What the hell—" as he caught one wrist and heaved a shoulder to block the other which groped toward his throat.

His artiplasm hand gave way. Polyorketes wrenched free with scarcely an effort.

Windham was bellowing incoherently, and Leblanc was calling out in his reedy voice, "Stop it! Stop it!" But it was little Mullen who threw his arms about the farmer's neck from behind and pulled with all his might. He was not very effective; Polyorketes seemed scarcely aware of the little man's weight upon his back. Mullen's feet left the floor so that he tossed helplessly to right and left. But he held his grip and it hampered Polyorketes sufficiently to allow Stuart to break free long enough to grasp Windham's aluminum cane.

He said, "Stay away, Polyorketes."

He was gasping for breath and fearful of another rush. The hollow aluminum cylinder was scarcely heavy enough to accomplish much, but it was better than having only his weak hands to defend himself with.

Mullen had loosed his hold and was now circling cautiously, his breathing roughened and his jacket in disarray.

Polyorketes, for a moment, did not move. He stood there, his shaggy head bent low. Then he said, "It is no use. I must kill Kloros. Just watch your tongue, Stuart. If it keeps on rattling too much, you're liable to get hurt. Really hurt, I mean."

Stuart passed a forearm over his forehead and thrust the cane back at Windham, who seized it with his left hand,

while mopping his bald pate vigorously with a handkerchief in his right.

Windham said, "Gentlemen, we must avoid this. It lowers our prestige. We must remember the common enemy. We are Earthmen and we must act what we are—the ruling race of the Galaxy. We dare not demean ourselves before the lesser breeds."

"Yes, Colonel," said Stuart, wearily. "Give us the rest of the speech tomorrow."

He turned to Mullen, "I want to say thanks."

He was uncomfortable about it, but he had to. The little accountant had surprised him completely.

But Mullen said, in a dry voice that scarcely raised above a whisper, "Don't thank me, Mr. Stuart. It was the logical thing to do. If we are to be interned, we would need you as an interpreter, perhaps, one who would understand the Kloros."

Stuart stiffened. It was, he thought, too much the book-keeper type of reasoning, too logical, too dry of juice. Present risk and ultimate advantage. The assets and debits balanced neatly. He would have liked Mullen to leap to his defense out of—well, out of what? Out of pure, unselfish decency?

Stuart laughed silently at himself. He was beginning to expect idealism of human beings, rather than good, straightforward, self-centered motivation.

Polyorketes was numb. His sorrow and rage were like acid inside him, but they had no words to get out. If he were Stuart, big-mouth, white-hands Stuart, he could talk and talk and maybe feel better. Instead, he had to sit there with half of him dead; with no brother, no Aristides—

It had happened so quickly. If he could only go back and have one second more warning, so that he might snatch Aristides, hold him, save him.

But mostly he hated the Kloros. Two months ago, he had hardly ever heard of them, and now he hated them so hard, he would be glad to die if he could kill a few.

He said, without looking up, "What happened to start this war, eh?"

He was afraid Stuart's voice would answer. He hated Stuart's voice. But it was Windham, the bald one.

Windham said, "The immediate cause, sir, was a dispute over mining concessions in the Wyandotte system. The Kloros had poached on Earth property."

"Room for both, Colonel!"

Polyorketes looked up at that, snarling. Stuart could not be kept quiet for long. He was speaking again; the cripple-hand, wiseguy, Kloros-lover.

Stuart was saying, "Is that anything to fight over, Colonel? We can't use one another's worlds. Their chlorine planets are useless to us and our oxygen ones are useless to them. Chlorine is deadly to us and oxygen is deadly to them. There's no way we could maintain permanent hostility. Our races just don't coincide. Is there reason to fight then because both races want to dig iron out of the same airless planetoids when there are millions like them in the Galaxy?"

Windham said, "There is the question of planetary honor—"

"Planetary fertilizer. How can it excuse a ridiculous war like this one? It can only be fought on outposts. It has to come down to a series of holding actions and eventually be settled by negotiations that might just as easily have been worked out in the first place. Neither we nor the Kloros will gain a thing."

Grudgingly, Polyorketes found that he agreed with Stuart. What did he and Aristides care where Earth or the Kloros got their iron?

Was that something for Aristides to die over?

The little warning buzzer sounded.

Polyorketes' head shot up and he rose slowly, his lips drawing back. Only one thing could be at the door. He waited, arms tense, fists balled. Stuart was edging toward him. Polyorketes saw that and laughed to himself. Let the Kloro come in, and Stuart, along with all the rest, could not stop him.

Wait, Aristides, wait just a moment, and a fraction of revenge will be paid back.

The door opened and a figure entered, completely swathed in a shapeless, billowing travesty of a spacesuit.

An odd, unnatural, but not entirely unpleasant voice began, "It is with some misgivings, Earthmen, that my companion and myself—"

It ended abruptly as Polyorketes, with a roar, charged once again. There was no science in the lunge. It was sheer bull-momentum. Dark head low, burly arms spread out with the hair-tufted fingers in choking position, he clumped on. Stuart was whirled to one side before he had a chance to intervene, and was spun tumbling across a cot.

The Kloro might have, without undue exertion, straight-armed Polyorketes to a halt, or stepped aside, allowing the whirlwind to pass. He did neither. With a rapid movement, a hand-weapon was up and a gentle pinkish line of radiance connected it with the plunging Earthman. Polyorketes stumbled and crashed down, his body maintaining its last curved position, one foot raised, as though a lightning paralysis had taken place. It toppled to one side and he lay there, eyes all alive and wild with rage.

The Kloro said, "He is not permanently hurt." He seemed not to resent the offered violence. Then he began again, "It is with some misgiving, Earthmen, that my companion and myself were made aware of a certain commotion in this room. Are you in any need which we can satisfy?"

Stuart was angrily nursing his knee which he had scraped in colliding with the cot. He said, "No, thank you, Kloro."

"Now, look here," puffed Windham, "this is a dashed outrage. We demand that our release be arranged."

The Kloro's tiny, insectlike head turned in the fat old man's direction. He was not a pleasant sight to anyone unused to him. He was about the height of an Earthman, but the top of him consisted of a thin stalk of a neck with a head that was the merest swelling. It consisted of a blunt triangular proboscis in front and two bulging eyes on either side. That was all. There was no brain pan and no brain. What corre-

sponded to the brain in a Kloro was located in what would be an Earthly abdomen, leaving the head as a mere sensory organ. The Kloro's spacesuit followed the outlines of the head more or less faithfully, the two eyes being exposed by two clear semicircles of glass, which looked faintly green because of the chlorine atmosphere inside.

One of the eyes was now cocked squarely at Windham, who quivered uncomfortably under the glance, but insisted, "You have no right to hold us prisoner. We are noncombatants."

The Kloro's voice, sounding thoroughly artificial, came from a small attachment of chromium mesh on what served as its chest. The voice box was manipulated by compressed air under the control of one or two of the many delicate, forked tendrils that radiated from two circles about its upper body and were, mercifully enough, hidden by the suit.

The voice said, "Are you serious, Earthman? Surely you have heard of war and rules of war and prisoners of war."

It looked about, shifting eyes with quick jerks of its head, staring at a particular object first with one, then with another. It was Stuart's understanding that each eye transferred a separate message to the abdominal brain, which had to co-ordinate the two to obtain full information.

Windham had nothing to say. No one had. The Kloro, its four main limbs, roughly arms and legs in pairs, had a vaguely human appearance under the masking of the suit, if you looked no higher than its chest, but there was no way of telling what it felt.

They watched it turn and leave.

Porter coughed and said in a strangled voice, "God, smell that chlorine. If they don't do something, we'll all die of rotted lungs."

Stuart said, "Shut up. There isn't enough chlorine in the air to make a mosquito sneeze, and what there is will be swept out in two minutes. Besides, a little chlorine is good for you. It may kill your cold virus."

Windham coughed and said, "Stuart, I feel that you might have said something to your Kloro friend about releasing us.

You are scarcely as bold in their presence, dash it, as you are once they are gone."

"You heard what the creature said, Colonel. We're prisoners of war, and prisoner exchanges are negotiated by diplomats. We'll just have to wait."

Leblanc, who had turned pasty white at the entrance of the Kloro, rose and hurried into the privy. There was the sound of retching.

An uncomfortable silence fell while Stuart tried to think of something to say to cover the unpleasant sound. Mullen filled in. He had rummaged through a little box he had taken from under his pillow.

He said, "Perhaps Mr. Leblanc had better take a sedative before retiring. I have a few. I'd be glad to give him one." He explained his generosity immediately, "Otherwise he may keep the rest of us awake, you see."

"Very logical," said Stuart, dryly. "You'd better save one for Sir Launcelot here; save half a dozen." He walked to where Polyorketes still sprawled and knelt at his side. "Comfortable, baby?"

Windham said, "Deuced poor taste speaking like that, Stuart."

"Well, if you're so concerned about him, why don't you and Porter hoist him onto his cot?"

He helped them do so. Polyorketes' arms were trembling erratically now. From what Stuart knew of the Kloro's nerve weapons, the man should be in an agony of pins and needles about now.

Stuart said, "And don't be too gentle with him, either. The damned fool might have gotten us all killed. And for what?"

He pushed Polyorketes' stiff carcass to one side and sat at the edge of the cot. He said, "Can you hear me, Polyorketes?"

Polyorketes' eyes gleamed. An arm lifted abortively and fell back.

"Okay then, listen. Don't try anything like that again. The next time it may be the finish for all of us. If you had been a Kloro and he had been an Earthman, we'd be dead now. So just get one thing through your skull. We're sorry about

your brother and it's a rotten shame, but it was his own fault."

Polyorketes tried to heave and Stuart pushed him back.

"No, you keep on listening," he said. "Maybe this is the only time I'll get to talk to you when you *have* to listen. Your brother had no right leaving passenger's quarters. There was no place for him to go. He just got in the way of our own men. We don't even know for certain that it was a Kloro gun that killed him. It might have been one of our own."

"Oh, I say, Stuart," objected Windham.

Stuart whirled at him. "Do you have proof it wasn't? Did you see the shot? Could you tell from what was left of the body whether it was Kloro energy or Earth energy?"

Polyorketes found his voice, driving his unwilling tongue into a fuzzy verbal snarl. "Damned stinking greenie bastard."

"Me?" said Stuart. "I know what's going on in your mind, Polyorketes. You think that when the paralysis wears off, you'll ease your feelings by slamming me around. Well, if you do, it will probably be curtains for all of us."

He rose, put his back against the wall. For the moment, he was fighting all of them. "None of you know the Kloros the way I do. The physical differences you see are not important. The differences in their temperament are. They don't understand our views on sex, for instance. To them, it's just a biological reflex like breathing. They attach no importance to it. But they *do* attach importance to social groupings. Remember, their evolutionary ancestors had lots in common with our insects. They always assume that any group of Earthmen they find together makes up a social unit.

"That means just about everything to them. I don't understand exactly *what* it means. No Earthman can. But the result is that they never break up a group, just as we don't separate a mother and her children if we can help it. One of the reasons they're treating us with kid gloves right now is that they imagine we're all broken up over the fact that they killed one of us, and they feel guilt about it.

"But this is what you'll have to remember. We're going to be interned together and *kept* together for duration. I don't like the thought. I wouldn't have picked any of you for

co-internees and I'm pretty sure none of you would have picked me. But there it is. The Kloros could never understand that our being together on the ship is only accidental.

"That means we've got to get along somehow. That's not just goodie-goodie talk about birds in their little nest agreeing. What do you think would have happened if the Kloros had come in earlier and found Polyorketes and myself trying to kill each other? You don't know? Well, what do you suppose you would think of a mother you caught trying to kill her children?"

"That's it, then. They would have killed every one of us as a bunch of Kloro-type perverts and monsters. Got that? How about you, Polyorketes? Have you got it? So let's call names if we have to, but let's keep our hands to ourselves. And now, if none of you mind, I'll massage my hands back into shape—these synthetic hands that I got from the Kloros and that one of my own kind tried to mangle again."

For Claude Leblanc, the worst was over. He had been sick enough; sick with many things; but sick most of all over having ever left Earth. It had been a great thing to go to college off Earth. It had been an adventure and had taken him away from his mother. Somehow, he had been sneakily glad to make that escape after the first month of frightened adjustment.

And then on the summer holidays, he had been no longer Claude, the shy-spoken scholar, but Leblanc, space traveler. He had swaggered the fact for all it was worth. It made him feel such a man to talk of stars and jumps and the customs and environments of other worlds; it had given him courage with Margaret. She had loved him for the dangers he had undergone—

Except that this had been the first one, really, and he had not done so well. He knew it and was ashamed and wished he were like Stuart.

He used the excuse of mealtime to approach. He said, "Mr. Stuart."

Stuart looked up and said shortly, "How do you feel?"

Leblanc felt himself blush. He blushed easily and the effort not to blush only made it worse. He said, "Much better, thank you. We are eating. I thought I'd bring you your ration."

Stuart took the offered can. It was standard space ration; thoroughly synthetic, concentrated, nourishing and, somehow, unsatisfying. It heated automatically when the can was opened, but could be eaten cold, if necessary. Though a combined fork-spoon utensil was enclosed, the ration was of a consistency that made the use of fingers practical and not particularly messy.

Stuart said, "Did you hear my little speech?"

"Yes, sir. I want you to know you can count on me."

"Well, good. Now go and eat."

"May I eat here?"

"Suit yourself."

For a moment, they ate in silence, and then Leblanc burst out, "You are so sure of yourself, Mr. Stuart! It must be very wonderful to be like that!"

"Sure of myself? Thanks, but there's your self-assured one."

Leblanc followed the direction of the nod in surprise. "Mr. Mullen? That little man? Oh, no!"

"You don't think he's self-assured?"

Leblanc shook his head. He looked at Stuart intently to see if he could detect humor in his expression. "That one is just cold. He has no emotion in him. He's like a little machine. I find him repulsive. You're different, Mr. Stuart. You have it all inside, but you control it. I would like to be like that."

And as though attracted by the magnetism of the mention, even though unheard, of his name, Mullen joined them. His can of ration was barely touched. It was still steaming gently as he squatted opposite them.

His voice had its usual quality of furtively rustling underbrush. "How long, Mr. Stuart, do you think the trip will take?"

"Can't say, Mullen. They'll undoubtedly be avoiding the usual trade routes and they'll be making more jumps through hyper-space than usual to throw off possible pursuit. I wouldn't be surprised if it took as long as a week. Why do you

ask? I presume you have a very practical and logical reason?"

"Why, yes. Certainly." He seemed quite shellbacked to sarcasm. He said, "It occurred to me that it might be wise to ration the rations, so to speak."

"We've got enough food and water for a month. I checked on that first thing."

"I see. In that case, I will finish the can." He did, using the all-purpose utensil daintily and patting a handkerchief against his unstained lips from time to time.

Polyorketes struggled to his feet some two hours later. He swayed a bit, looking like the Spirit of Hangover. He did not try to come closer to Stuart, but spoke from where he stood.

He said, "You stinking greenie spy, you watch yourself."

"You heard what I said before, Polyorketes."

"I heard. But I also heard what you said about Aristides. I won't bother with you, because you're a bag of nothing but noisy air. But wait, someday you'll blow your air in one face too many and it will be let out of you."

"I'll wait," said Stuart.

Windham hobbled over, leaning heavily on his cane. "Now, now," he called with a wheezing joviality that overlaid his sweating anxiety so thinly as to emphasize it. "We're all Earthmen, dash it. Got to remember that; keep it as a glowing light of inspiration. Never let down before the blasted Kloros. We've got to forget private feuds and remember only that we are Earthmen united against alien blighters."

Stuart's comment was unprintable.

Porter was right behind Windham. He had been in a close conference with the shaven-headed colonel for an hour, and now he said with indignation. "It doesn't help to be a wiseguy, Stuart. You listen to the colonel. We've been doing some hard thinking about the situation."

He had washed some of the grease off his face, wet his hair and slicked it back. It did not remove the little tic on his right cheek just at the point where his lips ended, or make his hangnail hands more attractive in appearance.

"All right, Colonel," said Stuart. "What's on your mind?"

Windham said, "I'd prefer to have all the men together."

"Okay, call them."

Leblanc hurried over; Mullen approached with greater deliberation.

Stuart said, "You want that fellow?" He jerked his head at Polyorketes.

"Why, yes. Mr. Polyorketes, may we have you, old fella?"

"Ah, leave me alone."

"Go ahead," said Stuart, "leave him alone. I don't want him."

"No, no," said Windham. "This is a matter for all Earthmen. Mr. Polyorketes, we must have you."

Polyorketes rolled off one side of his cot. "I'm close enough, I can hear you."

Windham said to Stuart, "Would they—the Kloros, I mean—have this room wired?"

"No," said Stuart. "Why should they?"

"Are you sure?"

"Of course I'm sure. They didn't know what happened when Polyorketes jumped me. They just heard the thumping when it started rattling the ship."

"Maybe they were trying to give us the impression the room wasn't wired."

"Listen, Colonel, I've never known a Kloro to tell a deliberate lie—"

Polyorketes interrupted calmly, "That lump of noise just loves the Kloros."

Windham said hastily, "Let's not begin that. Look, Stuart, Porter and I have been discussing matters and we have decided that you know the Kloros well enough to think of some way of getting us back to Earth."

"It happens that you're wrong. I can't think of any way."

"Maybe there is some way we can take the ship back from the blasted green fellas," suggested Windham. "Some weakness they may have. Dash it, you know what I mean."

"Tell me, Colonel, what are you after? Your own skin or Earth's welfare?"

"I resent that question. I'll have you know that while I'm

as careful of my own life as anyone has a right to be, I'm thinking of Earth primarily. And I think that's true of all of us."

"Damn right," said Porter, instantly. Leblanc looked anxious, Polyorketes resentful; and Mullen had no expression at all.

"Good," said Stuart. "Of course, I don't think we can take the ship. They're armed and we aren't. But there's this. You know why the Kloros took this ship intact. It's because they need ships. They may be better chemists than Earthmen are, but Earthmen are better astronomical engineers. We have bigger, better and more ships. In fact, if our crew had had a proper respect for military axioms in the first place, they would have blown the ship up as soon as it looked as though the Kloros were going to board."

Leblanc looked horrified. "And kill the passengers?"

"Why not? You heard what the good colonel said. Every one of us puts his own lousy little life after Earth's interests. What good are we to Earth alive right now? None at all. What harm will this ship do in Kloro hands? A hell of a lot, probably."

"Just why," asked Mullen, "did our men refuse to blow up the ship? They must have had a reason."

"They did. It's the firmest tradition of Earth's military men that there must never be an unfavorable ratio of casualties. If we had blown ourselves up, twenty fighting men and seven civilians of Earth would be dead as compared with an enemy casualty total of zero. So what happens? We let them board, kill twenty-eight—I'm sure we killed at least that many—and let them have the ship."

"Talk, talk, talk," jeered Polyorketes.

"There's a moral to this," said Stuart. "We can't take the ship away from the Kloros. We *might* be able to rush them, though, and keep them busy long enough to allow one of us enough time to short the engines."

"What?" yelled Porter, and Windham shushed him in fright.

"Short the engines," Stuart repeated. "That would destroy the ship, of course, which is what we want to do, isn't it?"

Leblanc's lips were white. "I don't think that would work."

"We can't be sure till we try. But what have we to lose by trying?"

"Our lives, damn it!" cried Porter. "You insane maniac, you're crazy!"

"If I'm a maniac," said Stuart, "and insane to boot, then naturally I'm crazy. But just remember that if we lose our lives, which is overwhelmingly probable, we lose nothing of value to Earth; whereas if we destroy the ship, as we just barely might, we do Earth a lot of good. What patriot would hesitate? Who here would put himself ahead of his world?" He looked about in the silence. "Surely not you, Colonel Windham."

Windham coughed tremendously. "My dear man, that is not the question. There must be a way to save the ship for Earth *without* losing our lives, eh?"

"All right. You name it."

"Let's all think about it. Now there are only two of the Kloros aboard ship. If one of us could sneak up on them and—"

"How? The rest of the ship's all filled with chlorine. We'd have to wear a spacesuit. Gravity in their part of the ship is hopped up to Kloro level, so whoever is patsy in the deal would be clumping around, metal on metal, slow and heavy. Oh, he could sneak up on them, sure—like a skunk trying to sneak downwind."

"Then we'll drop it all," Porter's voice shook. "Listen, Windham, there's not going to be any destroying the ship. My life means plenty to me and if any of you try anything like that, I'll call the Kloros. I mean it."

"Well," said Stuart, "there's hero number one."

Leblanc said, "I want to go back to Earth, but I—"

Mullen interrupted, "I don't think our chances of destroying the ship are good enough unless—"

"Heroes number two and three. What about you, Pol-yorketes? You would have the chance of killing two Kloros."

"I want to kill them with my bare hands," growled the

farmer, his heavy fists writhing. "On their planet, I will kill dozens."

"That's a nice safe promise for now. What about you, Colonel? Don't you want to march to death and glory with me?"

"Your attitude is very cynical and unbecoming, Stuart. It's obvious that if the rest are unwilling, then your plan will fall through."

"Unless I do it myself, huh?"

"You won't, do you hear?" said Porter, instantly.

"Damn right I won't," agreed Stuart. "I don't claim to be a hero. I'm just an average patriot, perfectly willing to head for any planet they take me to and sit out the war."

Mullen said, thoughtfully, "Of course, there is a way we could surprise the Kloros."

The statement would have dropped flat except for Polyorketes. He pointed a black-nailed, stubby forefinger and laughed harshly. "Mr. Bookkeeper!" he said. "Mr. Bookkeeper is a big shot talker like this damned greenie spy, Stuart. All right, Mr. Bookkeeper, go ahead. You make big speeches also. Let the words roll like an empty barrel."

He turned to Stuart and repeated venomously, "Empty barrel! Cripple-hand empty barrel. No good for anything but talk."

Mullen's soft voice could make no headway until Polyorketes was through, but then he said, speaking directly to Stuart, "We might be able to reach them from outside. This room has a C-chute I'm sure."

"What's a C-chute?" asked Leblanc.

"Well—" began Mullen, and then stopped, at a loss.

Stuart said, mockingly, "It's a euphemism, my boy. Its full name is 'casualty chute.' It doesn't get talked about, but the main rooms on any ship would have them. They're just little airlocks down which you slide a corpse. Buried at space. Always lots of sentiment and bowed heads, with the captain making a rolling speech of the type Polyorketes here wouldn't like."

Leblanc's face twisted. "Use *that* to leave the ship?"

"Why not? Superstitious?—Go on, Mullen."

The little man had waited patiently. He said, "Once outside, one could re-enter the ship by the steam-tubes. It can be done—with luck. And then you would be an unexpected visitor in the control room."

Stuart stared at him curiously. "How do you figure this out? What do you know about steam-tubes?"

Mullen coughed. "You mean because I'm in the paper-box business? Well—" He grew pink, waited a moment, then made a new start in a colorless, unemotional voice. "My company, which manufactures fancy paper boxes and novelty containers, made a line of spaceship candy boxes for the juvenile trade some years ago. It was designed so that if a string were pulled, small pressure containers were punctured and jets of compressed air shot out through the mock steam-tubes, sailing the box across the room and scattering candy as it went. The sales theory was that the youngsters would find it exciting to play with the ship and fun to scramble for the candy.

"Actually, it was a complete failure. The ship would break dishes and sometimes hit another child in the eye. Worse still, the children would not only scramble for the candy but would fight over it. It was almost our worst failure. We lost thousands.

"Still, while the boxes were being designed, the entire office was extremely interested. It was like a game, very bad for efficiency and office morale. For a while, we all became steam-tube experts. I read quite a few books on ship construction. On my own time, however, not the company's."

Stuart was intrigued. He said, "You know it's a video sort of idea, but it might work if we had a hero to spare. Have we?"

"What about you?" demanded Porter, indignantly. "You go around sneering at us with your cheap wisecracks. I don't notice you volunteering for anything."

"That's because I'm no hero, Porter. I admit it. My object is to stay alive, and shinnying down steam-tubes is no way

to go about staying alive. But the rest of you are noble patriots. The Colonel says so. What about you, Colonel? You're the senior hero here."

Windham said, "If I were younger, blast it, and if you had your hands, I would take pleasure, sir, in trouncing you soundly."

"I've no doubt of it, but that's no answer."

"You know very well that at my time of life and with my leg—" he brought the flat of his hand down upon his stiff knee—"I am in no position to do anything of the sort, however much I should wish to."

"Ah, yes," said Stuart, "and I, myself, am crippled in the hands, as Polyorketes tells me. That saves us. And what unfortunate deformities do the rest of us have?"

"Listen," cried Porter, "I want to know what this is all about. How can anyone go down the steam-tubes? What if the Kloros use them while one of us is inside?"

"Why, Porter, that's part of the sporting chance. It's where the excitement comes in."

"But he'd be boiled in the shell like a lobster."

"A pretty image, but inaccurate. The steam wouldn't be on for more than a very short time, maybe a second or two, and the suit insulation would hold that long. Besides, the jet comes scooting out at several hundred miles a minute, so that you would be blown clear of the ship before the steam could even warm you. In fact, you'd be blown quite a few miles out into space, and after that you would be quite safe from the Kloros. Of course, you couldn't get back to the ship."

Porter was sweating freely. "You don't scare me for one minute, Stuart."

"I don't? Then you're offering to go? Are you sure you've thought out what being stranded in space means? You're all alone, you know; really all alone. The steam-jet will probably leave you turning or tumbling pretty rapidly. You won't feel that. You'll seem to be motionless. But all the stars will be going around and around so that they're just streaks in the sky. They won't ever stop. They won't even slow up. Then your heater will go or your oxygen will give out, and you will

die very slowly. You'll have lots of time to think. Or, if you are in a hurry, you could open your suit. That wouldn't be pleasant, either. I've seen faces of men who had a torn suit happen to them accidentally, and it's pretty awful. But it would be quicker. Then—"

Porter turned and walked unsteadily away.

Stuart said, lightly, "another failure. One act of heroism still ready to be knocked down to the highest bidder with nothing offered yet."

Polyorketes spoke up and his harsh voice roughed the words. "You keep on talking, Mr. Big Mouth. You just keep banging that empty barrel. Pretty soon, we'll kick your teeth in. There's one boy I think would be willing to do it now, eh, Mr. Porter?"

Porter's look at Stuart confirmed the truth of Polyorketes' remarks, but he said nothing.

Stuart said, "Then what about you, Polyorketes? You're the bare-hand man with guts. Want me to help you into a suit?"

"I'll ask you when I want help."

"What about you, Leblanc?"

The young man shrank away.

"Not even to get back to Margaret?"

But Leblanc could only shake his head.

"Mullen?"

"Well—I'll try."

"You'll what?"

"I said, yes, I'll try. After all, it's my idea."

Stuart looked stunned. "You're serious? How come?"

Mullen's prim mouth pursed. "Because no one else will."

"But that's no reason. Especially for you."

Mullen shrugged.

There was a thump of a cane behind Stuart. Windham brushed past.

He said, "Do you really intend to go, Mullen?"

"Yes, Colonel."

"In that case, dash it, let me shake your hand. I like you. You're an—an Earthman, by heaven. Do this, and win or die, I'll bear witness for you."

Mullen withdrew his hand awkwardly from the deep and vibrating grasp of the other.

And Stuart just stood there. He was in a very unusual position. He was, in fact, in the particular position of all positions in which he most rarely found himself.

He had nothing to say.

The quality of tension had changed. The gloom and frustration had lifted a bit, and the excitement of conspiracy had replaced it. Even Polyorketes was fingering the spacesuits and commenting briefly and hoarsely on which he considered preferable.

Mullen was having a certain amount of trouble. The suit hung rather limply upon him even though the adjustable joints had been tightened nearly to minimum. He stood there now with only the helmet to be screwed on. He wiggled his neck.

Stuart was holding the helmet with an effort. It was heavy, and his artoplasmic hands did not grip it well. He said, "Better scratch your nose if it itches. It's your last chance for a while." He didn't add, "Maybe forever," but he thought it.

Mullen said, tonelessly, "I think perhaps I had better have a spare oxygen cyclinder."

"Good enough."

"With a reducing valve."

Stuart nodded. "I see what you're thinking of. If you do get blown clear of the ship, you could try to blow yourself back by using the cylinder as an action-reaction motor."

They clamped on the headpiece and buckled the spare cylinder to Mullen's waist. Polyorketes and Leblanc lifted him up to the yawning opening of the C-tube. It was ominously dark inside, the metal lining of the interior having been painted a mournful black. Stuart thought he could detect a musty odor about it, but that, he knew, was only imagination.

He stopped the proceedings when Mullen was half within the tube. He tapped upon the little man's faceplate.

"Can you hear me?"

Within, there was a nod.

"Air coming through all right? No last-minute troubles?"

Mullen lifted his armored arm in a gesture of reassurance.

"Then remember, don't use the suit-radio out there. The Kloros might pick up the signals.

Reluctantly, he stepped away. Polyorketes' brawny hands lowered Mullen until they could hear the thumping sound made by the steel-shod feet against the outer valve. The inner valve then swung shut with a dreadful finality, its beveled silicone gasket making a slight soughing noise as it crushed hard. They clamped it into place.

Stuart stood at the toggle-switch that controlled the outer valve. He threw it and the gauge that marked the air pressure within the tube fell to zero. A little pinpoint of red light warned that the outer valve was open. Then the light disappeared, the valve closed, and the gauge climbed slowly to fifteen pounds again.

They opened the inner valve again and found the tube empty.

Polyorketes spoke first. He said, "The little son-of-a-gum. He went!" He looked wonderingly at the other. "A little fellow with guts like that."

Stuart said, "Look, we'd better get ready in here. There's just a chance that the Kloros may have detected the valves opening and closing. If so, they'll be here to investigate and we'll have to cover up."

"How?" asked Windham.

"They won't see Mullen anywhere around. We'll say he's in the head. The Kloros know that it's one of the peculiar characteristics of Earthmen that they resent intrusion on their privacy in lavatories, and they'll make no effort to check. If we can hold them off—"

"What if they wait, or if they check the spacesuits?" asked Porter.

Stuart shrugged. "Let's hope they don't. And listen, Polyorketes, don't make any fuss when they come in."

Polyorketes grunted, "With that little guy out there? What do you think I am?" He stared at Stuart without animosity, then scratched his curly hair vigorously. "You know, I laughed

at him. I thought he was an old woman. It makes me ashamed."

Stuart cleared his throat. He said, "Look, I've been saying some things that maybe weren't too funny after all, now that I come to think of it. I'd like to say I'm sorry if I have."

He turned away morosely and walked toward his cot. He heard the steps behind him, felt the touch on his sleeve. He turned; it was Leblanc.

The youngster said softly, "I keep thinking that Mr. Mullen is an old man."

"Well, he's not a kid. He's about forty-five or fifty, I think."

Leblanc said, "Do you think, Mr. Stuart, that I should have gone, instead? I'm the youngest here. I don't like the thought of having let an old man go in my place. It makes me feel like the devil."

"I know. If he dies, it will be too bad."

"But he volunteered. We didn't make him, did we?"

"Don't try to dodge responsibility, Leblanc. It won't make you feel better. There isn't one of us without a stronger motive to run the risk than he had." And Stuart sat there silently, thinking.

Mullen felt the obstruction beneath his feet yield and the walls about him slip away quickly, too quickly. He knew it was the puff of air escaping, carrying him with it, and he dug arms and legs frantically against the wall to brake himself. Corpses were supposed to be flung well clear of the ship, but he was no corpse—for the moment.

His feet swung free and threshed. He heard the *clunk* of one magnetic boot against the hull just as the rest of his body puffed out like a tight cork under air pressure. He teetered dangerously at the lip of the hole in the ship—he had changed orientation suddenly and was looking down on it—then took a step backward as its lid came down of itself and fitted smoothly against the hull.

A feeling of unreality overwhelmed him. Surely, it wasn't he standing on the outer surface of a ship. Not Randolph F. Mullen. So few human beings could ever say they had, even those who traveled in space constantly.

He was only gradually aware that he was in pain. Popping out of that hole with one foot clamped to the hull had nearly bent him in two. He tried moving, cautiously, and found his motions to be erratic and almost impossible to control. He *thought* nothing was broken, though the muscles of his left side were badly wrenched.

And then he came to himself and noticed that the wrist lights of his suit were on. It was by their light that he had stared into the blackness of the C-chute. He stirred with the nervous thought that from within, the Kloros might see the twin spots of moving light just outside the hull. He flicked the switch upon the suit's mid-section.

Mullen had never imagined that, standing on a ship, he would fail to see its hull. But it was dark, as dark below as above. There were the stars, hard and bright little non-dimensional dots. Nothing more. Nothing more anywhere. Under his feet, not even the stars—*not even his feet*.

He bent back to look at the stars. His head swam. They were moving slowly. Or, rather, they were standing still and the ship was rotating, but he could not tell his eyes that. *They* moved. His eyes followed—down and behind the ship. New stars up and above from the other side. A black horizon. The ship existed only as a region where there were no stars.

No stars? Why, there was one almost at his feet. He nearly reached for it; then he realized that it was only a glittering reflection in the mirroring metal.

They were moving thousands of miles an hour. The stars were. The ship was. He was. But it meant nothing. To his senses, there was only silence and darkness and that slow wheeling of the stars. His eyes followed the wheeling—

And his head in its helmet hit the ship's hull with a soft bell-like ring.

He felt about in panic with his thick, insensitive, spun-silicate gloves. His feet were still firmly magnetized to the hull, that was true, but the rest of his body bent backward at the knees in a right angle. There was no gravity outside the ship. If he bent back, there was nothing to pull the upper

part of his body down and tell his joints they were bending. His body stayed as he put it.

He pressed wildly against the hull and his torso shot upward and refused to stop when upright. He fell forward.

He tried more slowly, balancing with both hands against the hull, until he squatted evenly. Then upward. Very slowly. Straight up. Arms out to balance.

He was straight now, aware of his nausea and lightheadedness.

He looked about. My God, where were the steam-tubes? He couldn't see them. They were black on black, nothing on nothing.

Quickly, he turned on the wrist lamps. In space, there were no beams, only elliptical, sharply defined spots of blue steel, winking light back at him. Where they struck a rivet, a shadow was cast, knife-sharp and as black as space, the lighted region illuminated abruptly and without diffusion.

He moved his arms, his body swaying gently in the opposite direction; action and reaction. The vision of a steam-tube with its smooth cylindrical sides sprang at him.

He tried to move toward it. His foot held firmly to the hull. He pulled and it slogged upward, straining against quicksand that eased quickly. Three inches up and it had almost sucked free; six inches up and he thought it would fly away.

He advanced it and let it down, felt it enter the quicksand. When the sole was within two inches of the hull, it snapped down, out of control, hitting the hull ringingly. His space-suit carried the vibrations, amplifying them in his ears.

He stopped in absolute terror. The dehydrators that dried the atmosphere within his suit could not handle the sudden gush of perspiration that drenched his forehead and armpits.

He waited, then tried lifting his foot again—a bare inch, holding it there by main force and moving it horizontally. Horizontal motion involved no effort at all; it was motion perpendicular to the lines of magnetic force. But he had to keep the foot from snapping down as he did so, and then lower it slowly.

He puffed with the effort. Each step was agony. The ten-

dons of his knees were cracking, and there were knives in his side.

Mullen stopped to let the perspiration dry. It wouldn't do to steam up the inside of his faceplate. He flashed his wrist-lamps, and the steam-cylinder was right ahead.

The ship had four of them, at ninety degree intervals, thrusting out at an angle from the midgirdle. They were the "fine adjustment" of the ship's course. The coarse adjustment was the powerful thrusters back and front which fixed final velocity by their accelerative and the decelerative force, and the hyperatomics that took care of the space-swallowing jumps.

But occasionally the direction of flight had to be adjusted slightly and then the steam-cylinders took over. Singly, they could drive the ship up, down, right, left. By twos, in appropriate ratios of thrust, the ship could be turned in any desired direction.

The device had been unimproved in centuries, being too simple to improve. The atomic pile heated the water content of a closed container into steam, driving it, in less than a second, up to temperatures where it would have broken down into a mixture of hydrogen and oxygen, and then into a mixture of electrons and ions. Perhaps the breakdown actually took place. No one ever bothered testing; it worked, so there was no need to.

At the critical point, a needle valve gave way and the steam thrust madly out in a short but incredible blast. And the ship, inevitably and majestically, moved in the opposite direction, veering about its own center of gravity. When the degrees of turn were sufficient, an equal and opposite blast would take place and the turning would be canceled. The ship would be moving at its original velocity, but in a new direction.

Mullen had dragged himself out to the lip of the steam-cylinder. He had a picture of himself—a small speck teetering at the extreme end of a structure thrusting out of an ovoid that was tearing through space at ten thousand miles an hour.

But there was no air-stream to whip him off the bull, and his magnetic soles held him more firmly than he liked.

With lights on, he bent down to peer into the tube and the ship dropped down precipitously as his orientation changed. He reached out to steady himself, but he was not falling. There was no up or down in space except for what his confused mind chose to consider up or down.

The cylinder was just large enough to hold a man, so that it might be entered for repair purposes. His light caught the rungs almost directly opposite his position at the lip. He puffed a sigh of relief with what breath he could muster. Some ships didn't have ladders.

He made his way to it, the ship appearing to slip and twist beneath him as he moved. He lifted an arm over the lip of the tube, feeling for the rung, loosened each foot, and drew himself within.

The knot in his stomach that had been there from the first was a convulsed agony now. If they should choose to manipulate the ship, if the steam should whistle out now—

He would never hear it; never know it. One instant he would be holding a rung, feeling slowly for the next with a groping arm. The next moment he would be alone in space, the ship a dark, dark nothingness lost forever among the stars. There would be, perhaps, a brief glory of swirling ice crystals drifting with him, shining in his wrist-light and slowly approaching and rotating about him, attracted by his mass like infinitesimal planets to an absurdly tiny Sun.

He was trickling sweat again, and now he was also conscious of thirst. He put it out of his mind. There would be no drinking until he was out of his suit—if ever.

Up a rung; up another; and another. How many were there? His hand slipped and he stared in disbelief at the glitter that showed under his light.

Ice?

Why not? The steam, incredibly hot as it was, would strike metal that was at nearly absolute zero. In the few split-seconds of thrust, there would not be time for the metal to warm above the freezing point of water. A sheet of ice would

condense that would sublime slowly into the vacuum. It was the speed of all that happened that prevented the fusion of the tubes and of the original water-container itself.

His groping hand reached the end. Again the wrist-light. He stared with crawling horror at the steam nozzle, half an inch in diameter. It looked dead, harmless. But it always would, right up to the microsecond before—

Around it was the outer steam lock. It pivoted on a central hub that was springed on the portion toward space, screwed on the part toward the ship. The springs allowed it to give under the first wild thrust of steam pressure before the ship's mighty inertia could be overcome. The steam was bled into the inner chamber, breaking the force of the thrust, leaving the total energy unchanged, but spreading it over time so that the hull itself was in that much less danger of being staved in.

Mullen braced himself firmly against a rung and pressed against the outer lock so that it gave a little. It was stiff, but it didn't have to give much, just enough to catch on the screw. He felt it catch.

He strained against it and turned it, feeling his body twist in the opposite direction. It held tight, the screw taking up the strain as he carefully adjusted the small control switch that allowed the springs to fall free. How well he remembered the books he had read!

He was in the interlock space now, which was large enough to hold a man comfortably, again for convenience in repairs. He could no longer be blown away from the ship. If the steam blast were turned on now, it would merely drive him against the inner lock—hard enough to crush him to a pulp. A quick death he would never feel, at least.

Slowly, he unhooked his spare oxygen cylinder. There was only an inner lock between himself and the control room now. This lock opened outward into space so that the steam blast could only close it tighter, rather than blow it open. And it fitted tightly and smoothly. There was absolutely no way to open it from without.

He lifted himself above the lock, forcing his bent back

against the curved inner surface of the interlock area. It made breathing difficult. The spare oxygen cylinder dangled at a queer angle. He held its metal-mesh hose and straightened it, forcing it against the inner lock so that vibration thudded. Again—again—

It would *have* to attract the attention of the Kloros. They would *have* to investigate.

He would have no way of telling when they were about to do so. Ordinarily, they would first let air into the interlock to force the outer lock shut. But now the outer lock was on the central screw, well away from its rim. Air would suck about it ineffectually, dragging out into space.

Mullen kept on thumping. Would the Kloros look at the air-gauge, note that it scarcely lifted from zero, or would they take its proper working for granted?

Porter said, "He's been gone an hour and a half."

"I know," said Stuart.

They were all restless, jumpy, but the tension among themselves had disappeared. It was as though all the threads of emotion extended to the hull of the ship.

Porter was bothered. His philosophy of life had always been simple—take care of yourself because no one will take care of you for you. It upset him to see it shaken.

He said, "Do you suppose they've caught him?"

"If they had, we'd hear about it," replied Stuart, briefly.

Porter felt, with a miserable twinge, that there was little interest on the part of the others in speaking to him. He could understand it; he had not exactly earned their respect. For the moment, a torrent of self-excuse poured through his mind. The others had been frightened, too. A man had a right to be afraid. No one likes to die. At least, he hadn't broken like Aristides Polyorketes. He hadn't wept like Leblanc. He—

But there was Mullen, out there on the hull.

"Listen," he cried, "why did he do it?" They turned to look at him, not understanding, but Porter didn't care. It bothered him to the point where it had to come out. "I want to know why Mullen is risking his life."

"The man," said Windham, "is a patriot—"

"No, none of that!" Porter was almost hysterical. "That little fellow has no emotions at all. He just has reasons and I want to know what those reasons are, because—"

He didn't finish the sentence. Could he say that if those reasons applied to a little middle-aged bookkeeper, they might apply even more forcibly to himself?

Polyorketes said, "He's one brave damn little fellow."

Porter got to his feet. "Listen," he said, "he may be stuck out there. Whatever he's doing, he may not be able to finish it alone. I—I volunteer to go out after him."

He was shaking as he said it and he waited in fear for the sarcastic lash of Stuart's tongue. Stuart was staring at him, probably with surprise, but Porter dared not meet his eyes to make certain.

Stuart said, mildly, "Let's give him another half-hour."

Porter looked up, startled. There was no sneer on Stuart's face. It was even friendly. They *all* looked friendly.

He said, "And then—"

"And then all those who do volunteer will draw straws or something equally democratic. Who volunteers, besides Porter?"

They all raised their hands; Stuart did, too.

But Porter was happy. He had volunteered first. He was anxious for the half-hour to pass.

It caught Mullen by surprise. The outer lock flew open and the long, thin, snakelike, almost headless neck of a Kloro sucked out, unable to fight the blast of escaping air.

Mullen's cylinder flew away, almost tore free. After one wild moment of frozen panic, he fought for it, dragging it above the air-stream, waiting as long as he dared to let the first fury die down as the air of the control room thinned out, then bringing it down with force.

It caught the sinewy neck squarely, crushing it. Mullen, curled above the lock, almost entirely protected from the stream, raised the cylinder again and plunging it down again striking the head, mashing the staring eyes to liquid ruin. In

the near-vacuum, green blood was pumping out of what was left of the neck.

Mullen dared not vomit, but he wanted to.

With eyes averted, he backed away, caught the outer lock with one hand and imparted a whirl. For several seconds, it maintained that whirl. At the end of the screw, the springs engaged automatically and pulled it shut. What was left of the atmosphere tightened it and the laboring pumps could now begin to fill the control room once again.

Mullen crawled over the mangled Kloro and into the room. It was empty.

He had barely time to notice that when he found himself on his knees. He rose with difficulty. The transition from non-gravity to gravity had taken him entirely by surprise. It was Klorian gravity, too, which meant that with this suit, he carried a fifty percent overload for his small frame. At least, though, his heavy metal clogs no longer clung so exasperatingly to the metal underneath. Within the ship, floors and wall were of cork-covered aluminum alloy.

He circled slowly. The neckless Kloro had collapsed and lay with only an occasional twitch to show it had once been a living organism. He stepped over it, distastefully, and drew the steam-tube lock shut.

The room had a depressing bilious cast and the lights shone yellow-green. It was the Kloro atmosphere, of course.

Mullen felt a twinge of surprise and reluctant admiration. The Kloros obviously had some way of treating materials so that they were impervious to the oxidizing effect of chlorine. Even the map of Earth on the wall, printed on glossy plastic-backed paper, seemed fresh and untouched. He approached, drawn by the familiar outlines of the continents—

There was a flash of motion caught in the corner of his eyes. As quickly as he could in his heavy suit, he turned, then screamed. The Kloro he had thought dead was rising to its feet.

Its neck hung limp, an oozing mass of tissue mash, but its arms reached out blindly, and the tentacles about its chest vibrated rapidly like innumerable snakes' tongues.

It was blind, of course. The destruction of its neck-stalk had deprived it of all sensory equipment, and partial asphyxiation had disorganized it. But the brain remained whole and safe in the abdomen. It still lived.

Mullen backed away. He circled, trying clumsily and unsuccessfully to tiptoe, though he knew that what was left of the Kloro was also deaf. It blundered on its way, struck a wall, felt to the base and began sidling along it.

Mullen cast about desperately for a weapon, found nothing. There was the Kloro's holster, but he dared not reach for it. Why hadn't he snatched it at the very first? Fool!

The door to the control room opened. It made almost no noise. Mullen turned, quivering.

The other Kloro entered, unharmed, entire. It stood in the doorway for a moment, chest-tendrils stiff and unmoving; its neck-stalk stretched forward; its horrible eyes flickering first at him and then at its nearly dead comrade.

And then its hand moved quickly to its side.

Mullen, without awareness, moved as quickly in pure reflex. He stretched out the hose of the spare oxygen-cylinder, which, since entering the control room, he had replaced in its suit-clamp, and cracked the valve. He didn't bother reducing the pressure. He let it gush out unchecked so that he nearly staggered under the backward push.

He could see the oxygen stream. It was a pale puff, billowing out amid the chlorine-green. It caught the Kloro with one hand on the weapon's holster.

The Kloro threw its hands up. The little beak on its head-nodule opened alarmingly but noiselessly. It staggered and fell, writhed for a moment, then lay still. Mullen approached and played the oxygen-stream upon its body as though he were extinguishing a fire. And then he raised his heavy foot and brought it down upon the center of the neck-stalk and crushed it on the floor.

He turned to the first. It was sprawled, rigid.

The whole room was pale with oxygen, enough to kill whole legions of Kloros, and his cylinder was empty.

Mullen stepped over the dead Kloro, out of the control

room and along the main corridor toward the prisoners' room.

Reaction had set in. He was whimpering in blind, incoherent fright.

Stuart was tired. Fake hands and all, he was at the controls of a ship once again. Two light cruisers of Earth were on the way. For better than twenty-four hours he had handled the controls virtually alone. He had discarded the chlorinating equipment, rerigged the old atmospherics, located the ship's position in space, tried to plot a course, and sent out carefully guarded signals—which had worked.

So when the door of the control room opened, he was a little annoyed. He was too tired to play conversational handball. Then he turned, and it was Mullen stepping inside.

Stuart said, "For God's sake, get back into bed, Mullen!"

Mullen said, "I'm tired of sleeping, even though I never thought I would be a while ago."

"How do you feel?"

"I'm stiff all over. Especially my side." He grimaced and stared involuntarily around.

"Don't look for the Kloros," Stuart said. "We dumped the poor devils." He shook his head. "I was sorry for them. To themselves, *they're* the human beings, you know, and *we're* the aliens. Not that I'd rather they'd killed you, you understand."

"I understand."

Stuart turned a sidelong glance upon the little man who sat looking at the map of Earth and went on, "I owe you a particular and personal apology, Mullen. I didn't think much of you."

"It was your privilege," said Mullen in his dry voice. There was no feeling in it.

"No, it wasn't. It is no one's privilege to despise another. It is only a hard-won right after long experience."

"Have you been thinking about this?"

"Yes, all day. Maybe I can't explain. It's these hands." He held them up before him, spread out. "It was hard knowing that other people had hands of their own. I had to hate them

for it. I always had to do my best to investigate and belittle their motives, point up their deficiencies, expose their stupidities. I had to do anything that would prove to myself that they weren't worth envying."

Mullen moved restlessly. "This explanation is not necessary."

"It is. It is!" Stuart felt his thoughts intently, strained to put them into words. "For years I've abandoned hope of finding any decency in human beings. Then you climbed into the C-chute."

"You had better understand," said Mullen, "that I was motivated by practical and selfish considerations. I will not have you present me to myself as a hero."

"I wasn't intending to. I know that you would do nothing without a reason. It was what your action did to the rest of us. It turned a collection of phonies and fools into decent people. And not by magic either. They were decent all along. It was just that they needed something to live up to and you supplied it. And—I'm one of them. I'll have to live up to you, too. For the rest of my life, probably."

Mullen turned away uncomfortably. His hand straightened his sleeves, which were not in the least twisted. His finger rested on the map.

He said, "I was born in Richmond, Virginia, you know. Here it is. I'll be going there first. Where were you born?"

"Toronto," said Stuart.

"That's right here. Not very far apart on the map, is it?"

Stuart said, "Would you tell me something?"

"If I can."

"Just why did you go out there?"

Mullen's precise mouth pursed. He said, dryly. "Wouldn't my rather prosaic reason ruin the inspirational effect?"

"Call it intellectual curiosity. Each of the rest of us had such obvious motives. Porter was scared to death of being interned; Leblanc wanted to get back to his sweetheart; Polyorketes wanted to kill Kloros; and Windham was a patriot according to his lights. As for me, I thought of myself as a noble idealist, I'm afraid. Yet in none of us was the motiva-

tion strong enough to get us into a spacesuit and out the C-chute. Then what made *you* do it, *you*, of all people?"

"Why the phrase, 'of all people?'"

"Don't be offended, but you seem devoid of all emotion."

"Do I?" Mullen's voice did not change. It remained precise and soft, yet somehow a tightness had entered it. "That's only training, Mr. Stuart, and self-discipline; not nature. A small man can have no respectable emotions. Is there anything more ridiculous than a man like myself in a state of rage? I'm five feet and one-half inch tall, and one hundred and two pounds in weight, if you care for exact figures. I insist on the half inch and the two pounds.

"Can I be dignified? Proud? Draw myself to my full height without inducing laughter? Where can I meet a woman who will not dismiss me instantly with a giggle? Naturally, I've had to learn to dispense with external display of emotion.

"You talk about deformities. No one would notice your hands or know they were different, if you weren't so eager to tell people all about it the instant you meet them. Do you think that the eight inches of height I do not have can be hidden? That it is not the first and, in most cases, the only thing about me that a person will notice?"

Stuart was ashamed. He had invaded a privacy he ought not have. He said, "I'm sorry."

"Why?"

"I should not have forced you to speak of this. I should have seen for myself that you—that you—"

"That I what? Tried to prove myself? Tried to show that while I might be small in body, I held within it a giant's heart?"

"I would not have put it mockingly."

"Why not? It's a foolish idea, and nothing like it is the reason I did what I did. What would I have accomplished if that's what was in my mind? Will they take me to Earth now and put me up before the television cameras—pitching them low, of course, to catch my face, or standing me on a chair—and pin medals on me?"

"They are quite likely to do exactly that."

"And what good would it do me? They would say, 'Gee, and he's such a little guy.' And afterward, what? Shall I tell each man I meet, 'You know, I'm the fellow they decorated for incredible valor last month?' How many medals, Mr. Stuart, do you suppose it would take to put eight inches and sixty pounds on me?"

Stuart said, "Put that way, I see your point."

Mullen was speaking a trifle more quickly now; a controlled heat had entered his words, warming them to just a tepid room temperature. "There *were* days when I thought I would show them, the mysterious 'them' that includes all the world. I was going to leave Earth and carve out worlds for myself. I would be a new and even smaller Napoleon. So I left Earth and went to Arcturus. And what could I do on Arcturus that I could not have done on Earth? Nothing. I balance books. So I am past the vanity, Mr. Stuart, of trying to stand on tip-toe."

"Then why *did* you do it?"

"I left Earth when I was twenty-eight and came to the Arcturian System. I've been there ever since. This trip was to be my first vacation, my first visit back to Earth in all that time. I was going to stay on Earth for six months. The Kloros instead captured us and would have kept us interned indefinitely. But I couldn't—I *couldn't* let them stop me from traveling to Earth. No matter what the risk, I had to prevent their interference. It wasn't love of woman, or fear, or hate, or idealism of any sort. It was stronger than any of those."

He stopped, and stretched out a hand as though to caress the map on the wall.

"Mr. Stuart," Mullen asked quietly, "haven't you ever been homesick?"

JOHN WYNDHAM

For some millions of persons who have encountered his exciting Day of the Triffids in one edition or another around the globe, the name of Wyndham and the sense of drama and danger go hand in hand. But, like a good many talented Englishmen, Wyndham's bite goes deepest when it is applied most gently. When the man-eating plants are forgotten, readers are still likely to be chuckling over such mild but memorable shorter pieces as the story he, with tongue in cheek, entitles—

The Perfect Creature

THE FIRST thing I knew of the Dixon affair was when a deputation came from the village of Membury to ask us if we would investigate the alleged curious goings-on there.

But first, perhaps, I had better explain the word *us*.

I happen to hold a post as Inspector for the S.S.M.A.—in full, the Society for the Suppression of the Maltreatment of Animals—in the District that includes Membury. Now, please don't assume that I am wobble-minded on the subject of animals. I needed a job. A friend of mine who has influence with the Society got it for me; and I do it, I think, conscientiously. As for the animals themselves, well, as with humans, I like some of them. In that, I differ from my co-Inspector, Alfred Weston; he likes—liked?—them all; on principle, and indiscriminately.

It could be that, at the salaries they pay, the S.S.M.A. has doubts of its personnel—though there is the point that where legal action is to be taken two witnesses are desirable; but,

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whatever the reason, there is a practice of appointing their Inspectors as pairs to each District. One result of which was my daily and close association with Alfred.

Now, one might describe Alfred as the animal-lover par excellence. Between him and all animals there was complete affinity—at least, on Alfred's side. It wasn't his fault if the animals didn't quite understand it; he tried hard enough. The very thought of four feet or feathers seemed to do something to him. He cherished them one and all and was apt to talk of them, and to them, as if they were his dear, dear friends temporarily embarrassed by a diminished I.Q.

Alfred himself was a well-built man, though not tall, who peered through heavily rimmed glasses with an earnestness that seldom lightened. The difference between us was that while I was doing a job, he was following a vocation—pursuing it wholeheartedly, and with a powerful imagination to energise him.

It didn't make him a restful companion. Under the powerful magnifier of Alfred's imagination the commonplace became lurid. A run-of-the-mill allegation of horse-thrashing would bring phrases about fiends, barbarians, and brutes in human form leaping into his mind with such vividness that he would be bitterly disappointed when we discovered, as we invariably did, a) that the thing had been much exaggerated, anyway; and, b) that the perpetrator had either had a drink too many or briefly lost his temper.

It so happened that we were in the office together on the morning that the Membury deputation arrived. They were a more numerous body than we usually received and as they filed in I could see Alfred's eyes begin to widen in anticipation of something really good—or horrific, depending on which way you were looking at it. Even I felt that this ought to produce something a cut above cans tied to cats' tails.

Our premonitions were right. There was a certain confusion in the telling, but when we had it sorted out, it seemed to amount to this:

Early the previous morning, one Tim Darrell, while engaged in his usual task of hauling the milk to the station, had en-

countered a phenomenon in the village street. The sight had so surprised him that, while stamping on his brakes, he had let out a yell which brought the whole place to its windows or doors. The men had gaped, and most of the women had set up screaming when they, too, saw the pair of creatures that were standing in the middle of their street.

The best picture of these creatures that we could get out of our visitors suggested that they must have looked more like turtles than anything else—though a very improbable kind of turtle that walked upright upon its hind legs.

The overall height of the apparitions would seem to have been about five foot six. Their bodies were covered with oval carapaces, not only at the back, but in front, too. The heads were about the size of normal human heads, but without hair, and having a horny surface. Their large, bright black eyes were set above a hard, shiny projection, debatably a beak or a nose.

But this description, while unlikely enough, did not cover the most troublesome characteristic—and the one upon which all were agreed despite other variations. This was that from the ridges at the sides, where the back and front carapaces joined, there protruded, some two-thirds of the way up, a pair of human arms and hands!

Well, about that point I suggested what anyone else would: that it was a hoax, a couple of fellows dressed up for a scare.

The deputation was indignant. For one thing, it convincingly said, no one was going to keep up that kind of hoax in the face of gunfire—which was what old Haliday who kept the saddler's had given them. He had let them have a half dozen rounds out of a twelve bore. This hadn't worried the things a bit and the pellets had just bounced off.

But when people had got around to emerging cautiously from their doors to take a closer look, that had seemed to upset them. They had squawked harshly at one another and then set off down the street at a kind of waddling run. Half the village, feeling braver now, had followed them. The creatures had not seemed to have any idea of where they

were going and had run out over Baker's Marsh. There they had soon stuck in one of the soft spots, and finally they had sunk out of sight into it, with a great deal of floundering and squawking. The village, after talking it over, had decided to come to us rather than to the police. It was well meant, no doubt, but, as I said:

"I really don't see what you can expect us to do if the creatures have vanished without trace."

"Moreover," put in Alfred, never strong on tact, "it sounds to me that we should have to report that the villagers of Membury simply bounded these unfortunate creatures—whatever they were—to their deaths and made no attempt to save them."

They looked somewhat offended at that, but it turned out that they had not finished. The tracks of the creatures had been followed back as far as possible and the consensus was that they could not have had their source anywhere but in Membury Grange.

"Who lives there?" I asked.

It was a Doctor Dixon, they told me. He had been there these last three or four years.

And that led us on to Bill Parsons' contribution. He was a little hesitant about making it at first.

"This'll be confidential like?" he asked.

Everyone for miles around knows that Bill's chief concern is other people's rabbits. I reassured him.

"Well, it was this way," he said. "'Bout three months ago it'd be. . ."

Pruned of its circumstantial detail, Bill's story amounted to this: finding himself, so to speak, in the grounds of the Grange one night, he had taken a fancy to investigate the nature of the new wing that Doctor Dixon had caused to be built on soon after he came. There had been considerable local speculation about it, and, seeing a chink of light between the curtains there, Bill had taken his opportunity.

"I'm telling you, there's things that's not right there," he said. "The very first thing I seen, back against the far wall,

was a line of cages with great thick bars to 'em—the way the light hung I couldn't see what was inside. But why'd anybody be wanting them in his house?

"And then when I shoved myself up higher to get a better look, there in the middle of the room I saw a horrible sight—a horrible sight it was!" He paused for a dramatic shudder.

"Well, what was it?" I asked patiently.

"It was—well, it's kind of hard to tell. Lying on a table, it was, though. Lookin' more like a white bolster than anything—'cept that it was moving a bit. Kind of inching, with a sort of ripple in it—if you understand me."

I didn't much.

"Is that all?" I asked.

"That it's not," Bill told me, approaching his climax with relish. "Most of it didn't 'ave no real shape, but there was a part of it as did—a pair of hands, human hands, a-stickin' out from the sides of it . . ."

In the end I got rid of the deputation with the assurance that we would look into the matter. When I turned back from closing the door behind the last of them I perceived that all was not well with Alfred. His eyes were gleaming widely behind his glasses and he was trembling.

"Sit down," I advised him. "You don't want to go shaking parts of yourself off."

I could see that there was a dissertation coming, probably something to beat what we had just heard. But, for once, he wanted my opinion first, while manfully contriving to hold his own down for a time. I obliged.

"It has to turn out simpler than it sounds," I told him. "Either somebody was playing a joke on the village—or there were some very unusual animals which they've distorted by talking it over too much."

"They were unanimous about the carapaces and arms—two structures as thoroughly incompatible as can be," Alfred said, tiresomely.

I had to grant that. And arms—or, at least, hands—had been the only describable feature of the bolster-like object

that Bill had seen at the Grange. . . .

Alfred gave me several other reasons why I was wrong and then paused meaningly.

"I, too, have heard rumors about Membury Grange," he told me.

"Such as?" I asked.

"Nothing very definite," he admitted. "But when one puts them all together . . . After all, there's no smoke without some sort of fire. . . ."

"All right, let's have it," I invited him.

"I think," he said, with impressive earnestness, "I think we are on the track of something big here. Very likely something that will at last stir people's consciences to the iniquities which are practised under the cloak of scientific research. Do you know what I think is happening on our very doorstep?"

"I'll buy it," I told him.

"I think we have to deal with a super-vivisectionist!" he said, wagging a dramatic finger at me.

I frowned. "I don't get that," I told him. "A thing is either vivi- or it isn't. Super-vivi- just doesn't—"

"Tchal!" said Alfred. At least, it was that kind of noise. "What I mean is that we are up against a man who is outrageous nature, abusing God's creatures, wantonly distorting the forms of animals until they are no longer recognisable, or only in parts, as what they were before he started distorting them," he announced involvedly.

At this point I began to get a line on the truly Alfredian theory that was being propounded this time. His imagination had got its teeth well in and, though later events were to show that it was not biting quite deeply enough, I laughed.

"I see it," I said. "I've read *The Island of Doctor Moreau*, too. You expect to go up to the Grange and be greeted by a horse walking on its hind legs and discussing the weather. Or perhaps you hope a super-dog will open the door to you and inquire your name?"

"A thrilling idea, Alfred. But this is real life, you know. Since there has been a complaint, we must try to investigate it, but I'm afraid you're going to be dreadfully disappointed,

old man, if you're looking forward to going into a house filled with the sickly fumes of ether and hideous with the cries of tortured animals. Just come off it a bit, Alfred. Come down to earth."

But Alfred was not to be deflated so easily. His fantasies were an important part of his life and, while he was a little irritated by my discerning the source of his inspiration, he was not quenched. Instead, he went on turning the thing over in his mind and adding a few extra touches to it here and there.

"Why turtles?" I heard him mutter. "It only seems to make it more complicated, to choose reptiles."

He contemplated that for some moments, then he added: "Arms. Arms and hands! Now where on earth would he get a pair of arms from?"

His eyes grew still larger and more excited as he thought about that.

"Now, now! Keep a hold on it!" I advised him.

All the same, it was an awkward, uneasy kind of question. . . .

The following afternoon Alfred and I presented ourselves at the lodge of Membury Grange and gave our names to the suspicious-looking man who lived there to guard the entrance. He shook his head to indicate that we hadn't a hope of approaching more closely, but he did pick up the telephone.

I had a somewhat unworthy hope that his discouraging attitude might be confirmed. The thing ought, of course, to be followed up, if only to pacify the villagers, but I could have wished that Alfred had had longer to go off the boil. At present, his agitation and expectation were, if anything, increased. The fancies of Poe and Zola are mild compared with the products of Alfred's imagination powered by suitable fuel. All night long, it seemed, the most horrid nightmares had galloped through his sleep and he was now in a vein where such phrases as the 'wanton torturing of our dumb friends' by 'the fiendish wielders of the knife,' and 'the shuddering cries of a

million quivering victims ascending to high heaven' came tripping off his tongue automatically. It was awkward. If I had not agreed to accompany him, he would certainly have gone alone, in which case he would be likely to come to some kind of harm on account of the generalised accusations of mayhem, mutilation, and sadism with which he would undoubtedly open any conversation.

In the end I had persuaded him that his course would be to keep his eyes cunningly open for telling evidence while I conducted the interview. Later, if he was not satisfied, he would be able to say his piece. I just had to hope that he would be able to withstand the internal pressure.

The guardian turned back to us from the telephone, wearing a surprised expression.

"He says as he'll see you!" he told us, as though not quite certain he had heard aright. "You'll find him in the new wing—that red-brick part, there."

The new wing, into which the poaching Bill had spied, turned out to be much bigger than I had expected. It covered a ground area quite as large as that of the original house, but was only one storey high. A door in the end of it opened as we drove up and a tall, loosely clad figure with an untidy beard stood waiting for us there.

"Good Lord!" I said as we approached. "So that was why we got in so easily! I'd no idea you were that Dixon. Who'd have thought it?"

"Come to that," he retorted, "you seem to be in a surprising occupation for a man of intelligence, yourself."

I remembered my companion.

"Alfred," I said, "I'd like to introduce you to Doctor Dixon—once a poor usher who tried to teach me something about biology at school, but later, by popular repute, the inheritor of millions, or thereabouts."

Alfred looked suspicious. This was obviously wrong. A move towards fraternization with the enemy at the very outset! He nodded ungraciously and did not offer to shake hands.

"Come in" Dixon invited.

He showed us into a comfortable study-cum-office which tended to confirm the rumors of his inheritance. I sat down in a magnificent easy chair.

"You'll very likely have gathered from your watchman that we're here in an official way," I said. "So perhaps it would be better to get the business over before we celebrate the reunion. It'd be a kindness to relieve the strain on my friend Alfred."

Doctor Dixon nodded and cast a speculative glance at Alfred who had no intention of compromising himself by sitting down.

"I'll give you the report just as we had it," I told him and proceeded to do so. When I reached a description of the turtle-like creatures he looked somewhat relieved.

"Oh, so that's what happened to them," he said.

"Ah!" cried Alfred, his voice going up into a squeak with excitement. "So you admit it! You admit that you are responsible for those two unhappy creatures!"

Dixon looked at him wonderingly.

"I was responsible for them—but I didn't know they were unhappy. How did you?"

Alfred disregarded the question.

"That's what we want," he squeaked. "He admits that he—"

"Alfred," I told him coldly. "Do be quiet! And stop dancing about! Let me get on with it."

I got on with it for a few more sentences but Alfred was building up too much pressure to hold. He cut right in.

"Where—where did you get the arms? Just tell me where *they* came from?" he demanded, with deadly meaning.

"Your friend seems a little over—er, a little dramatic," remarked Dr. Dixon.

"Look, Alfred," I said severely, "just let me get finished, will you? You can introduce your note of ghoulery later on."

When I ended, it was with an excuse that seemed necessary. I said to Dixon: "I'm sorry to intrude on you with all this, but you see how we stand. When supported allegations are laid before us we have no choice but to investigate. Obviously this is something quite out of the usual run, but I'm sure you'll

be able to clear it up satisfactorily for us. And now, Alfred," I added, turning to him, "I believe you have a question or two to ask, but do try to remember that our host's name is Dixon and not Moreau."

Alfred leapt, as from a slipped leash.

"What I want to know is the meaning, the reason, and the method of these outrages against nature. I demand to be told by what right this man considers himself justified in turning normal creatures into unnatural mockeries of natural forms."

Dr. Dixon nodded gently.

"A comprehensive inquiry—though not too comprehensively expressed," he said. "I deplore the loose, recurrent use of the word 'nature'—and would point out that the word 'unnatural' is a vulgarism which does not even make sense. Obviously, if a thing has been done at all it was in someone's nature to do it, and in the nature of the material to accept whatever was done. One can only act within the limits of one's nature. That is an axiom."

"A lot of hair-splitting isn't going to—" began Alfred, but Dixon continued smoothly.

"Nevertheless, I think I understand you to mean that my nature has prompted me to use certain material in a manner which your prejudices do not approve. Would that be right?"

"There may be lots of ways of putting it, but I call it vivisection—*vivisection*!" said Alfred, relishing the word like a good curse. "You may have a licence. But there have been things going on here that will require a very convincing explanation indeed to stop us taking the matter to the police."

Doctor Dixon nodded.

"I rather thought you might have some such idea. And I'd rather you did not. Before long, the whole thing will be announced by me and become public knowledge. Meanwhile, I want at least two, possibly three, months to get my findings ready for publication. When I have explained, I think you will understand my position better."

He paused, thoughtfully eyeing Alfred who did not look like a man intending to understand anything. He went on.

"The crux of this is that I have not, as you are suspecting,

either grafted, or readjusted, nor in any way distorted living forms. I have *built* them."

For a moment, neither of us grasped the significance of that—though Alfred thought he had it.

"Ha! You can quibble," he said, "but there had to be a basis. You must have had some kind of living animal to start with. One which you wickedly mutilated to produce these horrors."

But Dixon shook his head.

"No, I mean what I said. I have *built*—and then I have induced a kind of life into what I have built."

We gaped.

I said uncertainly, "Are you really claiming that you can create a living creature?"

"Pooh!" he said. "Of course I can. So can you. Even Alfred here can do that, with the help of a female of the species. What I am telling you is that I can animate the inert because I have found how to induce the—or, at any rate, *a* life-force."

The lengthy pause that followed that was broken at last by Alfred.

"I don't believe it," he said loudly. "It isn't possible that you, here in this one-eyed village, should have solved the mystery of life. You're just trying to hoax us because you're afraid of what we shall do."

Dixon smiled calmly.

"I said that I had found *a* life-force. There may be dozens of other kinds for all I know. I can understand that it's difficult for you to believe. But, after all, why not? Someone was bound to find one of them somewhere sooner or later. What's more surprising to me is that this one wasn't discovered before."

But Alfred was not to be soothed.

"I don't believe it," he repeated. "Nor will anybody else unless you produce proofs—if you can."

"Of course," agreed Dixon. "Who would take it on trust? Though I'm afraid that when you examine my present specimens you may find the construction a little crude at first. Your friend, Nature, puts in such a lot of unnecessary work that can be simplified out.

"Of course, in the matter of arms that seems to worry you

so much, if I could have obtained real arms immediately after the death of their owner I might have been able to use them—I'm not sure whether it wouldn't have been more trouble, though. However, such things are not usually handy and the building of simplified parts is not really difficult—a mixture of engineering, chemistry, and commonsense. Indeed, it has been quite possible for some time but without the means of animating them it was scarcely worth doing. One day they may be made finely enough to replace a lost limb, but a very complicated technique will have to be evolved before that can be done.

"As for your suspicion that my specimens suffer, Mr. Weston, I assure you that they are coddled—they have cost me a great deal of money and work. And, in any case, it would be difficult for you to prosecute me for cruelty to an animal hitherto unheard of, with habits unknown."

"I am not convinced," said Alfred stoutly.

The poor fellow was, I think, too upset by the threat to his theory for the true magnitude of Dixon's claim to reach him.

"Then, perhaps a demonstration . . ." Dixon suggested. "If you will follow me?"

Bill's peeping exploit had prepared us for the sight of the steel barred cages in the laboratory but not for many of the other things we found there—one of them was the smell.

Doctor Dixon apologised as we choked and gasped.

"I forgot to warn you about the preservatives."

"It's reassuring to know that that's all they are," I said between coughs.

The room must have been nearly 100 in length and about 30 high. Bill had certainly seen precious little through his chink in the curtain and I stared in amazement at the quantities of apparatus gathered there. There was a rough division into sections; chemistry in one corner, bench and lathes in another, electrical apparatus grouped at one end and so on. In one of several bays stood an operating table, with cases of instruments to hand. Alfred's eyes widened at the sight of it and an expression of triumph began to enliven his face. In

another bay there was more the suggestion of a sculptor's studio, with moulds and casts lying about on tables. Further on were large presses, and sizeable electric furnaces, but most of the gear other than the simplest conveyed little to me.

"No cyclotron, no electron-microscope. Otherwise, a bit of everything," I remarked.

"You're wrong there. There's the electron—Hullo! Your friend's off."

Alfred had sort of homed at the operating table. He was peering intently all around and under it, presumably hoping for bloodstains. We walked after him.

"Here's one of the chief primers of that ghastly imagination of yours," Dixon said. He opened a drawer, took out an arm, and laid it on the operating table. "Take a look at that."

The thing was a waxy yellow. In shape, it did have a close resemblance to a human arm, but when I looked closely at the hand, I saw that it was smooth, unmarked by whorls or lines. Nor did it have fingernails.

"Not worth bothering about at this stage," said Dixon, watching me.

Nor was it a whole arm. It was cut off short between the elbow and the shoulder.

"What's that?" Alfred inquired, pointing to a protruding metal rod.

"Stainless steel," Dixon told him. "Much quicker and less expensive than making matrices for pressing bone forms. When I get standardized I'll probably go to plastic bones. One ought to be able to save weight there."

Alfred was looking worriedly disappointed again. That arm was convincingly non-vivisectional.

"But why an arm? Why any of this?" he demanded, with a wave that largely included the whole room.

"In the order of asking. An arm—or rather, a hand—because it is the most useful tool ever evolved, and I certainly could not think of a better. And 'any of this' because once I had hit upon the basic secret I took a fancy to build as my proof the perfect creature—or as near that as one's finite mind can reach.

"The turtle-like creatures were an early step. They had enough brain to live and produce reflexes, but not enough for constructive thought. It wasn't necessary."

"You mean that your 'perfect creature' does have constructive thought?" I asked.

"She has a brain as good as ours and slightly larger," he said. "Though, of course, she needs experience—education. Still, as the brain is already fully developed, it learns much more quickly than a child's would."

"May we see it—her?" I asked.

He sighed regretfully.

"Everyone always wants to jump straight to the finished product. All right, then. But first we will have a little demonstration. I'm afraid your friend is still unconvinced."

Dixon led us across towards the surgical instrument cases and opened a preserving cupboard there. From it he took a shapeless white mass which he laid on the operating table. This he wheeled towards the electrical apparatus further up the room. Beneath the pallid, sagging object I saw a hand protruding.

"Good heavens!" I exclaimed. "Bill's 'bolster with hands'!"

"Yes. He wasn't entirely wrong, though from your account he laid it on a bit. This little fellow is really my chief assistant. He's got all the essential parts; alimentary, vascular, nervous, respiratory. He can, in fact, live. But it isn't a very exciting existence for him—he's a kind of testing motor for trying out newly made appendages."

While he busied himself with some electrical connections he added:

"If you, Mr. Weston, would care to examine the specimen in any way, short of harming it, to convince yourself that it is not alive at present, please do."

Alfred approached the white mass. He peered through his glasses at it closely. He prodded it with a tentative forefinger.

"So the basis is electrical?" I said to Dixon.

He picked up a bottle of some gray concoction and measured out a little.

"It may be. On the other hand, it may be chemical. You

don't think I am going to let you into *all* my secrets, do you?"

When he had finished his preparations he said, "Satisfied, Mr. Weston? I'd rather not be accused later on of having shown you a conjuring trick."

"It doesn't seem to be alive," Alfred admitted cautiously.

We watched Dixon attach several electrodes to it. Then he carefully chose three spots on its surface and injected each from a syringe containing a pale blue liquid. Next, he sprayed the whole form twice from different atomisers. Finally, he closed four or five switches in rapid succession.

"Now," he said, with a slight smile, "we wait for five minutes—which you may spend, if you like, in deciding which, or how many, of my actions were critical."

After three minutes the flaccid mass began to pulsate feebly. Gradually the movement increased until gentle, rhythmic undulations were running through it. Presently it half-sagged or rolled to one side, exposing the hand that had been hidden beneath it. I saw the fingers of the hand tense and try to clutch at the smooth table top.

I think I cried out. Until it actually happened, I had been unable to believe that it would. Now some part of the meaning of the thing came flooding in on me. I grabbed Dixon's arm.

"Man!" I said. "If you were to do that to a dead body . . ."

But he shook his head.

"No. It doesn't work. I've tried. One is justified in calling this life, I think. . . . But in some way it's a different kind of life. I don't at all understand why. . . ."

Different kind or not, I knew that I must be looking at the seed of a revolution, with potentialities beyond imagination. . . .

And all the time that fool Alfred kept on poking around the thing as if it were a sideshow at a circus. And he was out to make sure that no one was putting anything across him with mirrors, or working it with bits of string.

It served him right when he got a couple of hundred volts through his fingers.

"And now," said Alfred, when he had satisfied himself that

at least the grosser forms of deception were ruled out, "now we'd like to see this 'perfect creature' you spoke about."

He still seemed as far as ever from realising the marvel he had witnessed. He was convinced that an offence of some kind was being committed and he intended to discover the evidence that would assign it to its proper category.

"Very well," agreed Dixon. "By the way, I call her Una. No name I could think of seemed quite adequate, but she is certainly the first of her kind, so Una she is."

He led us along the room to the last and largest of the row of cages. Standing a little back from the bars, he called the occupant forward.

I don't know what I expected to see—nor quite what Alfred was hoping for. But neither of us had breath for comment when we did see what lumbered towards us.

Dixon's "perfect creature" was a more horrible grotesquerie than I had ever imagined in life or dreams.

Picture, if you can, a dark, conical carapace of some slightly glossy material. The rounded peak of the cone stood well over six feet from the ground; the base was four foot six or more in diameter. The whole thing was supported on three short, cylindrical legs. There were four arms, parodies of human arms, projecting from joints about halfway up. Eyes, set some six inches below the apex, were regarding us steadily from beneath horny lids. For a moment I felt close to hysterics.

Dixon looked at the thing with pride.

"Visitors to see you, Una," he told it.

The eyes turned to me, and then back to Alfred. One of them blinked, with a click from its lid as it closed. A deep, reverberant voice emerged from no obvious source.

"At last! I've been asking you long enough," it said.

"Good God!" said Alfred. "That appalling thing can talk?"

The steady gaze dwelt upon him.

"That one will do. I like his glass eyes," rumbled the voice.

"Be quiet, Una. This isn't what you think," Dixon interposed. "I must ask you," he added to us, but looking at Alfred, "to be careful in your comments. Una naturally lacks the ordinary background of experience, but she is aware of her

distinction—and of her several physical superiorities. She has a somewhat short temper and nothing is going to be gained by offending her. It is natural that you should find her appearance a little surprising at first, but I will explain.”

A lecturing note crept into his voice.

“After I had discovered my method of animation, my first inclination was to construct an approximately anthropoid form as a convincing demonstration. On second thought, however, I decided against mere imitation. I resolved to proceed functionally and logically, remedying certain features which seemed to me poorly or weakly designed in man and other existing creatures. It also proved necessary later to make a few modifications for technical and constructional reasons. However, in general, Una is the result of my resolve.” He paused, looking fondly at the monstrosity.

“I—er—you did say ‘logically?’” I inquired.

Alfred paused for some time before making his comment. He went on staring at the creature which still kept its eyes fixed on him. One could almost see him causing what he likes to think of as his better nature to override mere prejudice. He now rose nobly above his earlier, unsympathetic remark.

“I do not consider it proper to confine so large an animal in such restricted quarters,” he announced.

One of the horny eyelids clicked again as it blinked.

“I like him. He means well. He will do,” the great voice rumbled.

Alfred wilted a little. After a long experience of patronizing dumb friends, he found it disconcerting to be confronted by a creature that not only spoke, but patronized him as it did so. He returned its steady stare uneasily.

Dixon, disregarding the interruption, resumed.

“Probably the first thing that will strike you is that Una has no distinct head. That was one of my earliest rearrangements, the normal head is too exposed and vulnerable. The eyes should be carried high, of course, but there is no need whatever for a semi-detached head.

“But in eliminating the head, there was sight to be considered. I therefore gave her three eyes, two of which you can

see now, and one which is round the back—though, properly speaking, she has no back. Thus she is easily able to look and focus in any direction without the complicated device of a semi-rotatory head.

"Her general shape almost ensures that any falling or projected object would glance off the reinforced plastic carapace, but it seemed wise to me to insulate the brain from shock as much as possible by putting it where you might expect the stomach. I was thus able to put the stomach higher and allow for a more convenient disposition of the intestines."

"How does it eat?" I put it.

"Her mouth is round the other side," he said shortly. "Now, I have to admit that at first glance the provision of four arms might give an impression of frivolity. However, as I said before, the hand is the perfect tool—if it is the right size. So you will see that Una's upper pair are delicate and finely molded, while the lower are heavily muscular.

"Her respiration may interest you, too. I have used a flow principle. She inhales here, exhales there. An improvement, you must admit, on our own rather disgusting system.

"As regards the general design, she unfortunately turned out to be considerably heavier than I had expected—slightly over one ton, in fact—and to support that I had to modify my original plan somewhat. I redesigned the legs and feet rather after the pattern of the elephant's so as to spread the weight, but I'm afraid it is not altogether satisfactory. Something will have to be done in the later models to reduce the overall weight.

"The three-legged principle was adopted because it is obvious that the biped must waste quite a lot of muscular energy in merely keeping its balance and a tripod is not only efficient, but more easily adaptable to uneven surfaces than a four-legged support.

"As regards the reproductive system—"

"Excuse me interrupting," I said, "but with a plastic carapace and stainless steel bones I don't—er—quite see—"

"A matter of glandular balance, regulation of the personality. Something had to be done there, though I admit that

I'm not quite satisfied that I have done it the best way. I suspect that an approach on parthenogenetic lines would have been . . . However, there it is. And I have promised her a mate. I must say I find it a fascinating speculation to . . ."

"He will do," interrupted the rumbling voice, while the creature continued to gaze fixedly at Alfred.

"Of course," Dixon went on to us, a little hurriedly, "Una has never seen herself to know what she looks like. She probably thinks she—"

"I know what I want," said the deep voice, firmly and loudly, "I want—"

"Yes, yes," Dixon interposed, also loudly. "I'll explain about that later."

"But I want—" the voice repeated.

"Will you be quiet!" Dixon shouted fiercely.

The creature gave a slight rumbling protest, but desisted.

Alfred drew himself up with the air of one who after communing seriously with his principles is forced into speech.

"I cannot approve of this," he announced. "I will concede that this creature may be your own creation. Nevertheless, once created it becomes, in my opinion, entitled to the same safeguards as any other dumb—er, as any other creature.

"I say nothing whatever about your application of your discovery—except to say that it seems to me that you have behaved like an irresponsible child let loose with modelling clay, and that you have produced an unholy—and I use that word advisedly—unholy mess, a monstrosity, a perversion! However, I say nothing about that.

"What I do say is that in law this creature can be regarded simply as an unfamiliar species of animal. I intend to report that, in my professional opinion, it is being confined in too small a cage and is without proper opportunities for exercise. I am not able to judge whether it is being adequately nourished, but it is easy to perceive that it has needs that are not being met. Twice already when it has attempted to express them to us you have intimidated it."

"Alfred," I put in, "don't you think that perhaps—" but I was cut short by the creature thrumming like a double bass.

"I think he's wonderful! The way his glass eyes flash! I want him!" It sighed in a kind of deep vibrato that ran along the floor. The sound certainly was extremely mournful, and Alfred's one track mind pounced on it as additional evidence.

"If that is not the plaint of an unhappy creature," he said, stepping closer to the cage, "then I have never—"

"Look out!" shouted Dixon, jumping forward.

One of the creature's hands made a darting snatch through the bars. Simultaneously Dixon caught him by the shoulders, and pulled him back. There was a rending of cloth and three buttons pattered on to the linoleum.

"Phew!" said Dixon.

For the first time, Alfred looked a little alarmed.

"What—?" he began.

A deep, threatening sound from the cage obliterated the rest of it.

"Give him to me! I want him!" rumbled the voice angrily.

All four arms caught hold of the bars. Two of them began to rattle the gate violently. The two visible eyes were fixed unwaveringly on Alfred. He began to show signs of reorientating his outlook. His own eyes opened a little more widely behind his glasses.

"Er—it—it doesn't mean—?" he gasped incredulously.

"I want!" bellowed Una, stamping from one foot to another and shaking the building as she did so.

Dixon was regarding his achievement with some concern.

"I wonder—I wonder, could I have overdone the hormones a bit?" he said thoughtfully.

Alfred had come to grips with the idea now. He backed a little further away from the cage. The move did not have a good effect on Una.

"I want!" she cried, like a kind of sepulchral public address system. "Give me! Give me!"

It was an intimidating sound.

"Mightn't it be better if we—" I suggested.

"Perhaps, in the circumstances—" Dixon agreed.

"Yes!" said Alfred quite decisively.

The pitch on which Una operated made it difficult to be

certain of the finer shades of feelings; the window-rattling sound that occurred behind us as we moved off might have expressed anger, or anguish, or both. We increased our pace a little.

"Alfred!" called a voice like a disconsolate foghorn. "I want Alfred!"

Alfred cast a backward glance and stepped out a trifle more smartly.

There was a thump which rattled the bars and shook the building.

I looked round to see Una in the act of retiring to the back of her cage with the obvious intention of making another onslaught. We ran for the door. Alfred was first through.

A thunderous crash sounded at the other end of the room. As Dixon was closing the door behind us I had a glimpse of Una carrying bars and furnishings before her like a runaway bus.

"I think we shall need some help with her," Dixon said.

Small sparkles of perspiration were standing on Alfred's brow.

"You—you don't think it might be better if we were to—" he began.

"No," said Dixon. "She'd see you through the windows."

"Oh," said Alfred unhappily.

Dixon led the way into a large sitting room, and made for the telephone. He gave urgent messages to the fire brigade and the police.

"I don't think there's anything we can do till they get here," he said, as he put the receiver down. "The lab wing will probably hold her all right if she isn't tantalized any more."

"Tantalized! I like that—" Alfred started to protest, but Dixon went on.

"Luckily, being where she is, she couldn't see the door. So the odds are that she can have no idea of the purpose or nature of doors. What's worrying me most is the damage she's doing in there. Just listen!"

We did listen for some moments to the muffled sounds of smashing, splintering, and rending. Amongst it there was oc-

casionally a mournful di-syllable boom which might, or might not have been the word "Alfred."

Dixon's expression became more anguished as the noise continued.

"All my records! All the work of years is in there," he said bitterly. "Your Society's going to have to pay plenty for this, I warn you—but that won't give me back my records. She was always perfectly docile until your friend excited her—never a moment's trouble with her."

Alfred began to protest again but was interrupted by the sound of something massive being overturned with a thunderous crash, followed by a noise like a waterfall of broken glass.

"I want Alfred!" demanded the stentorian voice.

Alfred half rose, and then sat down again on the edge of his chair. His eyes flicked nervously hither and thither. He displayed a tendency to bite his fingernails.

"Ah!" said Dixon with a suddenness which startled both of us. "Ah, that must have been it! I must have calculated the hormone requirement on the overall weight—including the carapace. Of course! What a ridiculous slip to make! Tch-tch! I should've done much better to keep to the original parthenogen—Good heavens!"

The crash which caused his exclamation brought us all to our feet and across to the door.

Una had discovered the way out of the wing, all right, and had come through it like a bulldozer. Door, frame, and part of the brickwork had come with her. At the moment she was stumbling about amid the resulting mess. Dixon didn't hesitate.

"Quick! Upstairs—that'll beat her," he said.

At the same instant Una spotted us and let out a boom. We sprinted across the hall for the staircase. Initial mobility was our advantage; a freight like Una's takes appreciable time to get under way. I fled up the flight with Dixon ahead of me and, I imagined, Alfred just behind. However, I was not quite right there. I don't know whether Alfred had been momentarily transfixed or had fumbled his takeoff, but when I was

at the top I looked back to see him still only a few steps up, with Una thundering in pursuit like a jet propelled car of Juggernaut.

Alfred kept on coming, though. But so did Una. She may not have been familiar with stairs, nor designed to use them. But she tackled them for all that. She even got about five or six steps up before they collapsed under her. Alfred, by then more than halfway up, felt them fall away beneath his feet. He gave a shout as he lost his balance. Then, clawing wildly at the air, he fell backwards.

Una put in as neat a four-armed catch as you could ever hope to see.

"What coordination!" Dixon, behind me, murmured admiringly.

"Help!" bleated Alfred. "Help! Help!"

"Aah!" boomed Una, in a kind of deep diapason of satisfaction.

She backed off a little, with a crunching of timbers.

"Keep calm!" Dixon advised Alfred. "Don't do anything that might startle her."

Alfred, embraced by three arms, and patted affectionately by the fourth, made no immediate reply.

There was a pause for assessment of the situation.

"Well," I said, "we ought to do something. Can't we entice her somehow?"

"It's difficult to know what will distract the triumphant female in her moment of success," observed Dixon.

Una set up a sort of—of—well, if you can imagine an elephant contentedly crooning . . .

"Help!" Alfred bleated again. "She's—ow!"

"Calm, calm!" repeated Dixon. "There's probably no real danger. After all, she's a mammal—mostly, that is. Now if she were quite a different kind like, say, a female spider—"

"I don't think I'd let her overhear about female spiders just now," I suggested. "Isn't there a favorite food, or something, we could tempt her with?"

Una was swaying Alfred back and forth in three arms, and

prodding him inquisitively with the forefinger of the fourth. Alfred struggled.

"Damn it, can't you *do something?*" he demanded.

"Oh, Alfred! Alfred!" she reproved him, in a kind of besotted rumble.

"Well," Dixon said, doubtfully, "perhaps if we had some ice cream. . . ."

There was a sound of brakes, and vehicles pulling up outside. Dixon ran swiftly along the landing, and I heard him trying to explain the situation through the window to the men outside. Presently he came back, accompanied by a fireman and his officer. When they looked down into the hall their eyes bulged.

"What we have to do is surround her without scaring her," Dixon was explaining.

"Surround *that?*" said the officer dubiously. "What in hell is it, anyway?"

"Never mind about that now," Dixon told him impatiently. "If we can just get a few ropes on to her from different directions—"

"Help!" shouted Alfred again. He flailed about violently. Una clasped him more closely to her carapace and chuckled dotingly. A peculiarly ghastly sound, I thought. It shook the firemen, too.

"For crysake—" one of them began.

"Hurry up," Dixon interrupted. "We can drop the first rope over her from here."

They both went back. The officer started shouting instructions to those below. He seemed to be having some difficulty in making himself clear. However, they both returned shortly with a coil of rope. And that fireman was good. He spun his noose gently and dropped it as neatly as you like. When he pulled in, it was round the carapace, below the arms so that it could not slip free. He belayed to the newel post at the top of the flight.

Una was still taken up with Alfred to the exclusion of everything else around her.

The front door opened quietly and the faces of a number of assorted firemen and cops appeared, all with their eyes popping and their jaws dropping. A moment later there was another bunch gaping into the hall from the sitting room door, too. One fireman stepped forward nervously and began to spin his rope. Unfortunately his cast touched a hanging light and fell short.

In that moment Una suddenly became aware of what went on.

"No!" she thundered. "He's mine! I want him!"

The terrified ropeman hurled himself back through the door on top of his companions, and it shut behind him. Without turning, Una started off in the same direction. Our rope tightened and we jumped aside. The newel post was snapped away like a stick and the rest of the rope went trailing after it. There was a forlorn cry from Alfred, still firmly clasped, but, luckily for him, on the side away from the line of progress. Then Una took the front door like a tank. There was an almighty crash, a shower of wood and plaster.

By the time we were able to reach the front windows Una was already clear of obstructions. We had an excellent view of her galloping down the drive at some ten miles an hour, towing, without apparent inconvenience, a half dozen or more firemen and cops who clung grimly to the trailing rope.

Down at the lodge, the guardian had had the presence of mind to close the gates. He dived for personal cover into the bushes while she was still some yards away. Gates, however, meant nothing to Una. Carefully shielding her precious Alfred with three arms, she went at them sideways. True, she staggered slightly at the impact, but they crumpled and went down before her. Alfred was waving his arms, and kicking out wildly; a faint wail for help floated back to us. The collection of constables and firemen was towed into the jumbled ironwork and left tangled there.

There was a sound of engines starting up below. Dixon called to them to wait. We pelted down the backstairs, and were able to fling ourselves upon the fire engine just as it moved off.

After a quarter mile the trail led off down a steep, still narrower lane to one side. We had to abandon the fire engine and follow on foot.

At the bottom, there is—was—an old packhorse bridge across the river. It sufficed, I believe, for several centuries of pack-horses, but nothing like Una at full gallop had entered into its builders' calculations. By the time we reached it, the central span was missing, and a fireman was helping a dripping constable to carry the limp form of Alfred up the bank.

"Where is she?" Dixon demanded.

The fireman looked at him, then pointed silently to the middle of the river.

"A crane. Send for a crane, at once!" Dixon demanded. But everyone was more interested in emptying the water out of Alfred.

The experience has, I'm afraid, permanently altered that bonhomie which used to exist between Alfred and all dumb friends. In the forthcoming welter of claims, counter-claims, cross-claims, and civil and criminal charges in great variety, I shall be figuring only as a witness. But Alfred, who will, of course, appear in several capacities, says that when his charges of assault, abduction, attempted—well, there are several more on the list. When they have been met he intends to change his profession as he now finds it difficult to look a cow, or, indeed, any female animal, in the eye without a bias that tends to impair his judgment.

C. M. KORNBLUTH

The press-wire service which Dick Wilson headed was packed with talent; for while Wilson ran things from New York, his Chicago bureau chief was another science-fiction writer named C. M. Kornbluth (and other names on the payroll at one time or another included David A. Kyle, Judith Merrill, Stanley Asimov, younger brother of Isaac, and your editor). For Cyril Kornbluth, at least, the rapid-fire techniques of newsgathering served him well when he turned to fiction; he is still remembered by one publisher as the writer who, given 48 hours to put on paper a synopsis of a proposed novel, elected to turn in the completed manuscript instead. He now lives far from the hammering teletypes in a New York State farmhouse, where he assiduously labors to add to his total of six published novels and such fine shorter fiction as—

The Marching Morons

SOME THINGS had not changed. A potter's wheel was still a potter's wheel and clay was still clay. Efim Hawkins had built his shop near Goose Lake, which had a narrow band of good fat clay and a narrow beach of white sand. He fired three bottle-nosed kilns with willow charcoal from the wood lot. The wood lot was also useful for long walks while the kilns were cooling; if he let himself stay within sight of them, he would open them prematurely, impatient to see how some new shape or glaze had come through the fire, and—*ping!*—the new shape or glaze would be good for nothing but the shard pile back of his slip tanks.

A business conference was in full swing in his shop, a mod-

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est cube of brick, tile-roofed, as the Chicago-Los Angeles "rocket" thundered overhead—very noisy, very swept-back, very fiery jets, shaped as sleekly swift-looking as an airborne barracuda.

The buyer from Marshall Fields was turning over a black-glazed one liter carafe, nodding approval with his massive, handsome head. "This is real pretty," he told Hawkins and his own secretary, Gomez-Laplace. "This has got lots of what ya call real est'etic principles. Yeah, it is real pretty."

"How much?" the secretary asked the potter.

"Seven-fifty each in dozen lots," said Hawkins. "I ran up fifteen dozen last month."

"They are real est'etic," repeated the buyer from Fields. "I will take them all."

"I don't think we can do that, doctor," said the secretary. "They'd cost us \$1,350. That would leave only \$532 in our quarter's budget. And we still have to run down to East Liverpool to pick up some cheap dinner sets."

"Dinner sets?" asked the buyer, his big face full of wonder.

"Dinner sets. The department's been out of them for two months now. Mr. Garvy-Seabright got pretty nasty about it yesterday. Remember?"

"Garvy-Seabright, that meat-headed bluenose," the buyer said contemptuously. "He don't know nothin' about est'etics. Why for don't he lemme run my own department?" His eye fell on a stray copy of *Whambozambo Comix* and he sat down with it. An occasional deep chuckle or grunt of surprise escaped him as he turned the pages.

Uninterrupted, the potter and the buyer's secretary quickly closed a deal for two dozen of the liter carafes. "I wish we could take more," said the secretary, "but you heard what I told him. We've had to turn away customers for ordinary dinnerware because he shot the last quarter's budget on some Mexican piggy banks some equally enthusiastic importer stuck him with. The fifth floor is packed solid with them."

"I'll bet they look mighty est'etic."

"They're painted with purple cacti."

The potter shuddered and caressed the glaze of the sample carafe.

The buyer looked up and rumbled, "Ain't you dummies through yakkin' yet? What good's a seckertary for if'n he don't take the burden of *de-tail* off'n my back, harh?"

"We're all through, doctor. Are you ready to go?"

The buyer grunted peevisly, dropped *Whambozambo Comix* on the floor and led the way out of the building and down the log corduroy road to the highway. His car was waiting on the concrete. It was, like all contemporary cars, too low-slung to get over the logs. He climbed down into the car and started the motor with a tremendous sparkle and roar.

"Comez-Laplace," called out the potter under cover of the noise, "did anything come of the radiation program they were working on the last time I was on duty at the Pole?"

"The same old fallacy," said the secretary gloomily. "It stopped us on mutation, it stopped us on culling, it stopped us on segregation, and now it's stopped us on hypnosis."

"Well, I'm scheduled back to the grind in nine days. Time for another firing right now. I've got a new luster to try . . ."

"I'll miss you. I shall be 'vacationing'—running the drafting room of the New Century Engineering Corporation in Denver. They're going to put up a two hundred-story office building, and naturally somebody's got to be on hand."

"Naturally," said Hawkins with a sour smile.

There was an ear-piercingly sweet blast as the buyer leaned on the horn button. Also, a yard-tall jet of what looked like flame spurted up from the car's radiator cap; the car's power plant was a gas turbine, and had no radiator.

"I'm coming, doctor," said the secretary dispiritedly. He climbed down into the car and it whooshed off with much flame and noise.

The potter, depressed, wandered back up the corduroy road and contemplated his cooling kilns. The rustling wind in the boughs was obscuring the creak and mutter of the shrinking refractory brick. Hawkins wondered about the number two kiln—a reduction fire on a load of lusterware mugs. Had the clay chinking excluded the air? Had it been

a properly smoky blaze? Would it do any harm if he just took one close—?

Common sense took Hawkins by the scruff of the neck and yanked him over to the tool shed. He got out his pick and resolutely set off on a prospecting jaunt to a hummocky field that might yield some oxides. He was especially low on coppers.

The long walk left him sweating hard, with his lust for a peek into the kiln quiet in his breast. He swung his pick almost at random into one of the hummocks; it clanged on a stone which he excavated. A largely obliterated inscription said:

UNIVERSITY OF CHICAGO
LOGICAL LABORATORY
DEVELOPED MEMORY OF
KILLED IN ACT

The potter swore mildly. He had hoped the field would turn out to be a cemetery, preferably a once-fashionable cemetery full of once-massive bronze caskets moldered into oxides of tin and copper.

Well, hell, maybe there was some around anyway.

He headed lackadaisically for the second largest hillock and sliced into it with his pick. There was a stone to undercut and topple into a trench, and then the potter was very glad he'd stuck at it. His nostrils were filled with the bitter smell and the dirt was tinged with the exciting blue of copper salts. The pick went *clang!*

Hawkins, puffing, pried up a stainless steel plate that was quite badly stained and was also marked with incised letters. It seemed to have pulled loose from rotting bronze; there were rivets on the back that brought up flakes of green patina. The potter wiped off the surface dirt with his sleeve, turned it to catch the sunlight obliquely and read:

"HONEST JOHN BARLOW"

"Honest John," famed in university annals, represents a challenge which medical science has not yet answered: revival of a human being accidentally thrown into a state of suspended animation.

In 1988 Mr. Barlow, a leading Evanston real estate dealer, visited his dentist for treatment of an impacted wisdom tooth. His dentist requested and received permission to use the experimental anesthetic Cycloparadimethanol-B-7, developed at the University.

After administration of the anesthetic, the dentist resorted to his drill. By freakish mischance, a short circuit in his machine delivered 220 volts of 60-cycle current into the patient. (In a damage suit instituted by Mrs. Barlow against the dentist, the University and the makers of the drill, a jury found for the defendants.) Mr. Barlow never got up from the dentist's chair and was assumed to have died of poisoning, electrocution or both.

Morticians preparing him for embalming discovered, however, that their subject was—though certainly not living—just as certainly not dead. The University was notified and a series of exhaustive tests was begun, including attempts to duplicate the trance state on volunteers. After a bad run of seven cases which ended fatally, the attempts were abandoned.

Honest John was long an exhibit at the University museum, and livened many a football game as mascot of the University's Blue Crushers. The bounds of taste were overstepped, however, when a pledge to Sigma Delta Chi was ordered in '03 to "kidnap" Honest John from his loosely guarded glass museum case and introduce him into the Rachel Swanson Memorial Girls' Gymnasium shower room.

On May 22nd, 2003, the University Board of Regents issued the following order: "By unanimous vote, it is directed that the remains of Honest John Barlow be removed from the University museum and conveyed to the University's Lieutenant James Scott III Memorial Biological Laboratories and there be securely locked in a specially prepared vault. It is further directed that all possible measures for the preservation

of these remains be taken by the Laboratory administration and that access to these remains be denied to all persons except qualified scholars authorized in writing by the Board. The Board reluctantly takes this action in view of recent notices and photographs in the nation's press which, to say the least, reflect but small credit upon the University."

It was far from his field, but Hawkins understood what had happened—an early and accidental blundering onto the bare bones of the Levantman shock anesthesia, which had since been replaced by other methods. To bring subjects out of Levantman shock, you let them have a squirt of simple saline in the trigeminal nerve. Interesting. And now about that bronze—

He heaved the pick into the rotting green salts, expecting no resistance, and almost fractured his wrist. *Something* down there was solid. He began to flake off the oxides.

A half hour of work brought him down to phosphor bronze, a huge casting of the almost incorruptible metal. It had weakened structurally over the centuries; he could fit the point of his pick under a corroded boss and pry off great creaking and grumbling striae of the stuff.

Hawkins wished he had an archeologist with him, but didn't dream of returning to his shop and calling one to take over the find. He was an all-around man: by choice and in his free time, an artist in clay and glaze; by necessity, an automotive, electronics and atomic engineer who could also swing a project in traffic control, individual and group psychology, architecture or tool design. He didn't yell for a specialist every time something out of his line came up; there were so few with so much to do . . .

He trenched around his find, discovering that it was a great brick-shaped bronze mass with an excitingly hollow sound. A long strip of moldering metal from one of the long vertical faces pulled away, exposing red rust that went *whoosh* and was sucked into the interior of the mass.

It had been de-aired, thought Hawkins, and there must have been an inner jacket of glass which had crystalized

through the centuries and quietly crumbled at the first clang of his pick. He didn't know what a vacuum would do to a subject of Levantman shock, but he had hopes, nor did he quite understand what a real estate dealer was, but it might have something to do with pottery. And *anything* might have a bearing on Topic Number One.

He flung his pick out of the trench, climbed out and set off at a dog-trot for his shop. A little rummaging turned up a hypo and there was a plastic container of salt in the kitchen.

Back at his dig, he chipped for another half hour to expose the juncture of lid and body. The hinges were hopeless; he smashed them off.

Hawkins extended the telescopic handle of the pick for the best leverage, fitted its point into a deep pit, set its built-in fulcrum, and heaved. Five more heaves and he could see, inside the vault, what looked like a dusty marble statue. Ten more and he could see that it was the naked body of Honest John Barlow, Evanston real estate dealer, uncorrupted by time.

The potter found the apex of the trigeminal nerve with his needle's point and gave him 60 cc.

In an hour Barlow's chest began to pump.

In another hour, he rasped, "Did it work?"

"*Did it!*" muttered Hawkins.

Barlow opened his eyes and stirred, looked down, turned his hands before his eyes—

"I'll sue!" he screamed. "My clothes! My fingernails!" A horrid suspicion came over his face and he clapped his hands to his hairless scalp. "My hair!" he wailed. "I'll sue you for every penny you've got! That release won't mean a damned thing in court—I didn't sign away my hair and clothes and fingernails!"

"They'll grow back," said Hawkins casually. "Also your epidermis. Those parts of you weren't alive, you know, so they weren't preserved like the rest of you. I'm afraid the clothes are gone, though."

"What is this—the University hospital?" demanded Barlow.

"I want a phone. No, you phone. Tell my wife I'm all right and tell Sam Immerman—he's my lawyer—to get over here right away. Greenleaf 7-4022. Owl!" He had tried to sit up, and a portion of his pink skin rubbed against the inner surface of the casket, which was powdered by the ancient crystalized glass. "What the hell did you guys do, boil me alive? Oh, you're going to pay for this!"

"You're all right," said Hawkins, wishing now he had a reference book to clear up several obscure terms. "Your epidermis will start growing immediately. You're not in the hospital. Look here."

He handed Barlow the stainless steel plate that had labeled the casket. After a suspicious glance, the man started to read. Finishing, he laid the plate carefully on the edge of the vault and was silent for a spell.

"Poor Verna," he said at last. "It doesn't say whether she was stuck with the court costs. Do you happen to know—"

"No," said the potter. "All I know is what was on the plate, and how to revive you. The dentist accidentally gave you a dose of what we call Levantman shock anesthesia. We haven't used it for centuries; it was powerful, but too dangerous."

"Centuries . . ." brooded the man. "Centuries . . . I'll bet Sam swindled her out of her eyeteeth. Poor Verna. How long ago was it? What year is this?"

Hawkins shrugged. "We call it 7-B-936. That's no help to you. It takes a long time for these metals to oxidize."

"Like that movie," Barlow muttered. "Who would have thought it? Poor Verna!" He blubbered and sniffled, reminding Hawkins powerfully of the fact that he had been found under a flat rock.

Almost angrily, the potter demanded, "How many children did you have?"

"None yet," sniffed Barlow. "My first wife didn't want them. But Verna wants one—wanted one—but we're going to wait until—we were going to wait until—"

"Of course," said the potter, feeling a savage desire to tell him off, blast him to hell and gone for his work. But he

choked it down. There was The Problem to think of; there was always The Problem to think of, and this poor blubberer might unexpectedly supply a clue. Hawkins would have to pass him on.

"Come along," Hawkins said. "My time is short."

Barlow looked up, outraged. "How can you be so unfeeling? I'm a human being like—"

The Los Angeles-Chicago "rocket" thundered overhead and Barlow broke off in mid-complaint. "Beautiful!" he breathed, following it with his eyes. "Beautiful!"

He climbed out of the vault, too interested to be pained by its roughness against his infantile skin. "After all," he said briskly, "this should have its sunny side. I never was much for reading, but this is just like one of those stories. And I ought to make some money out of it, shouldn't I?" He gave Hawkins a shrewd glance.

"You want money?" asked the potter. "Here." He handed over a fistful of change and bills. "You'd better put my shoes on. It'll be about a quarter-mile. Oh, and you're—uh, modest?—yes, that was the word. Here." Hawkins gave him his pants, but Barlow was excitedly counting the money.

"Eighty-five, eighty-six—and it's dollars, too! I thought it'd be credits or whatever they call them. 'E Pluribus Unum' and 'Liberty'—just different faces. Say, is there a catch to this? Are these real, genuine, honest twenty-two-cent dollars like we had or just wallpaper?"

"They're quite all right, I assure you," said the potter. "I wish you'd come along. I'm in a hurry."

The man babbled as they stumped toward the shop. "Where are we going—The Council of Scientists, the World Coordinator or something like that?"

"Who? Oh, no. We call them 'President' and 'Congress.' No, that wouldn't do any good at all. I'm just taking you to see some people."

"I ought to make plenty out of this. *Plenty!* I could write books. Get some smart young fellow to put it into words for

me and I'll bet I could turn out a best-seller. What's the setup on things like that?"

"It's about like that. Smart young fellows. But there aren't any best-sellers any more. People don't read much nowadays. We'll find something equally profitable for you to do."

Back in the shop, Hawkins gave Barlow a suit of clothes, deposited him in the waiting room and called Central in Chicago. "Take him away," he pleaded. "I have time for one more firing and he blathers and blathers. I haven't told him anything. Perhaps we should just turn him loose and let him find his own level, but there's a chance—"

"The Problem," agreed Central. "Yes, there's a chance."

The potter delighted Barlow by making him a cup of coffee with a cube that not only dissolved in cold water but heated the water to boiling point. Killing time, Hawkins chatted about the "rocket" Barlow had admired, and had to haul himself up short; he had almost told the real estate man what its top speed really was—almost, indeed, revealed that it was not a rocket.

He regretted, too, that he had so casually handed Barlow a couple of hundred dollars. The man seemed obsessed with fear that they were worthless since Hawkins refused to take a note or I.O.U. or even a definite promise of repayment. But Hawkins couldn't go into details, and was very glad when a stranger arrived from Central.

"Tinny-Peete, from Algeciras," the stranger told him swiftly as the two of them met at the door. "Psychist for Poprob. Polasigned special overtake Barlow."

"Thank Heaven," said Hawkins. "Barlow," he told the man from the past, "this is Tinny-Peete. He's going to take care of you and help you make lots of money."

The psychist stayed for a cup of the coffee whose preparation had delighted Barlow, and then conducted the real estate man down the corduroy road to his car, leaving the potter to speculate on whether he could at last crack his kilns.

Hawkins, abruptly dismissing Barlow and The Problem, happily picked the chinking from around the door of the number two kiln, prying it open a trifle. A blast of heat and the heady,

smoky scent of the reduction fire delighted him. He peered and saw a corner of a shelf glowing cherry-red, becoming obscured by wavering black areas as it lost heat through the opened door. He slipped a charred wood paddle under a mug on the shelf and pulled it out as a sample, the hairs on the back of his hand curling and scorching. The mug crackled and pinged and Hawkins sighed happily.

The bismuth resinate luster had fired to perfection, a haunting film of silvery-black metal with strange bluish lights in it as it turned before the eyes, and the Problem of Population seemed very far away to Hawkins then.

Barlow and Tinny-Peete arrived at the concrete highway where the psychist's car was parked in a safety bay.

"What-a-boat!" gasped the man from the past.

"Boat? No, that's my car."

Barlow surveyed it with awe. Swept-back lines, deep-drawn compound curves, kilograms of chrome. He ran his hands futilely over the door—or was it the door?—in a futile search for a handle, and asked respectfully, "How fast does it go?"

The psychist gave him a keen look and said slowly, "Two hundred and fifty. You can tell by the speedometer."

"Wow! My old Chevy could hit a hundred on a straight-away, but you're out of my class, mister!"

Tinny-Peete somehow got a huge, low door open and Barlow descended three steps into immense cushions, floundering over to the right. He was too fascinated to pay serious attention to his flayed dermis. The dashboard was a lovely wilderness of dials, plugs, indicators, lights, scales and switches.

The psychist climbed down into the driver's seat and did something with his feet. The motor started like lighting a blowtorch as big as a silo. Wallowing around in the cushions, Barlow saw through a rear-view mirror a tremendous exhaust filled with brilliant white sparkles.

"Do you like it?" yelled the psychist.

"It's terrific!" Barlow yelled back. "It's—"

He was shut up as the car pulled out from the bay into the road with a great *ooo-ooo-ooooom!* A gale roared past

Barlow's head, though the windows seemed to be closed; the impression of speed was terrific. He located the speedometer on the dashboard and saw it climb past 90, 100, 150, 200.

"Fast enough for me," yelled the psychiatrist, noting that Barlow's face fell in response. "Radio?"

He passed over a surprisingly light object like a football helmet, with no trailing wires, and pointed to a row of buttons. Barlow put on the helmet, glad to have the roar of air stilled, and pushed a pushbutton. It lit up satisfyingly and Barlow settled back even farther for a sample of the brave new world's super-modern taste in ingenious entertainment.

"TAKE IT AND STICK IT!" a voice roared in his ears.

He snatched off the helmet and gave the psychiatrist an injured look. Tinny-Peete grinned and turned a dial associated with the pushbutton layout. The man from the past donned the helmet again and found the voice had lowered to normal.

"The show of shows! The supershow! The super-duper show! The quiz of quizzes! *Take it and stick it!*"

There were shrieks of laughter in the background.

"Here we got the contes-tants all ready to go. You know how we work it. I hand a contes-tant a triangle-shaped cutout and like that down the line. Now we got these here boards, they got cut-out places the same shape as the triangles and things, only they're all different shapes, and the first contes-tant that sticks the cutouts into the board, he wins.

"Now I'm gonna innaview the first contes-tant. Right here, honey. What's your name?"

"Name? Uh—"

"Hoddaya like that, folks? She don't remember her name! Hah? *Would you buy that for a quarter?*" The question was spoken with arch significance, and the audience shrieked howled and whistled its appreciation.

It was dull listening when you didn't know the punch line and catch lines, Barlow pushed another button, with his free hand ready at the volume control.

"—latest from Washington. It's about Senator Hull-Mendoza. He is still attacking the Bureau of Fisheries. The North Cali-

ifornia Syndicalist says he got affidavits that John Kingsley-Schultz is a bluenose from way back. He didn't publistat the affydavits, but he says they say that Kingsley-Schultz was saw at bluenose meetings in Oregon State College and later at Florida University. Kingsley-Schultz says he gotta confess he did major in fly-casting at Oregon and got his Ph.D. in game-fish at Florida.

"And here is a quote from Kingsley-Schultz: 'Hull-Mendoza don't know what he's talking about. He should drop dead.' Unquote. Hull-Mendoza says he won't publistat the affydavits to perfect his sources. He says they was sworn by three former employes of the Bureau which was fired for in-competence and in-com-pat-ibility by Kingsley-Schultz.

"Elsewhere they was the usual run of traffic accidents. A three-way pileup of cars on Route 66 going outta Chicago took twelve lives. The Chicago-Los Angeles morning rocket crashed and exploded in the Mo-have-Mo-javvy-what-ever-you-call-it Desert. All the 94 people aboard got killed. A Civil Aeronautics Authority investigator on the scene says that the pilot was buzzing herds of sheep and didn't pull out in time.

"Hey! Here's a hot one from New York! A Diesel tug run wild in the harbor while the crew was below and shoved in the port bow of the luck-shury liner *S. S. Placentia*. It says the ship filled and sank taking the lives of an es-ti-mated 180 passengers and 50 crew members. Six divers was sent down to study the wreckage, but they died, too, when their suits turned out to be fulla little holes.

"And here is a bulletin I just got from Denver. It seems—"

Barlow took off the headset uncomprehendingly. "He seemed so callous," he yelled at the driver. "I was listening to a newscast—"

Tinny-Pecte shook his head and pointed at his ears. The roar of air was deafening. Barlow frowned baffledly and stared out of the window.

A glowing sign said:

MOOGS!
WOULD YOU BUY IT
FOR A QUARTER?

He didn't know what Moogs was or were; the illustration showed an incredibly proportioned girl, 99.9 per cent naked, writhing passionately in animated full color.

The roadside jingle was still with him, but with a new feature. Radar or something spotted the car and alerted the lines of the jingle. Each in turn sped along a roadside track, even with the car, so it could be read before the next line was alerted.

IF THERE'S A GIRL
YOU WANT TO GET
DEFLOCCULIZE
UNROMANTIC SWEAT.
"A*R*M*P*I*T*T*O"

Another animated job, in two panels, the familiar "Before and After." The first said, "Just Any Cigar?" and was illustrated with a two-person domestic tragedy of a wife holding her nose while her coarse and red-faced husband puffed a slimy-looking rope. The second panel glowed, "Or a VUELTA ABAJO?" and was illustrated with—

Barlow blushed and looked at his feet until they had passed the sign.

"Coming into Chicago!" bawled Timmy-Peete.

Other cars were showing up, all of them dreamboats.

Watching them, Barlow began to wonder if he knew what a kilometer was, exactly. They seemed to be traveling so slowly, if you ignored the roaring air past your ears and didn't let the speedy lines of the dreamboats fool you. He would have sworn they were really crawling along at twenty-five, with occasional spurts up to thirty. How much was a kilometer, anyway?

The city loomed ahead, and it was just what it ought to

be: towering skyscrapers, overhead ramps, landing platforms for helicopters—

He clutched at the cushions. Those two 'copters. They were going to—they were going to—they—

He didn't see what happened because their apparent collision courses took them behind a giant building.

Screamingly sweet blasts of sound surrounded them as they stopped for a red light. "What the hell is going on here?" said Barlow in a shrill, frightened voice, because the braking time was just about zero, he wasn't hurled against the dashboard. "Who's kidding who?"

"Why, what's the matter?" demanded the driver.

The light changed to green and he started the pickup. Barlow stiffened as he realized that the rush of air past his ears began just a brief, unreal split-second before the car was actually moving. He grabbed for the door handle on his side.

The city grew on them slowly: scattered buildings, denser buildings, taller buildings, and a red light ahead. The car rolled to a stop in zero braking time, the rush of air cut off an instant after it stopped, and Barlow was out of the car and running frenziedly down a sidewalk one instant after that.

They'll track me down, he thought, panting. It's a secret police thing. They'll get you—mind-reading machines, television eyes everywhere, afraid you'll tell their slaves about freedom and stuff. They don't let anybody cross them, like that story I once read.

Winded, he slowed to a walk and congratulated himself that he had guts enough not to turn around. That was what they always watched for. Walking, he was just another business-suited back among hundreds. He would be safe, he would be safe—

A hand tumbled from a large, coarse, handsome face thrust close to his: "Wassamatta bumpinninna people likeya ownna sidewalk gotta miner slamya inna mushya bassar!" It was neither the mad potter nor the mad driver.

"Excuse me," said Barlow. "What did you say?"

"Oh, yeah?" yelled the stranger dangerously, and waited for an answer.

Barlow with the feeling that he had somehow been suckered into the short end of an intricate land-title deal, heard himself reply belligerently, "Yeah!"

The stranger let go of his shoulder and snarled, "Oh, yeah?"

"Yeah!" said Barlow, yanking his jacket back into shape.

"Aaah!" snarled the stranger, with more contempt and disgust than ferocity. He added an obscenity current in Barlow's time, a standard but physiologically impossible directive, and strutted off hulking his shoulders and balling his fists.

Barlow walked on, trembling. Evidently he had handled it well enough. He stopped at a red light while the long, low dreamboats roared before him and pedestrians in the sidewalk flow with him threaded their ways through the stream of cars. Brakes screamed, fenders clanged and dented, hoarse cries flew back and forth between drivers and walkers. He leaped backward frantically as one car swerved over an arc of sidewalk to miss another.

The signal changed to green, the cars kept on coming for about thirty seconds and then dwindled to an occasional light-runner. Barlow crossed warily and leaned against a vending machine, blowing big breaths.

Look natural, he told himself. Do something normal. Buy something from the machine.

He fumbled out some change, got a newspaper for a dime, a handkerchief for a quarter and a candy bar for another quarter.

The faint chocolate smell made him ravenous suddenly. He clawed at the glassy wrapper printed "CRIGGLIES" quite futilely for a few seconds, and then it divided neatly by itself. The bar made three good bites, and he bought two more and gobbled them down.

Thirsty, he drew a carbonated orange drink in another one of the glassy wrappers from the machine for another dime. When he fumbled with it, it divided neatly and spilled all

over his knees. Barlow decided he had been there long enough and walked on.

The shop windows were—shop windows. People still wore and bought clothes, still smoked and bought tobacco, still ate and bought food. And they still went to the movies, he saw with pleased surprise as he passed and then returned to a glittering place whose sign said it was THE BIJOU.

The place seemed to be showing a quintuple feature, *Babies Are Terrible*, *Don't Have Children*, and *The Canali Kid*.

It was irresistible; he paid a dollar and went in.

He caught the tail-end of *The Canali Kid* in three-dimensional, full-color, full-scent production. It appeared to be an interplanetary saga winding up with a chase scene and a reconciliation between estranged hero and heroine. *Babies Are Terrible* and *Don't Have Children* were fantastic arguments against parenthood—the grotesquely exaggerated dangers of painfully graphic childbirth, vicious children, old parents beaten and starved by their sadistic offspring. The audience, Barlow astoundedly noted, was placidly champing sweets and showing no particular signs of revulsion.

The *Coming Attractions* drove him into the lobby. The fanfares were shattering, the blazing colors blinding, and the added scents stomach-heaving.

When his eyes again became accustomed to the moderate lighting of the lobby, he groped his way to a bench and opened the newspaper he had bought. It turned out to be *The Racing Sheet*, which afflicted him with a crushing sense of loss. The familiar boxed index in the lower left hand corner of the front page showed almost unbearably that Churchill Downs and Empire City were still in business—

Blinking back tears, he turned to the Past Performances at Churchill. They weren't using abbreviations any more, and the pages because of that were single-column instead of double. But it was all the same—or was it?

He squinted at the first race, a three-quarter-mile maiden claimer for thirteen hundred dollars. Incredibly, the track re-

cord was two minutes, ten and three-fifths seconds. Any beetle in his time could have knocked off the three-quarter in one-fifteen. It was the same for the other distances, much worse for route events.

What the hell had happened to everything?

He studied the form of a five-year-old brown mare in the second and couldn't make head or tail of it. She'd won and lost and placed and showed and lost and placed without rhyme or reason. She looked like a front-runner for a couple of races and then she looked like a no-good pig and then she looked like a mudder but the next time it rained she wasn't and then she was a stayer and then she was a pig again. In a good five-thousand-dollar allowances event, too!

Barlow looked at the other entries and it slowly dawned on him that they were all like the five-year-old brown mare. Not a single damned horse running had the slightest trace of class.

Somebody sat down beside him and said, "That's the story."

Barlow whirled to his feet and saw it was Tinny-Peete, his driver.

"I was in doubts about telling you," said the psychist, "but I see you have some growing suspicions of the truth. Please don't get excited. It's all right, I tell you."

"So you've got me," said Barlow.

"Got you?"

"Don't pretend. I can put two and two together. You're the secret police. You and the rest of the aristocrats live in luxury on the sweat of these oppressed slaves. You're afraid of me because you have to keep them ignorant."

There was a bellow of bright laughter from the psychist that got them blank looks from other patrons of the lobby. The laughter didn't sound at all sinister.

"Let's get out of here," said Tinny-Peete, still chuckling. "You couldn't possibly have it more wrong." He engaged Barlow's arm and led him to the street. "The actual truth is that the millions of workers live in luxury on the sweat of the handful of aristocrats. I shall probably die before my time of

overwork unless—" He gave Barlow a speculative look. "You may be able to help us."

"I know that gag," sneered Barlow. "I made money in my time and to make money you have to get people on your side. Go ahead and shoot me if you want, but you're not going to make a fool out of me."

"You nasty little ingrate!" snapped the psychiatrist, with a kaleidoscopic change of mood. "This damned mess is all your fault and the fault of people like you! Now come along and no more of your nonsense."

He yanked Barlow into an office building lobby and an elevator that, disconcertingly, went *whoosh* loudly as it rose. The real estate man's knees were wobbly as the psychiatrist pushed him from the elevator, down a corridor and into an office.

A hawk-faced man rose from a plain chair as the door closed behind them. After an angry look at Barlow, he asked the psychiatrist, "Was I called from the Pole to inspect this—this—?"

"Unget updandered. I've deeprobed etfind quasichance exhim Poprobattackline," said the psychiatrist soothingly.

"Doubt," grunted the hawk-faced man.

"Try," suggested Tinny-Peete.

"Very well. Mr. Barlow, I understand you and your lamented had no children."

"What of it?"

"This of it. You were a blind, selfish stupid ass to tolerate economic and social conditions which penalized child-bearing by the prudent and foresighted. You made us what we are today, and I want you to know that we are far from satisfied. Damn-fool rockets! Damn-fool automobiles! Damn-fool cities with overhead ramps!"

"As far as I can see," said Barlow, "you're running down the best features of time. Are you crazy?"

"The rockets aren't rockets. They're turbo-jets—good turbo-jets, but the fancy shell around them makes for a bad drag. The automobiles have a top speed of one hundred kilometers per hour—a kilometer is, if I recall my paleolinguistics, three-

fifths of a mile—and the speedometers are all rigged accordingly so the drivers will think they're going two hundred and fifty. The cities are ridiculous, expensive, unsanitary, wasteful conglomerations of people who'd be better off and more productive if they were spread over the countryside.

"We need the rockets and trick speedometers and cities because, while you and your kind were being prudent and foresighted and not having children, the migrant workers, slum dwellers and tenant farmers were shiftlessly and shortsightedly having children—breeding, breeding. My God, how they bred!"

"Wait a minute," objected Barlow. "There were lots of people in our crowd who had two or three children."

"The attrition of accidents, illness, wars and such took care of that. Your intelligence was bred out. It is gone. Children that should have been born never were. The just-average, they'll-get-along majority took over the population. The average IQ now is 45."

"But that's far in the future—"

"So are you," grunted the hawk-faced man sourly.

"But who are *you* people?"

"Just people—real people. Some generations ago, the geneticists realized at last that nobody was going to pay any attention to what they said, so they abandoned words for deeds. Specifically, they formed and recruited for a closed corporation intended to maintain and improve the breed. We are their descendants, about three million of us. There are five billion of the others, so we are their slaves.

"During the past couple of years I've designed a skyscraper, kept Billings Memorial Hospital here in Chicago running, headed off war with Mexico and directed traffic at LaGuardia Field in New York."

"I don't understand! Why don't you let them go to hell in their own way?"

The man grimaced. "We tried it once for three months. We holed up at the South Pole and waited. They didn't notice it. Some drafting-room people were missing, some chief

nurses didn't show up, minor government people on the non-policy level couldn't be located. It didn't seem to matter.

"In a week there was hunger. In two weeks there were famine and plague, in three weeks war and anarchy. We called off the experiment; it took us most of the next generation to get things squared away again."

"But why *didn't* you let them kill each other off?"

"Five billion corpses mean about five hundred million tons of rotting flesh."

Barlow had another idea. "Why don't you sterilize them?"

"Two and one-half billion operations is a lot of operations. Because they breed continuously, the job would never be done."

"I see. Like the marching Chinese!"

"Who the devil are they?"

"It was a—uh—paradox of my time. Somebody figured out that if all the Chinese in the world were to line up four abreast, I think it was, and start marching past a given point, they'd never stop because of the babies that would be born and grow up before they passed the point."

"That's right. Only instead of 'a given point,' make it 'the largest conceivable number of operating rooms that we could build and staff.' There could never be enough."

"Say!" said Barlow. "Those movies about babies—was that your propaganda?"

"It was. It doesn't seem to mean a thing to them. We have abandoned the idea of attempting propaganda contrary to a biological drive."

"So if you work *with* a biological drive—?"

"I know of none which is consistent with inhibition of fertility."

Barlow's face went poker-blank, the result of years of careful discipline. "You don't, huh? You're the great brains and you can't think of any?"

"Why, no," said the psychiatrist innocently. "Can you?"

"That depends. I sold ten thousand acres of Siberian tun-

dra—through a dummy firm, of course—after the partition of Russia. The buyers thought they were getting improved building lots on the outskirts of Kiev. I'd say that was a lot tougher than this job."

"How so?" asked the hawk-faced man.

"Those were normal, suspicious customers and these are morons, born suckers. You just figure out a con they'll fall for; they won't know enough to do any smart checking."

The psychist and the hawk-faced man had also had training; they kept themselves from looking with sudden hope at each other.

"You seem to have something in mind," said the psychist.

Barlow's poker face went blanker still. "Maybe I have. I haven't heard any offer yet."

"There's the satisfaction of knowing that you've prevented Earth's resources from being so plundered," the hawk-faced man pointed out, "that the race will soon become extinct."

"I don't know that," Barlow said bluntly. "All I have is your word."

"If you really have a method, I don't think any price would be too great," the psychist offered.

"Money," said Barlow.

"All you want."

"More than you want," the hawk-faced man corrected.

"Prestige," added Barlow. "Plenty of publicity. My picture and my name in the papers and over TV every day, statues to me, parks and cities and streets and other things named after me. A whole chapter in the history books."

The psychist made a facial sign to the hawk-faced man that meant, "Oh, brother!"

The hawk-faced man signaled back, "Steady, boy!"

"It's not too much to ask," the psychist agreed.

Barlow, sensing a seller's market, said, "Power!"

"Power?" the hawk-faced man repeated puzzledly. "Your own hydro station or nuclear pile?"

"I mean a world dictatorship with me as dictator!"

"Well, now—" said the psychist, but the hawk-faced man

interrupted, "It would take a special emergency act of Congress but the situation warrants it. I think that can be guaranteed."

"Could you give us some indication of your plan?" the psychist asked.

"Ever hear of lemmings?"

"No."

"They are—were, I guess, since you haven't heard of them—little animals in Norway, and every few years they'd swarm to the coast and swim out to sea until they drowned. I figure on putting some lemming urge into the population."

"How?"

"I'll save that till I get the right signatures on the deal."

The hawk-faced man said, "I'd like to work with you on it, Barlow. My name's Ryan-Ngana." He put out his hand.

Barlow looked closely at the hand, then at the man's face. "Ryan what?"

"Ngana."

"That sounds like an African name."

"It is. My mother's father was a Watusi."

Barlow didn't take the hand. "I thought you looked pretty dark. I don't want to hurt your feelings, but I don't think I'd be at my best working with you. There must be somebody else just as well qualified, I'm sure."

The psychist made a facial sign to Ryan-Ngana that meant, "Steady yourself, boy!"

"Very well," Ryan-Ngana told Barlow. "We'll see what arrangement can be made."

"It's not that I'm prejudiced, you understand. Some of my best friends—"

"Mr. Barlow, don't give it another thought. Anybody who could pick on the lemming analogy is going to be useful to us."

And so he would, thought Ryan-Ngana, alone in the office after Tinny-Peete had taken Barlow up to the helicopter stage. So he would. Poprob had exhausted every rational attempt and the new Poprobattacklines would have to be irra-

tional or sub-rational. This creature from the past with his lemming legends and his improved building lots would be a fountain of precious vicious self-interest.

Ryan-Ngana sighed and stretched. He had to go and run the San Francisco subway. Summoned early from the Pole to study Barlow, he'd left unfinished a nice little theorem. Between interruptions, he was slowly constructing an n -dimensional geometry whose foundations and superstructure owed no debt whatsoever to intuition.

Upstairs, waiting for a helicopter, Barlow was explaining to Tinny-Peete that he had nothing against Negroes, and Tinny-Peete wished he had some of Ryan-Ngana's imperturbability and humor for the ordeal.

The helicopter took them to International Airport where, Tinny-Peete explained, Barlow would leave for the Pole.

The man from the past wasn't sure he'd like a dreary waste of ice and cold.

"It's all right," said the psychiatrist. "A civilized layout. Warm, pleasant. You'll be able to work more efficiently there. All the facts at your fingertips, a good secretary—"

"I'll need a pretty big staff," said Barlow, who had learned from thousands of deals never to take the first offer.

"I meant a private, confidential one," said Tinny-Peete readily, "but you can have as many as you want. You'll naturally have top-primary-top priority if you really have a workable plan."

"Let's not forget this dictatorship angle," said Barlow.

He didn't know that the psychiatrist would just as really have promised him deification to get him happily on the "rocket" for the Pole. Tinny-Peete had no wish to be torn limb from limb; he knew very well that it would end that way if the population learned from this anachronism that there was a small elite which considered itself head, shoulders, trunk and groin above the rest. The fact that this assumption was perfectly true and the fact that the elite was condemned by its superiority to a life of the most grinding toil would not be considered; the difference would.

The psychiatrist finally put Barlow aboard the "rocket" with some thirty people—real people—headed for the Pole.

Barlow was airsick all the way because of a post-hypnotic suggestion Tinny-Peete had planted in him. One idea was to make him as averse as possible to a return trip, and another idea was to spare the other passengers from his aggressive, talkative company.

Barlow during the first day at the pole was reminded of his first day in the Army. It was the same now-where-the-hell-are-we-going-to-put-you? business until he took a firm line with them. Then instead of acting like supply sergeants they acted like hotel clerks.

It was a wonderful, wonderfully calculated buildup, and one that he failed to suspect. After all, in his time a visitor from the past would have been lionized.

At day's end he reclined in a snug underground billet with the 60-mile gales roaring yards overhead, and tried to put two and two together.

It was like old times, he thought—like a coup in real estate where you had the competition by the throat, like a 50-per cent rent boost when you knew damned well there was no place for the tenants to move, like smiling when you read over the breakfast orange juice that the city council had decided to build a school on the ground you had acquired by a deal with the city council. And it was simple. He would just sell tundra building lots to eagerly suicidal lemmings, and that was absolutely all there was to solving The Problem that had these double-domes spinning.

They'd have to work out most of the details, naturally, but what the hell, that was what subordinates were for. He'd need specialists in advertising, engineering, communications—did they know anything about hypnotism? That might be helpful. If not, there'd have to be a lot of bribery done, but he'd make sure—damned sure—there were unlimited funds.

Just selling building lots to lemmings . . .

He wished, as he fell asleep, that poor Verna could have been in on this. It was his biggest, most stupendous deal.

Verna—that sharp shyster Sam Immerman must have swindled her . . .

It began the next day with people coming to visit him. He knew the approach. They merely wanted to be helpful to their illustrious visitor from the past and would he help fill them in about his era, which unfortunately was somewhat obscure historically, and what did he think could be done about The Problem? He told them he was too old to be roped any more, and they wouldn't get any information out of him until he got a letter of intent from at least the Polar President, and a session of the Polar Congress empowered to make him dictator.

He got the letter and the session. He presented his program, was asked whether his conscience didn't revolt at its callousness, explained succinctly that a deal was a deal and anybody who wasn't smart enough to protect himself didn't deserve protection—"Caveat emptor," he threw in for scholarship, and had to translate it to "Let the buyer beware." He didn't, he stated, give a damn about either the morons or their intelligent slaves; he'd told them his price and that was all he was interested in.

Would they meet it or wouldn't they?

The Polar President offered to resign in his favor, with certain temporary emergency powers that the Polar Congress would vote him if he thought them necessary. Barlow demanded the title of World Dictator, complete control of world finances, salary to be decided by himself, and the publicity campaign and historical writeup to begin at once.

"As for the emergency powers," he added, "they are neither to be temporary nor limited."

Somebody wanted the floor to discuss the matter, with the declared hope that perhaps Barlow would modify his demands.

"You've got the proposition," Barlow said. "I'm not knocking off even ten per cent."

"But what if the Congress refuses, sir?" the President asked.

"Then you can stay up here at the Pole and try to work

it out yourselves. I'll get what I want from the morons. A shrewd operator like me doesn't have to compromise; I haven't got a single competitor in this whole cockeyed moronic era."

Congress waived debate and voted by show of hands. Barlow won unanimously.

"You don't know how close you came to losing me," he said in his first official address to the joint Houses. "I'm not the boy to haggle; either I get what I ask or I go elsewhere. The first thing I want is to see designs for a new palace for me—nothing unostentatious, either—and your best painters and sculptors to start working on my portraits and statues. Meanwhile, I'll get my staff together."

He dismissed the Polar President and the Polar Congress, telling them that he'd let them know when the next meeting would be.

A week later, the program started with North America the first target.

Mrs. Garvy was resting after dinner before the ordeal of turning on the dishwasher. The TV, of course, was on and it said: "Oooh!"—long, shuddery and ecstatic, the cue for the *Parfum Assault Criminale* spot commercial. "Girls," said the announcer hoarsely, "do you want your man? It's easy to get him—easy as a trip to Venus."

"Huh?" said Mrs. Garvy.

"Wassamatter?" snorted her husband, starting out of a doze.

"Ja hear that?"

"Wha'?"

"He said 'easy like a trip to Venus.'"

"So?"

"Well, I thought ya couldn't get to Venus. I thought they just had that one rocket thing that crashed on the Moon."

"Aah, women don't keep up with the news," said Garvy righteously, subsiding again.

"Oh," said his wife uncertainly.

And the next day, on *Henry's Other Mistress*, there was a new character who had just breezed in: Buzz Rentshaw, Master Rocket Pilot of the Venus run. On *Henry's Other*

Mistress, "the broadcast drama about you and your neighbors, folksy people, ordinary people, real people"! Mrs. Garvy listened with amazement over a cooling cup of coffee as Buzz made hay of her hazy convictions.

MONA: Darling, it's so good to see you again!

BUZZ: You don't know how I've missed you on that dreary Venus run.

SOUND: *Venetian blind run down, key turned in door lock.*

MONA: Was it very dull, dearest?

BUZZ: Let's not talk about my humdrum job, darling. Let's talk about us.

SOUND: *Creaking bed.*

Well, the program was back to normal at last. That evening Mrs. Garvy tried to ask again whether her husband was sure about those rockets, but he was dozing right through *Take It and Stick It*, so she watched the screen and forgot the puzzle.

She was still rocking with laughter at the gag line, "Would you buy it for a quarter?" when the commercial went on for the detergent powder she always faithfully loaded her dishwasher with on the first of every month.

The announcer displayed mountains of suds from a tiny piece of the stuff and coyly added: "Of course, Cleano don't lay around for you to pick up like the soap root on Venus, but it's pretty cheap and it's almost pretty near just as good. So for us plain folks who ain't lucky enough to live up there on Venus, Cleano is the real cleaning stuff!"

Then the chorus went into their "Cleano-is-the-stuff" jingle, but Mrs. Garvy didn't hear it. She was a stubborn woman, but it occurred to her that she was very sick indeed. She didn't want to worry her husband. The next day she quietly made an appointment with her family freud.

In the waiting room she picked up a fresh new copy of *Readers Pabulum* and put it down with a faint palpitation. The lead article, according to the table of contents on the

cover, was titled "The Most Memorable Venusian I Ever Met."

"The freud will see you now," said the nurse, and Mrs. Garvy tottered into his office.

His traditional glasses and whiskers were reassuring. She choked out the ritual: "Freud, forgive me, for I have neuroses."

He chanted the antiphonal: "Tut, my dear girl, what seems to be the trouble?"

"I got like a hole in the head," she quavered. "I seem to forget all kinds of things. Things like everybody seems to know and I don't."

"Well, that happens to everybody occasionally, my dear. I suggest a vacation on Venus."

The freud stared, open-mouthed, at the empty chair. His nurse came in and demanded, "Hey, you see how she scrambled? What was the matter with *her*?"

He took off his glasses and whiskers meditatively. "You can search me. I told her she should maybe try a vacation on Venus." A momentary bafflement came into his face and he dug through his desk drawers until he found a copy of the four-color, profusely illustrated journal of his profession. It had come that morning and he had lip-read it, though looking mostly at the pictures. He leafed through to the article *Advantages of the Planet Venus in Rest Cures*.

"It's right there," he said.

The nurse looked. "It sure is," she agreed. "Why shouldn't it be?"

"The trouble with these here neurotics," decided the freud, "is that they all the time got to fight reality. Show in the next twitch."

He put on his glasses and whiskers again and forgot Mrs. Garvy and her strange behavior.

"Freud, forgive me, for I have neuroses."

"Tut, my dear girl, what seems to be the trouble?"

Like many cures of mental disorders, Mrs. Garvy's was achieved largely by self-treatment. She disciplined herself sternly out of the crazy notion that there had been only one

rocket ship and that one a failure. She could join without wincing, eventually, in any conversation on the desirability of Venus as a place to retire, on its fabulous floral profusion. Finally she went to Venus.

All her friends were trying to book passage with the Evening Star Travel and Real Estate Corporation, but naturally the demand was crushing. She considered herself lucky to get a seat at last for the two-week summer cruise. The space ship took off from a place called Los Alamos, New Mexico. It looked just like all the spaceships on television and in the picture magazines, but was more comfortable than you would expect.

Mrs. Garvy was delighted with the fifty or so fellow-passengers assembled before takeoff. They were from all over the country and she had a distinct impression that they were on the brainy side. The captain, a tall, hawk-faced, impressive fellow named Ryan-Something or other, welcomed them aboard and trusted that their trip would be a memorable one. He regretted that there would be nothing to see because, "due to the meteorite season," the ports would be dogged down. It was disappointing, yet reassuring that the line was taking no chances.

There was the expected momentary discomfort at takeoff and then two monotonous days of droning travel through space to be whiled away in the lounge at cards or craps. The landing was a routine bump and the voyagers were issued tablets to swallow to immunize them against any minor ailments. When the tablets took effect, the lock was opened and Venus was theirs.

It looked much like a tropical island on Earth, except for a blanket of cloud overhead. But it had a heady, other-wordly quality that was intoxicating and glamorous.

The ten days of the vacation were suffused with a hazy magic. The soap root, as advertised, was free and sudsy. The fruits, mostly tropical varieties transplanted from Earth, were delightful. The simple shelters provided by the travel company were more than adequate for the balmy days and nights.

It was with sincere regret that the voyagers filed again into

the ship, and swallowed more tablets doled out to counteract and sterilize any Venus illnesses they might unwittingly communicate to Earth.

Vacationing was one thing. Power politics was another.

At the Pole, a small man was in a soundproof room, his face deathly pale and his body limp in a straight chair.

In the American Senate Chamber, Senator Hull-Mendoza (Synd., N. Cal.) was saying: "Mr. President and gentlemen, I would be remiss in my duty as a legislature if I didn't bring to the attention of the august body I see here a perilous situation which is fraught with peril. As is well known to members of this august body, the perfection of space flight has brought with it a situation I can only describe as fraught with peril. Mr. President and gentlemen, now that swift American rockets now traverse the trackless void of space between this planet and our nearest planetarial neighbor in space—and, gentlemen, I refer to Venus, the star of dawn, the brightest jewel in fair Vulcan's diadome—now, I say, I want to inquire what steps are being taken to colonize Venus with a vanguard of patriotic citizens like those minutemen of yore.

"Mr. President and gentlemen! There are in this world nations, envious nations—I do not name Mexico—who by fair means or foul may seek to wrest from Columbia's grasp the torch of freedom of space; nations whose low living standards and innate depravity give them an unfair advantage over the citizens of our fair republic.

"This is my program: I suggest that a city of more than 100,000 population be selected by lot. The citizens of the fortunate city are to be awarded choice lands on Venus free and clear, to have and to hold and convey to their descendants. And the national government shall provide free transportation to Venus for these citizens. And this program shall continue, city by city, until there has been deposited on Venus a sufficient vanguard of citizens to protect our manifest rights in that planet.

"Objections will be raised, for carping critics we have always with us. They will say there isn't enough steel. They will

call it a cheap giveaway. I say there *is* enough steel for *one* city's population to be transferred to Venus, and that is all that is needed. For when the time comes for the second city to be transferred, the first, emptied city can be wrecked for the needed steel! And is it a giveaway? Yes! It is the most glorious giveaway in the history of mankind! Mr. President and gentlemen, there is no time to waste—Venus must be American!"

Black-Kupperman, at the Pole, opened his eyes and said feebly, "The style was a little uneven. Do you think anybody'll notice?"

"You did fine, boy; just fine," Barlow reassured him.

Hull-Mendoza's bill became law.

Drafting machines at the South Pole were busy around the clock and the Pittsburgh steel mills spewed millions of plates into the Los Alamos spaceport of the Evening Star Travel and Real Estate Corporation. It was going to be Los Angeles, for logistic reasons, and the three most accomplished psychokineticists went to Washington and mingled in the crowd at the drawing to make certain that the Los Angeles capsule slithered into the fingers of the blindfolded Senator.

Los Angeles loved the idea and a forest of spaceships began to blossom in the desert. They weren't very good space ships, but they didn't have to be.

A team at the Pole worked at Barlow's direction on a mail setup. There would have to be letters to and from Venus to keep the slightest taint of suspicion from arising. Luckily Barlow remembered that the problem had been solved once before—by Hitler. Relatives of persons incinerated in the furnaces of Lublin or Majdanek continued to get cheery postal cards.

The Los Angeles flight went off on schedule, under tremendous press, newsreel and television coverage. The world cheered the gallant Angelenos who were setting off on their patriotic voyage to the land of milk and honey. The forest of spaceships thundered up, and up, and out of sight without

untoward incident. Billions envied the Angelenos, cramped and on short rations though they were.

Wreckers from San Francisco, whose capsule came up second, moved immediately into the city of the angels for the scrap steel their own flight would require. Senator Hull-Mendoza's constituents could do no less.

The president of Mexico, hypnotically alarmed at this extension of *yanqui imperialism* beyond the stratosphere, launched his own Venus-colony program.

Across the water it was England versus Ireland, France versus Germany, China versus Russia, India versus Indonesia. Ancient hatreds grew into the flames that were rocket ships assailing the air by hundreds daily.

Dear Ed, how are you? Sam and I are fine and hope you are fine. Is it nice up there like they say with food and close grone on trees? I drove by Springfield yesterday and it sure looked funny all the buildings down but of coarse it is worth it we have to keep the greasers in their place. Do you have any trouble with them on Venus? Drop me a line some time. Your loving sister, Alma.

Dear Alma, I am fine and hope you are fine. It is a fine place here fine climate and easy living. The doctor told me today that I seem to be ten years younger. He thinks there is something in the air here keeps people young. We do not have much trouble with the greasers here they keep to theirselves it is just a question of us outnumbering them and staking out the best places for the Americans. In South Bay I know a nice little island that I have been saving for you and Sam with lots of blanket trees and ham bushes. Hoping to see you and Sam soon, your loving brother, Ed.

Sam and Alma were on their way shortly.

Poprob got a dividend in every nation after the emigration had passed the halfway mark. The lonesome stay-at-homes were unable to bear the melancholy of a low population

density; their conditioning had been to swarms of their kin. After that point it was possible to foist off the crudest stripped-down accommodations on would-be emigrants; they didn't care.

Black-Kupperman did a final job on President Hull-Mendoza, the last job that genius of hypnotics would ever do on any moron, important or otherwise.

Hull-Mendoza, panic-stricken by his presidency over an emptying nation, joined his constituents. The *Independence*, aboard which traveled the national government of America, was the most elaborate of all the spaceships—bigger, more comfortable, with a lounge that was handsome, though cramped, and cloakrooms for Senators and Representatives. It went, however, to the same place as the others and Black-Kupperman killed himself, leaving a note that stated he "couldn't live with my conscience."

The day after the American President departed, Barlow flew into a rage. Across his specially built desk were supposed to flow all Poprob high-level documents and this thing—this outrageous thing—called Poprobterm apparently had got into the executive stage before he had even had a glimpse of it!

He buzzed for Rogge-Smith, his statistician. Rogge-Smith seemed to be at the bottom of it. Poprobterm seemed to be about first and second and third derivatives, whatever they were. Barlow had a deep distrust of anything more complex than what he called an "average."

While Rogge-Smith was still at the door, Barlow snapped, "What's the meaning of this? Why haven't I been consulted? How far have you people got and why have you been working on something I haven't authorized?"

"Didn't want to bother you, Chief," said Rogge-Smith. "It was really a technical matter, kind of a final cleanup. Want to come and see the work?"

Mollified, Barlow followed his statistician down the corridor.

"You still shouldn't have gone ahead without my okay," he grumbled. "Where the hell would you people have been without me?"

"That's right, Chief. We couldn't have swung it ourselves; our minds just don't work that way. And all that stuff you knew from Hitler—it wouldn't have occurred to us. Like poor Black-Kupperman."

They were in a fair-sized machine shop at the end of a slight upward incline. It was cold. Rogge-Smith pushed a button that started a motor, and a flood of arctic light poured in as the roof parted slowly. It showed a small spaceship with the door open.

Barlow gaped as Rogge-Smith took him by the elbow and his other boys appeared: Swenson-Swenson, the engineer; Tsutsugimushi-Duncan, his propellants man; Kalb-French, advertising.

"In you go, Chief," said Tsutsugimushi-Duncan. "This is Popobterm."

"But I'm the world Dictator!"

"You bet, Chief. You'll be in history, all right—but this is necessary, I'm afraid."

The door was closed. Acceleration slammed Barlow cruelly to the metal floor. Something broke and warm, wet stuff, salty-tasting, ran from his mouth to his chin. Arctic sunlight through a port suddenly became a fierce lancet stabbing at his eyes; he was out of the atmosphere.

Lying twisted and broken under the acceleration, Barlow realized that some things had not changed, that Jack Ketch was never asked to dinner however many shillings you paid him to do your dirty work, that murder will out, that crime pays only temporarily.

The last thing he learned was that death is the end of pain.

ANTHONY BOUCHER

Elsewhere in this volume is a reference to a somewhat modified old adage: "Them as can, write; them as can't, edit." It should clearly be understood that in no way does this refer to the astonishing individual who was christened William A. P. White, signed his successful series of mystery novels H. H. Holmes, and is at present best known to science-fiction readers as Anthony Boucher. As editor, he (with J. Francis McComas) continues to put out The Magazine of Fantasy and Science Fiction, one of the best regarded periodicals in the science-fiction world today. As writer—well, enough said: He wrote—

Transfer Point

THERE WERE three of them in the retreat, three out of all mankind safe from the yellow bands.

The great Kirth-Labbery himself had constructed the retreat and its extraordinary air-conditioning—not because his scientific genius had foreseen the coming of agnoton and the end of the human race, but quite simply because he itched.

And here Vyrko sat, methodically recording the destruction of mankind, once in a straight factual record, for the instruction of future readers ("if any," he added wryly to himself), and again as a canto in that epic of Man which he never expected to complete but for which he lived.

Lavra's long golden hair fell over his shoulders. It was odd that its scent distracted him when he was at work on the factual record, yet seemed at times to wing the lines of the epic.

"But why bother?" she asked. Her speech might have been

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clearer if her tongue had not been more preoccupied with the savor of the apple than with the articulation of words. But Vyrko understood readily; the remark was as familiar an opening as P-K4.

"It's my duty," Vyrko explained patiently. "I haven't your father's scientific knowledge and perception. Your father's? I haven't the knowledge of his humblest lab assistant. But I can put words together so that they make sense and sometimes more than sense, and I have to do this."

From Lavra's plump red lips an apple pip fell into the works of the electronic typewriter. Vyrko fished it out automatically; this too was part of the gambit, with the possible variants of grape seed, orange peel . . .

"But why," Lavra demanded petulantly, "won't Father let us leave here? A girl might as well be in a—a—"

"Convent?" Vyrko suggested. He was a good amateur paleolinguist. "There is an analogy—even despite my presence. *Convents* were supposed to shelter girls from the Perils of The World. Now the whole world is one Peril—outside of this retreat."

"Go on," Lavra said. She had long ago learned, Vyrko suspected, that he was a faintly over-serious young man with no small talk, and that she could enjoy his full attention only by asking to have something explained, even if for the *n*th time.

He smiled and thought of the girls he used to talk *with*, not *at*, and of how little breath they had for talking now in the world where no one drew an unobstructed breath.

It had begun with the accidental discovery in a routine laboratory analysis of a new element in the air, an inert gas which the great paleolinguist Larkish had named *agnoton*, the Unknown Thing, after the pattern of the similar nicknames given to others: *neon*, the New Thing; *xenon*, the Strange Thing.

It had continued (the explanation ran off so automatically that his mind was free to range from the next line of the epic to the interesting question of whether the presence of ear lobes would damage the symmetry of Lavra's perfect face) it had continued with the itching and sneezing, the coughing

and wheezing, with the increase of the percentage of agnoton in the atmosphere, promptly passing any other inert gas, even argon, and soon rivaling oxygen itself.

And it had culminated (no, the lines were cleaner without lobes), on that day when only the three of them were here in this retreat, with the discovery that the human race was allergic to agnoton.

Now allergies had been conquered for a decade of generations. Their cure, even their palliation, had been forgotten. And mankind coughed and sneezed and itched—and died. For while the allergies of the ancient past produced only agonies to make the patient long for death, agnoton brought on racking and incessant spasms of coughing and sneezing which no heart could long withstand.

"So if you leave this shelter, my dear," Vyrko concluded, "you too will fight for every breath and twist your body in torment until your heart decides that it is all a little too much trouble. Here we are safe, because your father's eczema was the only known case of allergy in centuries—and was traced to the inert gases. Here is the only air-conditioning in the world that excludes the inert gases—and with them agnoton. And here—"

Lavra leaned forward, a smile and a red fleck of apple skin on her lips, the apples of her breasts touching Vyrko's shoulders. This too was part of the gambit.

Usually it was merely declined. (Tyrsa, who sang well and talked better; whose plain face and beautiful throat were alike racked by agnoton. . . .) This time it was interrupted.

Kirth-Labbery himself had come in unnoticed. His old voice was thin with weariness, sharp with impatience. "And here we are! Safe in perpetuity, with our air-conditioning, our energy plant, our hydroponics! Safe in perpetual siege, besieged by an inert gas!"

Vyrko grinned. "Undignified, isn't it?"

Kirth-Labbery managed to laugh at himself. "Damn your secretarial hide, Vyrko. I love you like a son, but if I had one man who knew a meson from a metazoön to help me in the laboratory—"

"You'll find something, Father," Lavra said vaguely.

Her father regarded her with an odd seriousness. "Lavra," he said, "your beauty is the greatest thing that I have wrought—with a certain assistance, I'll grant, from the genes so obviously carried by your mother. That beauty alone still has meaning. The sight of you would bring a momentary happiness even to a man choking in his last spasms, while our great web of civilization—"

He left the sentence unfinished and switched on the video screen. He had to try a dozen channels before he found one that was still casting. When every gram of a man's energy goes to drawing his next breath, he cannot tend his machine.

At last he picked up a Nyork newscast. The announcer was sneezing badly ("The older literature," Vyrko observed, "found that comic . . ."), but still contriving to speak, and somewhere a group of technicians must have had partial control of themselves.

"Four hundred and seventy-two planes have crashed," the announcer said, "in the past forty-eight hours. Civil authorities have forbidden further plane travel indefinitely because of the danger of spasms at the controls, and it is rumored that all vehicular transport whatsoever is to come under the same ban. No Rocklipper has arrived from Lunn for over a week, and it is thirty-six hours since we have made contact with the Lunn telestation. Urope has been silent for over two days, and Asia for almost a week.

"The most serious threat of this epidemic," the head of the Academy has said in an authorized statement, "is the complete disruption of the systems of communication upon which world civilization is based. When man becomes physically incapable of governing his machines . . ."

It was then that they saw the first of the yellow bands.

It was just that: a band of bright yellow some thirty centimeters wide, about five meters long, and so thin as to seem insubstantial, a mere stripe of color. It came underneath the back drop behind the announcer. It streaked about the casting room with queesting sinuosity. No features, no appendages relieved its yellow blankness.

Then with a deft whipping motion it wrapped itself around the announcer. It held him only an instant. His hideously shriveled body plunged toward the camera as the screen went dead.

That was the start of the horror.

Vyrko was never to learn the origin of the yellow bands. Even Kirth-Labbery could offer no more than conjectures. From another planet, another system, another galaxy, another universe . . .

It did not matter. Kirth-Labbery was almost as indifferent to the problem as was Lavra; precise knowledge had now lost its importance. What signified was that they were alien, and that they were rapidly and precisely completing the destruction of mankind begun by the agnoton.

"Their arrival immediately after the epidemic," Kirth-Labbery concluded, "cannot be coincidence. You will observe that they function freely in an agnoton-laden atmosphere."

"It would be interesting," Vyrko commented, "to visualize a band sneezing . . ."

"It's possible," the scientist went on, "that the agnoton was a poison-gas barrage laid down to soften the earth for their coming; but is it likely that they could know that a gas harmless to them would be lethal to other life? It's more probable that they learned from spectroscopic analysis that the atmosphere of this earth lacked an element essential to them, which they supplied before invading."

Vyrko considered the problem while Lavra sliced a peach with delicate grace . . . then was unable to resist licking the rich juice from her fingers. "Then if the agnoton," he ventured, "is something that they imported, is it possible that their supply might run short?"

Kirth-Labbery fiddled with the dials under the screen. It was still possible to pick up occasional glimpses from remote sectors, though by now the heart sickened in advance at the knowledge of the inevitable end of the cast.

"It is possible, Vyrko. It is the only hope. The three of us here, where the agnoton and the yellow bands are alike helpless to enter, may continue our self-sufficient existence long

enough to outlast the invaders. Perhaps somewhere on earth there are other such nuclei; but I doubt it. We are the whole of the future—and I am old."

Vyrko frowned. He resented the terrible weight of a burden that he did not want but could not reject. He felt himself at once oppressed and ennobled. Lavra went on eating her peach.

The video screen sprang into light. A young man with the tense lined face of premature age spoke hastily, urgently, "To all of you, if there are any of you . . . I have heard no answer for two days now . . . It is chance that I am here. But *watch*, all of you! I have found how the yellow bands came here. I am going to turn the camera on it now—*watch!*"

The field of vision panned to something that was for a moment totally incomprehensible. "This is their ship," the old young man gasped. It was a set of bars of a metal almost exactly the color of the bands themselves, and it looked in the first instant like a three-dimensional projection of a tesseract. Then as you looked at it your eye seemed to follow strange new angles. Possibilities of vision opened up beyond your capacities. For a moment you seemed to see what the human eye was not framed to grasp.

"They come," the voice panted on, "from—"

The voice and the screen went dead at once. Vyrko covered his eyes with his hands. Darkness was infinite relief. A minute passed before he felt that he could endure once more even the normal exercise of the optic nerve. He opened his eyes sharply at a little scream from Lavra.

He opened them to see how still Kirth-Labbery sat. The human heart, too, is framed to endure only so much; and, as the scientist had said, he was old.

It was three days after Kirth-Labbery's death before Vyrko had brought his prose and verse record up to date. Nothing more had appeared on the video, even after the most patient hours of knob-twirling. Now Vyrko leaned back from the keyboard and contemplated his completed record—and then sat forward with abrupt shock at the thought of that word *completed*.

For it was quite literally true. There was nothing more to write.

The situation was not novel in literature. He had read many treatments, and even written a rather successful satire on the theme himself. But here was the truth itself.

He was that most imagination-stirring of all figures, The Last Man on Earth. And he was bored.

Kirth-Labbery, had he lived, would have devoted his energies in the laboratory to an effort, even conceivably a successful one, to destroy the invaders; Vyrko knew his own limitations too well to attempt that.

Vrist, his gay wild twin who had been in Lunn on yet another of his fantastic ventures when the agnoton struck—Vrist would have dreamed up some gallant feat of physical prowess to make the invaders pay dearly for his life; Vyrko found it difficult to cast himself in so swashbuckling a role.

He had never envied Vrist till now. *Be jealous of the dead; only the living are alone.* Vyrko smiled as he recalled the line from one of his early poems; it had been only the expression of a pose when he wrote it, a mood for a song that Tyrsa would sing well.

It was in this mood that he found (the ancient word had no modern counterpart) the *pulpa*.

He knew their history: how some eccentric of two thousand years ago (the name was variously rendered as Trees or Tiller) had buried them in a hermetic capsule to check against the future; how Tarabal had dug them up some fifty years ago; how Kirth-Labbery had spent almost the entire Hartl Prize for them because, as he used to assert, their incredible mixture of exact prophecy and arrant nonsense offered the perfect proof of the greatness and helplessness of human ingenuity.

But he had never read them before. They would at least be a novelty to assuage the ennui of his classically dramatic situation. And they helped. He passed a more than pleasant hour with them, needing the dictionary but rarely. He was particularly impressed by one story detailing with the most precise minutiae the politics of the American Religious Wars

—a subject on which he himself had based a not unsuccessful novel. By one Norbert Holt, he observed. Extraordinary how exact a forecast—and yet extraordinary too how many of the stories dealt with space- and time-travel which the race had never yet attained and now never would . . .

And inevitably there was a story, a neat and witty one by an author named Knight, about The Last Man on Earth. He read it and smiled, first at the story and then at his own stupidity.

He found Lavra in the laboratory, of all unexpected places.

She was staring fixedly at one corner, where the light did not strike clearly.

"What's so fascinating?" Vyrko asked.

Lavra turned suddenly. Her hair and her flesh rippled with the perfect grace of the movement. "I was thinking . . ."

Vyrko's half-formed intent permitted no comment on that improbable statement.

"The day before Father . . . died, I was in here with him and I asked if there was any hope of our escaping ever. Only this time he answered me. He said yes there was a way out but he was afraid of it. It was an idea he'd worked on but never tried. And we'd be wiser not to try it, he said."

"I don't believe in arguing with your father—even post mortem."

"But I can't help wondering . . . And when he said it he looked over at that corner."

Vyrko went to that corner and drew back a curtain. There was a chair of metal rods, and there was a crude panel, though it was hard to see what it was intended to control. He shrugged and restored the curtain.

For a moment he stood watching Lavra. She was a fool, and she was exceedingly lovely. And the child of Kirth-Labbery could hardly carry nothing but a fool's genes.

Several generations could grow up in this retreat before the inevitable failure of the most permanent mechanical installations made it uninhabitable. By that time the earth would be free of agnoton and yellow bands, or they would be so firmly

established that there was no hope. The third generation would go forth into the world, to perish or . . .

He walked over to Lavra and laid a gentle hand on her golden hair.

Vyrko never understood whether Lavra had been bored before that time. A life of undemanding inaction with plenty of food may well have sufficed her. Certainly she was not bored now.

At first she was merely passive; Vyrko had always suspected that she had meant the gambit to be declined. Then as her interest mounted and Vyrko began to compliment himself on his ability as an instructor, they became certain of their success; and from that point on she was rapt with the fascination of the changes in herself.

But even this new development did not totally alleviate Vyrko's own ennui. If there were only something he could do, some positive, Vristian, Kirth-Labberian step that he could take! He damned himself for an incompetent esthetic fool who had taken so for granted the scientific wonders of his age that he had never learned what made them tick or how greater wonders might be attained.

He slept too much, he ate too much, for a brief period he drank too much—until he found boredom even less attractive with a hangover.

He tried to write, but the terrible uncertainty of any future audience disheartened him.

Sometimes a week would pass without his consciously thinking of agnoton or the yellow bands. Then he would spend a day flogging himself into a state of nervous tension worthy of his uniquely dramatic situation, and thereafter relapse.

Now even the consolation of Lavra's beauty was vanishing and she began demanding odd items of food which the hydroponic garden could not supply.

"If you loved me, you'd find a way to make cheese . . . or . . . grow a new kind of peach . . . a little like a grape only . . ."

It was while he was listening to a wire of Tyrsa's (the last she ever made, in the curious tonalities of that newly-rediscovered Mozart opera) and visualizing her homely face made even less lovely by the effort of those effortless-sounding notes that he became conscious of the operative phrase. "If you loved me . . ."

"Have I ever said I did?" he snapped.

He saw a new and not readily understood expression mar the beauty of Lavra's face. "No," she said in sudden surprise. "No," and her voice fell to flatness, "you haven't. . ."

And as her sobs—the first he had ever heard from her—traveled away toward the hydroponic room, he felt a new and not readily understood emotion. He switched off the wire midway through the pyrotechnic rage of the eighteenth-century queen of darkness.

Vyrko found a curious refuge in the *pulps*. There was a perverse satisfaction in reading the thrilling exploits of other Last Men on Earth. He could feel through them the emotions that he should be feeling directly. And the other stories were fun too, in varying ways. For instance that astonishingly accurate account of the hairsbreadth maneuvering which averted what threatened to be the first and final Atomic War . . .

He noticed one oddity: Every absolutely correct story of the "future" bore the same by-line. Occasionally other writers made good guesses, predicted logical trends, foresaw inevitable extrapolations; but only Norbert Holt named names and dated dates with perfect historical accuracy.

It wasn't possible. It was too precise to be plausible. It was far more spectacular than the erratic Nostradamus so often discussed in certain of the *pulps*.

But there it was. He had read the Holt stories solidly through in order a half-dozen times without finding a single flaw when he discovered the copy of *Surprising Stories* that had slipped behind a shelf and was therefore new to him.

He looked at the contents page; yes, there was a Holt and—he felt a twinge of irrational but poignant sadness—one labeled as posthumous. He turned to the page indicated and read:

This story, we regret to tell you, is incomplete, and not only because of Norbert Holt's tragic death last month. This is the last in chronological order of Holt's stories of a consistently plotted future; but this fragment was written before his masterpiece, *The Siege of Lunn*. Holt himself used to tell me that he could never finish it, that he could not find an ending; and he died still not knowing how *The Last Boredom* came out. But here, even though in fragment form, is the last published work of the greatest writer of the future, Norbert Holt.

The note was signed with the initials M. S. Vyrko had long sensed a more than professional intimacy between Holt and his editor Mapping Stern; this obituary introduction must have been a bitter task. But his eyes were hurrying on, almost fearfully, to the first words of *The Last Boredom*:

There were three of them in the retreat, three out of all mankind safe from the yellow bands. The great Kirth-Labbery himself had constructed . . .

Vyrko blinked and started again. It still read the same. He took firm hold of the magazine, as though the miracle might slip between his fingers, and dashed off with more energy than he had felt in months.

He found Lavra in the hydroponic room. "I have just found," he shouted, "the damndest unbelievable—"

"Darling," said Lavra, "I want some meat."

"Don't be silly. We haven't any meat. Nobody's eaten meat except as ritual dinners for generations."

"Then I want a ritual dinner."

"You can go on wanting. But look at this! Just read those first lines!"

"Vyrko," she pleaded, "I want it. Really."

"Don't be an idiot!"

Her lips pouted and her eyes moistened. "Vyrko dear . . . What you said when you were listening to that funny music . . . Don't you love me?"

"No," he barked.

Her eyes overflowed. "You don't love me? Not after . . . ?"

All Vyrko's pent-up boredom and irritation erupted. "You're beautiful, Lavra, or you were a few months ago, but you're an idiot. I am not given to loving idiots."

"But you—"

"I tried to assure the perpetuation of the race—questionable though the desirability of such a project seems at the moment. It was not an unpleasant task, but I'm damned if it gives you the right in perpetuity to pester me."

She moaned a little as he slammed out of the room. He felt oddly better. Adrenalin is a fine thing for the system. He settled into a chair and resolutely read, his eyes bugging like a cover-monster's with amazed disbelief. When he reached the verbatim account of the quarrel he had just enjoyed, he dropped the magazine.

It sounded so petty in print. Such stupid inane bickering in the face of— He left the magazine lying there and went back to the hydroponic room.

Lavra was crying—noiselessly this time, which somehow made it worse. One hand had automatically plucked a ripe grape, but she was not eating it. He went up behind her and slipped his hand under her long hair and began rubbing the nape of her neck. The soundless sobs diminished gradually. When his fingers probed tenderly behind her ears she turned to him with parted lips. The grape fell from her hand.

"I'm sorry," he heard himself saying. "It's me that's the idiot. Which, I repeat, I am not given to loving. And you're the mother of my son and I do love you . . ." And he realized that the statement was quite possibly, if absurdly, true.

"I don't want anything now," Lavra said when words were again in order. She stretched contentedly, and she was still beautiful even in the ungainly distortion which might preserve a race. "And what were you trying to tell me?"

He explained. "And this Holt is always right," he ended. "And now he's writing about us!"

"Oh! Oh, then we'll know—"

"We'll know everything! We'll know what the yellow

bands are and what becomes of them and what happens to mankind and—"

"—and we'll know," said Lavra, "whether it's a boy or a girl."

Vyrko smiled. "Twins probably. It runs in my family—at least one pair to a generation. And I think that's it—Holt's already planted the fact of my having a twin named Vrist even though he doesn't come into the action."

"Twins . . . That *would* be nice. They wouldn't be lonely until we could . . . But get it quick, dear. Read it to me; I can't wait!"

So he read Norbert Holt's story to her—too excited and too oddly affectionate to point out that her longstanding aversion for print persisted even when she herself was a character. He read on past the quarrel. He read a printable version of the past hour. He read about himself reading the story to her.

"Now!" she cried. "We're up to now. What happens next?"

Vyrko read:

The emotional release of anger and love had set Vyrko almost at peace with himself again; but a small restlessness still nibbled at his brain.

Irrelevantly he remembered Kirth-Labbery's cryptic hint of escape. Escape for the two of them, happy now; for the two of them and for their . . . say, on the odds, their twins.

He sauntered curiously into the laboratory, Lavra following him. He drew back the curtain and stared at the chair of metal rods. It was hard to see the control board that seemed to control nothing. He sat in the chair for a better look.

He made puzzled grunting noises. Lavra, her curiosity finally stirred by something inedible, reached over his shoulder and poked at the green button.

"I don't like that last thing he says about me," Lavra objected. "I don't like anything he says about me. I think your Mr. Holt is nasty."

"He says you're beautiful."

"And he says you love me. Or does he? It's all mixed up."

"It's all mixed up . . . and I love you."

The kiss was a short one; Lavra had to say, "And what next?"

"That's all. It ends there."

"Well . . . Aren't you . . . ?"

Vyrko felt strange. Holt had described his feelings so precisely. He was at peace and still curious, and the thought of Kirth-Labbery's escape method nibbled at his brain.

He rose and sauntered into the laboratory, Lavra following him. He drew back the curtain and stared at the chair of metal rods. It was hard to see the control board that seemed to control nothing. He sat in the chair for a better look.

He made puzzled grunting noises. Lavra, her curiosity finally stirred by something inedible, reached over his shoulder and poked at the green button.

Vyrko had no time for amazement when Lavra and the laboratory vanished. He saw the archaic vehicle bearing down directly upon him and tried to get out of the way as rapidly as possible. But the chair hampered him and before he could get to his feet the vehicle struck. There was a red explosion of pain and then a long blackness.

He later recalled a moment of consciousness at the hospital and a shrill female voice repeating over and over, "But he wasn't there and then all of a sudden he was and I hit him. It was like he came out of nowhere. He wasn't there and then all of a sudden . . ." Then the blackness came back.

All the time of his unconsciousness, all through the semi-conscious nightmares while doctors probed at him and his fever soared, his subconscious mind must have been working on the problem. He knew the complete answer the instant that he saw the paper on his breakfast tray, that first day he was capable of truly seeing anything.

The paper was easy to read for a paleolinguist with special training in *pulps*—easier than the curious concept of breakfast was to assimilate. What mattered was the date, 1948—and the headlines refreshed his knowledge of the Cold War and the impending election. (There was something he should remember about that election . . .)

He saw it clearly. Kirth-Labbery's genius had at last evolved a time machine. That was the one escape, the escape which the scientist had not yet tested and rather distrusted. And Lavra had poked the green button because Norbert Holt had said she had poked (would poke?) the green button.

How many buttons could a wood poke poke if a wood-poke would poke . . .

"The breakfast didn't seem to agree with him, doctor."

"Maybe it was the paper. Makes me run a temperature every morning too!"

"Oh doctor, you do say the funniest things!"

"Nothing funnier than this case. Total amnesia, as best we can judge by his lucid moments. And his clothes don't help us—must've been on his way to a fancy-dress party. Or maybe I should say fancy-undress!"

"Oh, doctor . . . !"

"Don't tell me nurses can blush. Never did when I was an intern—and you can't say they didn't get a chance! But this character here—not a blessed bit of identification on him! Riding some kind of newfangled bike that got smashed up . . . Better hold off on the solid food for a bit—stick to intravenous."

He'd had this trouble before at ritual dinners, Vyrko finally recalled. Meat was apt to affect him badly—the trouble was he had not at first recognized those odd strips of oily solid which accompanied the egg as meat.

The adjustment was gradual and successful, in this case as in other matters. At the end of two weeks, he was eating meat easily (and, he confessed, with a faintly obscene non-ritual pleasure), and equally chatting with nurses and fellow patients about the events (which he still privately tended to regard as mummified museum pieces) of 1948.

His adjustment, in fact, was soon so successful that it could not long endure. The doctor made that clear.

"Got to think about the future, you know. Can't keep you here forever. Nasty unreasonable prejudice against keeping well men in hospitals."

Vyrko allowed the expected laugh to come forth. "But since," he said, gladly accepting the explanation that was so

much more credible than the truth, "I haven't any idea who I am, where I live, or what my profession is—"

"Can't remember anything? Don't know if you can take shorthand, for instance? Or play the bull fiddle?"

"Not a thing." Vyrko felt it hardly worth while to point out his one manual accomplishment, the operation of the as yet uninvented electronic typewriter.

"Behold," he thought, "the Man of the Future. I've read all the time travel stories. I know what should happen. I teach them everything Kirth-Labbery knew and I'm the greatest man in the world. Only the time travel never happens to a poor dope who took for granted all the science around him, who pushed a button or turned a knob and never gave a damn what happened, or why, between that action and the end result. Here they're just beginning to get two-dimensional black-and-white short-range television. We had (will have?) stereoscopic full-color world-wide video—which I'm about as capable of constructing here as my friend the doctor would be of installing an electric light in Ancient Rome. The Mouse of the Future . . ."

The doctor had been thinking too. He said, "Notice you're a great reader. Librarian's been telling me about you—went through the whole damn hospital library like a bookworm with a tapeworm!"

Vyrko laughed dutifully. "I like to read," he admitted.

"Every try writing?" the doctor asked abruptly, almost in the tone in which he might reluctantly advise a girl that her logical future lay in Port Said."

This time Vyrko really laughed. "That does seem to ring a bell, you know . . . It might be worth trying. But at that, what do I live on until I get started?"

"Hospital trustees here administer a rehabilitation fund. Might wangle a loan. Won't be much, of course; but I always say a single man's got only one mouth to feed—and if he feeds more, he won't be single long!"

"A little," said Vyrko with a glance at the newspaper headlines, "might go a long way."

It did. There was the loan itself, which gave him a bank account on which in turn he could acquire other short-term loans—at exorbitant interest. And there was the election.

He had finally reconstructed what he should know about it. There had been a brilliant Wheel-of-If story in one of the much later pulps, on *If* the Republicans had won the 1948 election. Which meant that in fact they had lost; and here, in October of 1948, all newspapers, all commentators, and most important, all gamblers, were convinced that they must infallibly win.

On Wednesday, November third, Vyrko repaid his debts and settled down to his writing career, comfortably guaranteed against immediate starvation.

A half dozen attempts at standard fiction failed wretchedly. A matter of "tone," editors remarked vaguely, on the rare occasions when they did not confine themselves to the even vaguer phrases of printed rejection forms. A little poetry sold—"if you can call that selling," Vyrko thought bitterly, comparing the financial position of the poet with his own world.

His failures were beginning to bring back the bitterness and boredom, and his thoughts turned more and more to that future to which he could never know the answer.

Twins. It had to be twins—of opposite sexes, of course. The only hope of the continuance of the race lay in a matter of odds and genetics.

Odds . . . He began to think of the election bet, to figure other angles with which he could turn foreknowledge to profit. But his pulp-reading had filled his mind with fears of the paradoxes involved. He had calculated the election bets carefully; they could not affect the outcome of the election, they could not even, in their proportionately small size, affect the odds. But any further step . . .

Vyrko was, like most conceited men, fond of self-contempt, which he felt he could occasionally afford to indulge in. Possibly his strongest access of self-contempt came when he realized the simplicity of the solution to all his problems.

He could write for the science fiction pulps.

The one thing that he could handle convincingly and skillfully, with the proper "tone," was the future. Possibly start off with a story on the Religious Wars; he'd done all that research on his novel. Then . . .

It was not until he was about to mail the manuscript that the full pattern of the truth struck him.

Soberly, yet half-grinning, he crossed out *Kirth Vyrko* on the first page and wrote *Norbert Holt*.

Manning Stern rejoiced loudly in this fresh discovery. "This boy's got it! He makes it sound so real that . . ." The business office was instructed to pay the highest bonus rate (unheard of for a first story), and an intensely cordial letter went to the author outlining immediate needs and offering certain story suggestions.

The editor of *Surprising* was no little surprised at the answer:

. . . I regret to say that all my stories will be based on one consistent scheme of future events and that you must allow me to stick to my own choice of material . . .

"And who the hell," Manning Stern demanded, "is editing this magazine?" and dictated a somewhat peremptory suggestion for a personal interview.

The features were small and sharp, and the face had a sort of dark aliveness. It was a different beauty from Lavra's, and an infinitely different beauty from the curious standards set by the 1949 films; but it was beauty and it spoke to Norbert Holt.

"You'll forgive a certain surprise, Miss Stern," he ventured. "I've read *Surprising* for so many years and never thought . . ."

Manning Stern grinned. "That the editor was a surprise? I'm used to it—your reaction, I mean. I don't think I'll ever be quite used to being a woman . . . or a human being, for that matter."

"Isn't it rather unusual? From what I know of the field . . ."

"Please God, when I find a man who can write don't let him go all male-chauvinist on me! I'm a good editor, said she with becoming modesty (and don't you ever forget it!), and I'm a good scientist. I even worked on the Manhattan Project—until some character discovered that my adopted daughter was a Spanish War orphan. But what we're here to talk about is this consistent-scheme gimmick of yours. It's all right, of course; it's been done before. But where I frankly think you're crazy is in planning to do it *exclusively*."

Norbert Holt opened his briefcase. "I've brought along an outline that might help convince you . . ."

An hour later Manning Stern glanced at her watch and announced, "End of office hours! Care to continue this slugfest over a martini or five? I warn you—the more I'm plied, the less pliant I get."

And an hour after that she stated, "We might get someplace if we'd stay someplace. I mean the subject seems to be getting elusive."

"The hell," Norbert Holt announced recklessly, "with editorial relations. Let's get back to the current state of opera."

"It was paintings. I was telling you about the show at the—"

"No, I remember now. It was movies. You were trying to explain the Marx Brothers. Unsuccessfully, I may add."

"Un . . . suc . . . cess . . . fly," said Manning Stern ruminatively. "Five martinis and the man can say unsuccessfully successfully. But I try to explain the Marx Brothers yet! Look, Holt. I've got a subversive orphan at home and she's undoubtedly starving. I've got to feed her. You come home and meet her and have potluck, huh?"

"Good. Fine. Always like to try a new dish."

Manning Stern looked at him curiously. "Now was that a gag or not? You're funny, Holt. You know a lot about everything and then all of a sudden you go all Man-from-Mars on the simplest thing. Or do you? . . . Anyway, let's go feed Raquel."

And five hours later Holt was saying, "I never thought I'd

have this reason for being glad I sold a story. Manning, I haven't had so much fun talking to— I almost said 'to a woman.' I haven't had so much fun talking period since—"

He had almost said *since the agnoton came*. She seemed not to notice his abrupt halt. She simply said, "Bless you, Norb. Maybe you aren't a male-chauvinist. Maybe even you're . . . Look, go find a subway or a cab or something. If you stay here another minute I'm either going to kiss you or admit you're right about your stories—and I don't know which is worse editor-author relations."

Manning Stern committed the second breach of relations first. The fan mail on Norbert Holt's debut left her no doubt that *Surprising* would profit by anything he chose to write about.

She'd never seen such a phenomenally rapid rise in author popularity. Or rather you could hardly say *rise*. Holt hit the top with his first story and stayed there. He socked the fen (Guest of Honor at the Washinvention), the pros (first President of Fantasy Writers of America), and the general reader (author of the first pulp-bred science fiction book to stay three months on the best seller list).

And never had there been an author who was more pure damned fun to work with. Not that you edited him; you checked his copy for typos and sent it to the printers. (Typos were frequent at first; he said something odd about absurd illogical keyboard arrangement.) But just being with him, talking about this, that and those . . . Raquel was quite obviously in love with him—praying that he'd have the decency to stay single till she grew up and you know, Manningcita, I am Spanish; and the Mediterranean girls . . .

But there was this occasional feeling of oddness. Like the potluck and the illogical keyboard and that night at FWA . . .

"I've got a story problem," Norbert Holt announced. "An idea, and I can't lick it. Maybe if I toss it out to the lions . . ."

"Story problem?" Manning said, a little more sharply than

she'd intended. "I thought everything was outlined for the next ten years."

"This is different. This is a sort of paradox story, and I can't get out of it. It won't end. Something like this: Suppose a man in the remote year X reads a story that tells him how to work a time machine. So he works the time machine and goes back to the year X-2000—let's say, for instance, now. So in 'now' he writes the story that he's going to read two thousand years later, telling himself how to work the time machine because he knows how to work it because he read the story which he wrote because—"

Manning was starting to say "Hold it!" when Matt Duncan interrupted with "Good old endless-cycle gimmick. Lot of fun to kick around but Bob Heinlein did it once and for all in *By His Bootstraps*. Damnedest tour de force I ever read; there just aren't any switcheroos left after that."

"Ouroboros," Joe Henderson contributed.

Norbert Holt looked a vain question at him; they knew that one word per evening was Joe's maximum contribution.

Austin Carter picked it up. "Ouroboros. The worm that circles the universe with its tail in its mouth. The Asgard Serpent, too. And I think there's something Mayan. All symbols of infinity—no beginning, no ending. Always out by the same door where in you went. See that magnificent novel of Eddison's, *The Worm Ouroboros*; the perfect cyclic novel, ending with its recommencement, stopping not because there's a stopping place but because it's uneconomical to print the whole text over infinitely."

"The Quaker Oats box," said Duncan. "With a Quaker holding a box with a Quaker holding a box with a Quaker holding a . . ."

It was standard professional shoptalk. It was a fine evening with the boys. But there was a look of infinitely remote sadness in Norbert's Holt's eyes.

That was the evening that Manning violated her first rule of editor-author relationships.

They were having martinis in the same bar in which Norbert had, so many years ago, successfully said *unsuccessfully*.

"They've been good years," he remarked, apparently to the olive.

There was something wrong with this evening. No bounce. "That's a funny tense," Manning confided to her own olive.

"I've owed you a serious talk for a long time."

"You don't have to pay the debt. We don't go in much for being serious, do we? Not so dead-earnest-catch-in-the-throat serious."

"Don't we?"

"I've got an awful feeling," Manning admitted, "that you're building up to a proposal, either to me or that olive. And if it's me, I've got an awful feeling I'm going to accept—and Raquel is never going to forgive me."

"You're safe," Norbert said dryly. "That's the serious talk. I want to marry you, darling, and I'm not going to."

"I suppose this is the time you twirl your black mustache and tell me you have a wife and family elsewhere?"

"I hope to God I have!"

"No, it wasn't very funny, was it?" Manning felt very little, aside from wishing she was dead.

"I can't tell you the truth," he went on. "You wouldn't believe it. I've loved two women before; one had talent and a brain, the other had beauty. I think I loved her. The damnedest curse of Ouroboros is that I'll never quite know. If I could take that tail out of that mouth . . ."

"Go on," she said. "Talk plot-gimmicks. It's nicer."

"And she is carrying . . . will carry . . . my child—my children, it must be. My twins . . ."

"Look, Holt. We came in here editor and author—remember back when? Let's go out that way. Don't go on talking. I'm a big girl but I can't take . . . everything. It's been fun knowing you and all future manuscripts gratefully received."

"I knew I couldn't say it. I shouldn't have tried. But there won't be any future manuscripts. I've written every Holt I've ever read."

"Does that make sense?" Manning aimed the remark at the olive, but it was gone. So was the martini.

"Here's the last." He took it out of his breast-pocket, neatly

folded. "The one we talked about at FWA—the one I couldn't end. Maybe you'll understand. I wanted somehow to make it clear before . . ."

The tone of his voice projected the unspoken meaning, and Manning forgot everything else. "Is something going to happen to you? Are you going to— Oh my dear, no! All right, so you have a wife on every space station in the asteroid belt; but if anything happens to you . . ."

"I don't know," said Norbert Holt. "I can't remember the exact date of that issue . . ." He rose abruptly. "I shouldn't have tried a goodbye. See you again, darling—the next time round Ouroboros."

She was still staring at the empty martini glass when she heard the shrill of brakes and the excited upspringing of a crowd outside.

She read the posthumous fragment late that night, after her eyes had dried sufficiently to make the operation practicable. And through her sorrow her mind fought to help her, making her think, making her be an editor.

She understood a little and disbelieved what she understood. And underneath she prodded herself. "But it isn't a *story*. It's too short, too inconclusive. It'll just disappoint the Holt fans—and that's everybody. Much better if I do the damndest straight obit I can, take up a full page on it . . ."

She fought hard to keep on thinking, not feeling. She had never before experienced so strongly the I-have-been-here-before sensation. She had been faced with this dilemma once before, once on some other time-spiral, as the boys in FWA would say. And her decision had been . . .

"It's sentimentality," she protested. "It isn't *editing*. This decision's right. I know it. And if I go and get another of these attacks and start to change my mind . . ."

She laid the posthumous Holt fragment on the coals. It caught fire quickly.

The next morning Raquel greeted her with, "Manningcita, who's Norbert Holt?"

Manning had slept so restfully that she was even tolerant of foolish questions at breakfast. "Who?" she asked.

"Norbert Holt. Somehow the name popped into my mind. Is he perhaps one of your writers?"

"Never heard of him," said Manning.

Raquel frowned. "I was almost sure . . . Can you really remember them all? I'm going to check those bound volumes of *Surprising*."

"Any luck with your . . . what was it? . . . Holt?" Manning asked the girl a little later.

"No, Manningcita. I was quite unsuccessful."

. . . *unsuccessful* . . . Now why, in Heaven's name, mused Manning Stern, should I be thinking of martinis at breakfast time?

ROBERT SHECKLEY

Next time the family is gathered together and conversation runs low, you might try comparing literary notes on the stories everyone has most enjoyed over the past year. When you query each member—your wife with Today's Woman, Uncle Jack with his all-male Esquire, your own science-fiction magazines, the family's copy of Collier's, even the small fry who scarcely bother to read at all but keep their eyes glued to Captain Video on TV—you may find a surprising phenomenon: A good many of the most memorable stories and sequences in each are likely to turn out to have been written by a youthful fireball named Robert Sheckley. At 24, Bob Sheckley has half a hundred stories in a score of magazines; and to learn the reason for his abrupt and unbounded popularity, you need look no farther than the present example of his way with words, entitled—

Watchbird

WHEN GELSEN entered, he saw that the rest of the watchbird manufacturers were already present. There were six of them, not counting himself, and the room was blue with expensive cigar smoke.

"Hi, Charlie," one of them called as he came in.

The rest broke off conversation long enough to wave a casual greeting at him. As a watchbird manufacturer, he was a member manufacturer of salvation, he reminded himself wryly. Very exclusive. You must have a certified government contract if you want to save the human race.

"The government representative isn't here yet," one of the men told him. "He's due any minute."

"We're getting the green light," another said.

WATCHBIRD by Robert Sheckley. Copyright, 1953, by Galaxy Publishing Corp.; reprinted by permission of the author.

"Fine." Gelsen found a chair near the door and looked around the room. It was like a convention, or a Boy Scout rally. The six men made up for their lack of numbers by sheer volume. The president of Southern Consolidated was talking at the top of his lungs about watchbird's enormous durability. The two presidents he was talking at were grinning, nodding, one trying to interrupt with the results of a test he had run on watchbird's resourcefulness, the other talking about the new recharging apparatus.

The other three men were in their own little group, delivering what sounded like a panegyric to watchbird.

Gelsen noticed that all of them stood straight and tall, like the saviors they felt they were. He didn't find it funny. Up to a few days ago he had felt that way himself. He had considered himself a pot-bellied, slightly balding saint.

He sighed and lighted a cigarette. At the beginning of the project, he had been as enthusiastic as the others. He remembered saying to Macintyre, his chief engineer, "Mac, a new day is coming. Watchbird is the Answer." And Macintyre had nodded very profoundly—another watchbird convert.

How wonderful it had seemed then! A simple, reliable answer to one of mankind's greatest problems, all wrapped and packaged in a pound of incorruptible metal, crystal and plastics.

Perhaps that was the very reason he was doubting it now. Gelsen suspected that you don't solve human problems so easily. There had to be a catch somewhere.

After all, murder was an old problem, and watchbird too new a solution.

"Gentlemen—" They had been talking so heatedly that they hadn't noticed the government representative entering. Now the room became quiet at once.

"Gentlemen," the plump government man said, "the President, with the consent of Congress, has acted to form a watchbird division for every city and town in the country."

The men burst into a spontaneous shout of triumph. They were going to have their chance to save the world after all,

Gelsen thought, and worriedly asked himself what was wrong with that.

He listened carefully as the government man outlined the distribution scheme. The country was to be divided into seven areas, each to be supplied and serviced by one manufacturer. This meant monopoly, of course, but a necessary one. Like the telephone service, it was in the public's best interests. You couldn't have competition in watchbird service. Watchbird was for everyone.

"The President hopes," the representative continued, "that full watchbird service will be installed in the shortest possible time. You will have top priorities on strategic metals, manpower, and so forth."

"Speaking for myself," the president of Southern Consolidated said, "I expect to have the first batch of watchbirds distributed within the week. Production is all set up."

The rest of the men were equally ready. The factories had been prepared to roll out the watchbirds for months now. The final standardized equipment had been agreed upon, and only the Presidential go-ahead had been lacking.

"Fine," the representative said. "If that is all, I think we can—is there a question?"

"Yes, sir," Gelsen said. "I want to know if the present model is the one we are going to manufacture."

"Of course," the representative said. "It's the most advanced."

"I have an objection," Gelsen stood up. His colleagues were glaring coldly at him. Obviously he was delaying the advent of the golden age.

"What is your objection?" the representative asked.

"First, let me say that I am one hundred per cent in favor of a machine to stop murder. It's been needed for a long time. I object only to the watchbird's learning circuits. They serve, in effect, to animate the machine and give it a pseudo-consciousness. I can't approve of that."

"But, Mr. Gelsen, you yourself testified that the watchbird would not be completely efficient unless such circuits were

introduced. Without them, the watchbirds could stop only an estimated seventy per cent of murders."

"I know that," Gelsen said, feeling extremely uncomfortable. "I believe there might be a moral danger in allowing a machine to make decisions that are rightfully Man's," he declared doggedly.

"Oh, come now, Gelsen," one of the corporation presidents said. "It's nothing of the sort. The watchbird will only reinforce the decisions made by honest men from the beginning of time."

"I think that is true," the representative agreed. "But I can understand how Mr. Gelsen feels. It is sad that we must put a human problem into the hands of a machine, sadder still that we must have a machine enforce our laws. But I ask you to remember, Mr. Gelsen, that there is no other possible way of stopping a murderer *before he strikes*. It would be unfair to the many innocent people killed every year if we were to restrict watchbird on philosophical grounds. Don't you agree that I'm right?"

"Yes, I suppose I do," Gelsen said unhappily. He had told himself all that a thousand times, but something still bothered him. Perhaps he would talk it over with Macintyre.

As the conference broke up, a thought struck him. He grinned.

A lot of policemen were going to be out of work!

"Now what do you think of that?" Officer Celtrics demanded. "Fifteen years in Homicide and a machine is replacing me." He wiped a large red hand across his forehead and leaned against the captain's desk. "Ain't science marvelous?"

Two other policemen, late of Homicide, nodded glumly.

"Don't worry about it," the captain said. "We'll find a home for you in Larceny, Celtrics. You'll like it here."

"I just can't get over it," Celtrics complained. "A lousy little piece of tin and glass is going to solve all the crimes."

"Not quite," the captain said. "The watchbirds are supposed to prevent the crimes before they happen."

"Then how'll they be crimes?" one of the policeman asked.

"I mean they can't hang you for murder until you commit one, can they?"

"That's not the idea," the captain said. "The watchbirds are supposed to stop a man before he commits a murder."

"Then no one arrests him?" Celtrics asked.

"I don't know how they're going to work that out," the captain admitted.

The men were silent for a while. The captain yawned and examined his watch.

"The thing I don't understand," Celtrics said, still leaning on the captain's desk, "is just how do they do it? How did it start, Captain?"

The captain studied Celtrics' face for possible irony; after all, watchbird had been in the papers for months. But then he remembered that Celtrics, like his sidekicks, rarely bothered to turn past the sports pages.

"Well," the captain said, trying to remember what he had read in the Sunday supplements, "these scientists were working on criminology. They were studying murderers, to find out what made them tick. So they found that murderers throw out a different sort of brain wave from ordinary people. And their glands act funny, too. All this happens when they're about to commit a murder. So these scientists worked out a special machine to flash red or something when these brain waves turned on."

"Scientists," Celtrics said bitterly.

"Well, after the scientists had this machine, they didn't know what to do with it. It was too big to move around, and murderers didn't drop in often enough to make it flash. So they built it into a smaller unit and tried it out in a few police stations. I think they tried one upstate. But it didn't work so good. You couldn't get to the crime in time. That's why they built the watchbirds."

"I don't think they'll stop no criminals," one of the policemen insisted.

"They sure will. I read the test results. They can smell him out before he commits a crime. And when they reach him,

they give him a powerful shock or something. It'll stop him."

"You closing up Homicide, Captain?" Celtrics asked.

"Nope," the captain said. "I'm leaving a skeleton crew in until we see how these birds do."

"Hah," Celtrics said. "Skeleton crew. That's funny."

"Sure," the captain said. "Anyhow, I'm going to leave some men on. It seems the birds don't stop all murders."

"Why not?"

"Some murderers don't have these brain waves," the captain answered, trying to remember what the newspaper article had said. "Or their glands don't work or something."

"Which ones don't they stop?" Celtrics asked, with professional curiosity.

"I don't know. But I hear they got the damned things fixed so they're going to stop all of them soon."

"How they working that?"

"They learn. The watchbirds, I mean. Just like people."

"You kidding me?"

"Nope."

"Well," Celtrics said, "I think I'll just keep old Betsy oiled, just in case. You can't trust these scientists."

"Right."

"Birds!" Celtrics scoffed.

Over the town, the watchbird soared in a long, lazy curve. Its aluminum hide glistened in the morning sun, and dots of light danced on its stiff wings. Silently it flew.

Silently, but with all senses functioning. Built-in kinesthetics told the watchbird where it was, and held it in a long search curve. Its eyes and ears operated as one unit, searching, seeking.

And then something happened! The watchbird's electronically fast reflexes picked up the edge of a sensation. A correlation center tested it, matching it with electrical and chemical data in its memory files. A relay tripped.

Down the watchbird spiraled, coming in on the increasingly strong sensation. It *smelled* the outpouring of certain glands, *tasted* a deviant brain wave.

Fully alerted and armed, it spun and banked in the bright morning sunlight.

Dinelli was so intent he didn't see the watchbird coming. He had his gun poised, and his eyes pleaded with the big grocer.

"Don't come no closer."

"You lousy little punk," the grocer said, and took another step forward. "Rob me? I'll break every bone in your puny body."

The grocer, too stupid or too courageous to understand the threat of the gun, advanced on the little thief.

"All right," Dinelli said, in a thorough state of panic. "All right, sucker, take—"

A bolt of electricity knocked him on his back. The gun went off, smashing a breakfast food display.

"What in hell?" the grocer asked, staring at the stunned thief. And then he saw a flash of silver wings. "Well, I'm really damned. Those watchbirds work!"

He stared until the wings disappeared in the sky. Then he telephoned the police.

The watchbird returned to his search curve. His thinking center correlated the new facts he had learned about murder. Several of these he hadn't known before.

This new information was simultaneously flashed to all the other watchbirds and their information was flashed back to him.

New information, methods, definitions were constantly passing between them.

Now that the watchbirds were rolling off the assembly line in a steady stream, Gelsen allowed himself to relax. A loud contented hum filled his plant. Orders were being filled on time, with top priorities given to the biggest cities in his area, and working down to the smallest towns.

"All smooth, Chief," Macintyre said, coming in the door. He had just completed a routine inspection.

"Fine. Have a seat."

The big engineer sat down and lighted a cigarette.

"We've been working on this for some time," Gelsen said, when he couldn't think of anything else.

"We sure have," Macintyre agreed. He leaned back and inhaled deeply. He had been one of the consulting engineers on the original watchbird. That was six years back. He had been working for Gelsen ever since, and the men had become good friends.

"The thing I wanted to ask you was this—" Gelsen paused. He couldn't think how to phrase what he wanted. Instead he asked, "What do you think of the watchbirds, Mac?"

"Who, me?" The engineer grinned nervously. He had been eating, drinking and sleeping watchbird ever since its inception. He had never found it necessary to have an attitude. "Why, I think it's great."

"I don't mean that," Gelsen said. He realized that what he wanted was to have someone understand his point of view. "I mean do you figure there might be some danger in machine thinking?"

"I don't think so, Chief. Why do you ask?"

"Look, I'm no scientist or engineer. I've just handled cost and production and let you boys worry about how. But as a layman, watchbird is starting to frighten me."

"No reason for that."

"I don't like the idea of the learning circuits."

"But why not?" Then Macintyre grinned again. "I know. You're like a lot of people, Chief—afraid your machines are going to wake up and say, 'What are we doing here? Let's go out and rule the world.' Is that it?"

"Maybe something like that," Gelsen admitted.

"No chance of it," Macintyre said. "The watchbirds are complex, I'll admit, but an M.I.T. calculator is a whole lot more complex. And it hasn't got consciousness."

"No. But the watchbirds can *learn*."

"Sure. So can all the new calculators. Do you think they'll team up with the watchbirds?"

Gelsen felt annoyed at Macintyre, and even more annoyed at himself for being ridiculous. "It's a fact that the watchbirds

can put their learning into action. No one is monitoring them."

"So that's the trouble," Macintyre said.

"I've been thinking of getting out of watchbird." Gelsen hadn't realized it until that moment.

"Look, Chief," Macintyre said. "Will you take an engineer's word on this?"

"Let's hear it."

"The watchbirds are no more dangerous than an automobile, an IBM calculator or a thermometer. They have no more consciousness or volition than those things. The watchbirds are built to respond to certain stimuli, and to carry out certain operations when they receive that stimuli."

"And the learning circuits?"

"You have to have those," Macintyre said patiently, as though explaining the whole thing to a ten-year-old. "The purpose of the watchbird is to frustrate all murder-attempts, right? Well, only certain murderers give out these stimuli. In order to stop all of them, the watchbird has to search out new definitions of murder and correlate them with what it already knows."

"I think it's inhuman," Gelsen said.

"That's the best thing about it. The watchbirds are unemotional. Their reasoning is non-anthropomorphic. You can't bribe them or drug them. You shouldn't fear them, either."

The intercom on Gelsen's desk buzzed. He ignored it.

"I know all this," Gelsen said. "But, still, sometimes I feel like the man who invented dynamite. He thought it would only be used for blowing up tree stumps."

"You didn't invent watchbird."

"I still feel morally responsible because I manufacture them."

The intercom buzzed again, and Gelsen irritably punched a button.

"The reports are in on the first week of watchbird operation," his secretary told him.

"How do they look?"

"Wonderful, sir."

"Send them in in fifteen minutes." Gelsen switched the in-

tercom off and turned back to Macintyre, who was cleaning his fingernails with a wooden match. "Don't you think that this represents a trend in human thinking? The mechanical god? The electronic father?"

"Chief," Macintyre said, "I think you should study watchbird more closely. Do you know what's built into the circuits?"

"Only generally."

"First, there is a purpose. Which is to stop living organisms from committing murder. Two, murder may be defined as an act of violence, consisting of breaking, mangling, maltreating or otherwise stopping the functions of a living organism by a living organism. Three, most murderers are detectable by certain chemical and electrical changes."

Macintyre paused to light another cigarette. "Those conditions take care of the routine functions. Then, for the learning circuits, there are two more conditions. Four, there are some living organisms who commit murder without the signs mentioned in three. Five, these can be detected by data applicable to condition two."

"I see," Gelsen said.

"You realize how foolproof it is?"

"I suppose so." Gelsen hesitated a moment. "I guess that's all."

"Right," the engineer said, and left.

Gelsen thought for a few moments. There *couldn't* be anything wrong with the watchbirds.

"Send in the reports," he said into the intercom.

High above the lighted buildings of the city, the watchbird soared. It was dark, but in the distance the watchbird could see another, and another beyond that. For this was a large city.

To prevent murder. . .

There was more to watch for now. New information had crossed the invisible network that connected all watchbirds. New data, new ways of detecting the violence of murder.

There! The edge of a sensation! Two watchbirds dipped simultaneously. One had received the scent a fraction of a

second before the other. He continued down while the other resumed monitoring.

Condition four, there are some living organisms who commit murder without the signs mentioned in condition three.

Through his new information, the watchbird knew by extrapolation that this organism was bent on murder, even though the characteristic chemical and electrical smells were absent.

The watchbird, all senses acute, closed in on the organism. He found what he wanted, and dived.

Roger Greco leaned against a building, his hands in his pockets. In his left hand was the cool butt of a .45. Greco waited patiently.

He wasn't thinking of anything in particular, just relaxing against a building, waiting for a man. Greco didn't know why the man was to be killed. He didn't care. Greco's lack of curiosity was part of his value. The other part was his skill.

One bullet, neatly placed in the head of a man he didn't know. It didn't excite him or sicken him. It was a job, just like anything else. You killed a man. So?

As Greco's victim stepped out of a building, Greco lifted the .45 out of his pocket. He released the safety and braced the gun with his right hand. He still wasn't thinking of anything as he took aim. . . .

And was knocked off his feet.

Greco thought he had been shot. He struggled up again, looked around, and sighted foggily on his victim.

Again he was knocked down.

This time he lay on the ground, trying to draw a bead. He never thought of stopping, for Greco was a craftsman.

With the next blow, everything went black. Permanently, because the watchbird's duty was to protect the object of violence—at whatever cost to the murderer.

The victim walked to his car. He hadn't noticed anything unusual. Everything had happened in silence.

Gelsen was feeling pretty good. The watchbirds had been operating perfectly. Crimes of violence had been cut in half,

and cut again. Dark alleys were no longer mouths of horror. Parks and playgrounds were not places to shun after dusk.

Of course, there were still robberies. Petty thievery flourished, and embezzlement, larceny, forgery and a hundred other crimes.

But that wasn't so important. You could regain lost money—never a lost life.

Gelsen was ready to admit that he had been wrong about the watchbirds. They were doing a job that humans had been unable to accomplish.

The first hint of something wrong came that morning.

Macintyre came into his office. He stood silently in front of Gelsen's desk, looking annoyed and a little embarrassed.

"What's the matter, Mac?" Gelsen asked.

"One of the watchbirds went to work on a slaughterhouse man. Knocked him out."

Gelsen thought about it for a moment. Yes, the watchbirds would do that. With their new learning circuits, they had probably defined the killing of animals as murder.

"Tell the packers to mechanize their slaughtering," Gelsen said. "I never liked that business myself."

"All right," Macintyre said. He pursed his lips, then shrugged his shoulders and left.

Gelsen stood beside his desk, thinking. Couldn't the watchbirds differentiate between a murderer and a man engaged in a legitimate profession? No, evidently not. To them, murder was murder. No exceptions. He frowned. That might take a little ironing out in the circuits.

But not too much, he decided hastily. Just make them a little more discriminating.

He sat down again and buried himself in paperwork, trying to avoid the edge of an old fear.

They strapped the prisoner into the chair and fitted the electrode to his leg.

"Oh, oh," he moaned, only half-conscious now of what they were doing.

They fitted the helmet over his shaved head and tightened the last straps. He continued to moan softly.

And then the watchbird swept in. How he had come, no one knew. Prisons are large and strong, with many locked doors, but the watchbird was there—

To stop a murder.

"Get that thing out of here!" the warden shouted, and reached for the switch. The watchbird knocked him down.

"Stop that!" a guard screamed, and grabbed for the switch himself. He was knocked to the floor beside the warden.

"This isn't murder, you idiot!" another guard said. He drew his gun to shoot down the glittering wheeling metal bird.

Anticipating, the watchbird smashed him back against the wall.

There was silence in the room. After a while, the man in the helmet started to giggle. Then he stopped.

The watchbird stood on guard, fluttering in mid-air—

Making sure no murder was done.

New data flashed along the watchbird network. Unmonitored, independent, the thousands of watchbirds received and acted upon it.

The breaking, mangling or otherwise stopping the functions of a living organism by a living organism. New acts to stop.

"Damn you, git going!" Farmer Ollister shouted, and raised his whip again. The horse balked, and the wagon rattled and shook as he edged sideways.

"You lousy hunk of pigmeal, git going!" the farmer yelled and he raised the whip again.

It never fell. An alert watchbird, sensing violence, had knocked him out of his seat.

A living organism? What is a living organism? The watchbirds extended their definitions as they became aware of more facts. And, of course, this gave them more work.

The deer was just visible at the edge of the woods. The hunter raised his rifle, and took careful aim.

He didn't have time to shoot.

With his free hand, Gelsen mopped perspiration from his

face. "All right," he said into the telephone. He listened to the stream of vituperation from the other end, then placed the receiver gently in its cradle.

"What was that one?" Macintyre asked. He was unshaven, tie loose, shirt unbuttoned.

"Another fisherman," Gelsen said. "It seems the watchbirds won't let him fish even though his family is starving. What are we going to do about it, he wants to know."

"How many hundred is that?"

"I don't know. I haven't opened the mail."

"Well, I figured out where the trouble is," Macintyre said gloomily, with the air of a man who knows just how he blew up the Earth—after it was too late.

"Let's hear it."

"Everybody took it for granted that we wanted all murder stopped. We figured the watchbirds would think as we do. We ought to have qualified the conditions."

"I've got an idea," Gelsen said, "that we'd have to know just why and what murder is, before we could qualify the conditions properly. And if we knew that, we wouldn't need the watchbirds."

"Oh, I don't know about that. They just have to be told that some things which look like murder are not murder."

"But why should they stop fisherman?" Gelsen asked.

"Why shouldn't they? Fish and animals are living organisms. We just don't think that killing them is murder."

The telephone rang. Gelsen glared at it and punched the intercom. "I told you no more calls, no matter what."

"This is from Washington," his secretary said. "I thought you'd—"

"Sorry." Gelsen picked up the telephone. "Yes. Certainly is a mess . . . Have they? All right, I certainly will." He put down the telephone.

"Short and sweet," he told Macintyre. "We're to shut down temporarily."

"That won't be so easy," Macintyre said. "The watchbirds operate independent of any central control, you know. They

come back once a week for a repair checkup. We'll have to turn them off then, one by one."

"Well, let's get to it. Monroe over on the Coast has shut down about a quarter of his birds."

"I think I can dope out a restricting circuit," Macintyre said.

"Fine," Gelsen replied bitterly. "You make me very happy."

The watchbirds were learning rapidly, expanding and adding to their knowledge. Loosely defined abstractions were extended, acted upon and re-extended.

To stop murder . . .

Metal and electrons reason well, but not in a human fashion.

A living organism? Any living organism!

The watchbirds set themselves the task of protecting all living things.

The fly buzzed around the room, lighting on a table top, pausing a moment, then darting to a window sill.

The old man stalked it, a rolled newspaper in his hand. Murderer!

The watchbirds swept down and saved the fly in the nick of time.

The old man writhed on the floor a minute and then was silent. He had been given only a mild shock, but it had been enough for his fluttery, cranky heart.

His victim had been saved, though, and this was the important thing. Save the victim and give the aggressor his just deserts.

Gelsen demanded angrily. "Why aren't they being turned off!"

The assistant control engineer gestured. In a corner of the repair room lay the senior control engineer. He was just regaining consciousness.

"He tried to turn one of them off," the assistant engineer said. Both his hands were knotted together. He was making a visible effort not to shake.

"That's ridiculous. They haven't got any sense of self-preservation."

"Then turn them off yourself. Besides, I don't think any more are going to come."

What could have happened? Gelsen began to piece it together. The watchbirds still hadn't decided on the limits of a living organism. When some of them were turned off in the Monroe plant, the rest must have correlated the data.

So they had been forced to assume that they were living organisms, as well.

No one had ever told them otherwise. Certainly they carried on most of the functions of living organisms.

Then the old fears hit him. Gelsen trembled and hurried out of the repair room. He wanted to find Macintyre in a hurry.

The nurse handed the surgeon the sponge.

"Scalpel."

She placed it in his hand. He started to make the first incision. And then he was aware of a disturbance.

"Who let that thing in?"

"I don't know," the nurse said, her voice muffled by the mask.

"Get it out of here."

The nurse waved her arms at the bright winged thing, but it fluttered over her head.

The surgeon proceeded with the incision—as long as he was able.

The watchbird drove him away and stood guard.

"Telephone the watchbird company!" the surgeon ordered.

"Get them to turn the thing off."

The watchbird was preventing violence to a living organism.

The surgeon stood by helplessly while his patient died.

Fluttering high above the network of highways, the watchbird watched and waited. It had been constantly working for weeks now, without rest or repair. Rest and repair were

impossible, because the watchbird couldn't allow itself—a living organism—to be murdered. And that was what happened when watchbirds returned to the factory.

There was a built-in order to return, after the lapse of a certain time period. But the watchbird had a stronger order to obey—preservation of life, including its own.

The definitions of murder were almost infinitely extended now, impossible to cope with. But the watchbird didn't consider that. It responded to its stimuli, whenever they came and whatever their source.

There was a new definition of living organism in its memory files. It had come as a result of the watchbird discovery that watchbirds were living organisms. And it had enormous ramifications.

The stimuli came! For the hundredth time that day, the bird wheeled and banked, dropping swiftly down to stop murder.

Jackson yawned and pulled his car to a shoulder of the road. He didn't notice the glittering dot in the sky. There was no reason for him to. Jackson wasn't contemplating murder, by any human definition.

This was a good spot for a nap, he decided. He had been driving for seven straight hours and his eyes were starting to fog. He reached out to turn off the ignition key—

And was knocked back against the side of the car.

"What in hell's wrong with you?" he asked indignantly. "All I want to do is—" He reached for the key again, and again he was smacked back.

Jackson knew better than to try a third time. He had been listening to the radio and he knew what the watchbirds did to stubborn violators.

"You mechanical jerk," he said to the waiting metal bird. "A car's not alive. I'm not trying to kill it."

But the watchbird only knew that a certain operation resulted in stopping an organism. The car was certainly a functioning organism. Wasn't it of metal, as were the watchbirds? Didn't it run?

Macintyre said, "Without repairs they'll run down." He shoved a pile of specification sheets out of his way.

"How soon?" Gelsen asked.

"Six months to a year. Say a year, barring accidents."

"A year," Gelsen said. "In the meantime, everything is stopping dead. Do you know the latest?"

"What?"

"The watchbirds have decided that the Earth is a living organism. They won't allow farmers to break ground for plowing. And, of course, everything else is a living organism—rabbits, beetles, flies, wolves, mosquitoes, lions, crocodiles, crows, and smaller forms of life such as bacteria."

"I know," Macintyre said.

"And you tell me they'll wear out in six months or a year. What happens *now*? What are we going to eat in six months?"

The engineer rubbed his chin. "We'll have to do something quick and fast. Ecological balance is gone to hell."

"Fast isn't the word. Instantaneously would be better." Gelsen lighted his thirty-fifth cigarette for the day. "At least I have the bitter satisfaction of saying, 'I told you so.' Although I'm just as responsible as the rest of the machine-worshipping fools."

Macintyre wasn't listening. He was thinking about watchbirds. "Like the rabbit plague in Australia."

"The death rate is mounting," Gelsen said. "Famine. Floods. Can't cut down trees. Doctors can't—what was that you said about Australia?"

"The rabbits," Macintyre repeated. "Hardly any left in Australia now."

"Why? How was it done?"

"Oh, found some kind of germ that attacked only rabbits. I think it was propagated by mosquitos—"

"Work on that," Gelsen said. "You might have something. I want you to get on the telephone, ask for an emergency hookup with the engineers of the other companies. Hurry it up. Together you may be able to dope out something."

"Right," Macintyre said. He grabbed a handful of blank paper and hurried to the telephone.

"What did I tell you?" Officer Celtrics said. He grinned at the captain. "Didn't I tell you scientists were nuts?"

"I didn't say you were wrong, did I?" the captain asked.

"No, but you weren't sure."

"Well, I'm sure now. You'd better get going. There's plenty of work for you."

"I know." Celtrics drew his revolver from its holster, checked it and put it back. "Are all the boys back, Captain?"

"All?" the captain laughed humorlessly. "Homicide has increased by fifty per cent. There's more murder now than there's ever been."

"Sure," Celtrics said. "The watchbirds are too busy guarding cars and slugging spiders." He started toward the door, then turned for a parting shot.

"Take my word, Captain. Machines are *stupid*."

The captain nodded.

Thousands of watchbirds, trying to stop countless millions of murders—a hopeless task. But the watchbirds didn't hope. Without consciousness, they experienced no sense of accomplishment, no fear of failure. Patiently they went about their jobs, obeying each stimulus as it came.

They couldn't be everywhere at the same time, but it wasn't necessary to be. People learned quickly what the watchbirds didn't like and refrained from doing it. It just wasn't safe. With their high speed and superfast senses, the watchbirds got around quickly.

And now they meant business. In their original directives there had been a provision made for killing a murderer, if all other means failed.

Why spare a murderer?

It backfired. The watchbirds extracted the fact that murder and crimes of violence had increased geometrically since they had begun operation. This was true, because their new definitions increased the possibilities of murder. But to the watchbirds, the rise showed that the first methods had failed.

Simple logic. If A doesn't work, try B. The watchbirds shocked to kill.

Slaughterhouses in Chicago stopped and cattle starved to death in their pens, because farmers in the Midwest couldn't cut hay or harvest grain.

No one had told the watchbirds that all life depends on carefully balanced murders.

Starvation didn't concern the watchbirds, since it was an act of omission.

Their interest lay only in acts of commission.

Hunters sat home, glaring at the silver dots in the sky, longing to shoot them down. But for the most part, they didn't try. The watchbirds were quick to sense the murder intent and to punish it.

Fishing boats swung idle at their moorings in San Pedro and Gloucester. Fish were living organisms.

Farmers cursed and spat and died, trying to harvest the crop. Grain was alive and thus worthy of protection. Potatoes were as important to the watchbird as any other living organism. The death of a blade of grass was equal to the assassination of a President—

To the watchbirds.

And, of course, certain machines were living. This followed, since the watchbirds were machines and living.

God help you if you maltreated your radio. Turning it off meant killing it. Obviously—its voice was silenced, the red glow of its tubes faded, it grew cold.

The watchbirds tried to guard their other charges. Wolves were slaughtered, trying to kill rabbits. Rabbits were electrocuted, trying to eat vegetables. Creepers were burned out in the act of strangling trees.

A butterfly was executed, caught in the act of outraging a rose.

This control was spasmodic, because of the fewness of the watchbirds. A billion watchbirds couldn't have carried out the ambitious project set by the thousands.

The effect was of a murderous force, ten thousand bolts of irrational lightning raging around the country, striking a thousand times a day.

Lightning which anticipated your moves and punished your intentions.

"Gentlemen, *please*," the government representative begged. "We must hurry."

The seven manufacturers stopped talking.

"Before we begin this meeting formally," the president of Monroe said, "I want to say something. We do not feel ourselves responsible for this unhappy state of affairs. It was a government project; the government must accept the responsibility, both moral and financial."

Gelsen shrugged his shoulders. It was hard to believe that these men, just a few weeks ago, had been willing to accept the glory of saving the world. Now they wanted to shrug off the responsibility when the salvation went amiss.

"I'm positive that that need not concern us now," the representative assured him. "We must hurry. You engineers have done an excellent job. I am proud of the cooperation you have shown in this emergency. You are hereby empowered to put the outlined plan into action."

"Wait a minute," Gelsen said.

"There is no time."

"The plan's no good."

"Don't you think it will work?"

"Of course it will work. But I'm afraid the cure will be worse than the disease."

The manufacturers looked as though they would have enjoyed throttling Gelsen. He didn't hesitate.

"Haven't we learned yet?" he asked. "Don't you see that you can't cure human problems by mechanization?"

"Mr. Gelsen," the president of Monroe said, "I would enjoy hearing you philosophize, but, unfortunately, people are being killed. Crops are being ruined. There is famine in some sections of the country already. The watchbirds must be stopped at once!"

"Murder must be stopped, too. I remember all of us agreeing upon that. But this is not the way!"

"What would you suggest?" the representative asked.

Gelsen took a deep breath. What he was about to say took all the courage he had.

"Let the watchbirds run down by themselves," Gelsen suggested.

There was a near-riot. The government representative broke it up.

"Let's take our lesson," Gelsen urged, "admit that we were wrong trying to cure human problems by mechanical means. Start again. Use machines, yes, but not as judges and teachers and fathers."

"Ridiculous," the representative said coldly. "Mr. Gelsen, you are overwrought. I suggest you control yourself." He cleared his throat. "All of you are ordered by the President to carry out the plan you have submitted." He looked sharply at Gelsen. "Not to do so will be treason."

"I'll cooperate to the best of my ability," Gelsen said.

"Good. Those assembly lines must be rolling within the week."

Gelsen walked out of the room alone. Now he was confused again. Had he been right or was he just another visionary? Certainly, he hadn't explained himself with much clarity.

Did he know what he meant?

Gelsen cursed under his breath. He wondered why he couldn't ever be sure of anything. Weren't there any values he could hold on to?

He hurried to the airport and to his plant.

The watchbird was operating erratically now. Many of its delicate parts were out of line, worn by almost continuous operation. But gallantly it responded when the stimuli came.

A spider was attacking a fly. The watchbird swooped down to the rescue.

Simultaneously, it became aware of something overhead. The watchbird wheeled to meet it.

There was a sharp crackle and a power bolt whizzed by the watchbird's wing. Angrily, it spat a shock wave.

The attacker was heavily insulated. Again it spat at the watchbird. This time, a bolt smashed through a wing. The watchbird darted away, but the attacker went after it in a burst of speed, throwing out more crackling power.

The watchbird fell, but managed to send out its message. Urgent! A new menace to living organisms and this was the deadliest yet!

Other watchbirds around the country integrated the message. Their thinking centers searched for an answer.

"Well, Chief, they bagged fifty today," Macintyre said, coming into Gelsen's office.

"Fine," Gelsen said, not looking at the engineer.

"Not so fine." Macintyre sat down. "Lord, I'm tired! It was seventy-two yesterday."

"I know." On Gelsen's desk were several dozen lawsuits, which he was sending to the government with a prayer.

"They'll pick up again, though," Macintyre said confidently. "The Hawks are especially built to hunt down watchbirds. They're stronger, faster, and they've got better armor. We really rolled them out in a hurry, huh?"

"We sure did."

"The watchbirds are pretty good, too," Macintyre had to admit. "They're learning to take cover. They're trying a lot of stunts. You know, each one that goes down tells the others something."

Gelsen didn't answer.

"But anything the watchbirds can do, the Hawks can do better," Macintyre said cheerfully. "The Hawks have special learning circuits for hunting. They're more flexible than the watchbirds. They learn faster."

Gelsen gloomily stood up, stretched, and walked to the window. The sky was blank. Looking out, he realized that his uncertainties were over. Right or wrong, he had made up his mind.

"Tell me," he said, still watching the sky, "what will the Hawks hunt after they get all the watchbirds?"

"Huh?" Macintyre said. "Why—"

"Just to be on the safe side, you'd better design something to hunt down the Hawks. Just in case, I mean."

"You think—"

"All I know is that the Hawks are self-controlled. So were the watchbirds. Remote control would have been too slow, the argument went on. The idea was to get the watchbirds and get them fast. That meant no restricting circuits."

"We can dope something out," Macintyre said uncertainly.

"You've got an aggressive machine up in the air now. A murder machine. Before that it was an anti-murder machine. Your next gadget will have to be even more self-sufficient, won't it?"

Macintyre didn't answer.

"I don't hold you responsible," Gelsen said. "It's me. It's everyone."

In the air outside was a swift-moving dot.

"That's what comes," said Gelsen, "of giving a machine the job that was our own responsibility."

Overheard, Hawk was zeroing in on a watchbird.

The armored murder machine had learned a lot in a few days. Its sole function was to kill. At present it was impelled toward a certain type of living organism, metallic like itself.

But the Hawk had just discovered that there were other types of living organisms, too—

Which had to be murdered.

WILSON TUCKER

Many science-fiction writers started out as science-fiction fans; Wilson Tucker started that way—and never stopped. Today, after half a dozen successful novels, he ranks as Fan No. One in the minds and hearts of most of science-fiction's organized fan groups and has for many years published the best-loved fan magazine of them all, the Science-Fiction Newsletter. Some of his novels are mysteries (The Chinese Doll, To Keep or Kill, for instance); but two of the best are science fiction, and so are most of his short stories, including the neatly ironical—

To a Ripe Old Age

GEORGE YOUNG sneezed and squinted his eyes. The dirty wallpaper clinging to the ceiling above him seemed ready to come loose and fall. He sneezed again and rolled his eyes slowly, taking in the equally sad paper peeling from the side-walls—faded roses, and beneath that, blue feathers. A battered old telephone hung on the wall near the door. The room contained a peculiar odor. His trousers were thrown over a chair beside the bed.

"Mother of Moses!" George Young complained aloud. "Another firetrap."

He fought away the ache in his back and the dull pain in his chest to sit up. The movement sent a fine cloud of dust flying. He sneezed again, and continued sneezing until the dust had cleared away.

"What the hell goes on here?" George demanded of the

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peeling wallpaper. His uneasy nostrils cringed from the smell of the place.

Slowly swinging his feet off the bed and to the floor, he swore loudly when his naked toes made jarring contact with several glass bottles. Curious, George peered down. Liquor bottles—all empty. With growing incredulity he examined them, attempted to count them. Bottles, all shapes, all kinds, all colors, all manner and variety of labels, empty bottles. They began at the baseboard of the wall near the head of his bed and marched across the dusty carpet, a reasonably straight line of them running from the head to the foot of the bed. His eyes swung that way, still doubtfully counting, to find the bottles turned a corner. At the count of 52 they swung around the scarred bedpost and continued parallel with the footboard.

George gingerly lifted himself to his feet and rested his hands on the footboard, staring over and down. The empty bottles continued their fantastic march across the floor and turned a second corner. George swallowed and lay back down on the bed. Dust flew. He sneezed.

"Stop that, damn it!" he yelled hoarsely. "Why don't they dust this stinking firetrap?"

After a long moment he very carefully rolled over on his belly to stare at the floor on the opposite side of the bed. Empty bottles. After turning that second corner the bottles maintained their marching line up to the wallboard once more. His bed was ringed by bottles, a three-sided ring with each end anchored at the wall. All empty, all large—he saw that he had not wasted his money on pint sizes.

"Money—!"

Alarmed, George leaped from the bed in another cloud of dust to snatch up the rumpled trousers. There was no wallet in the pockets. He shook his addled head to clear away the dust and haze, and grabbed for the pillow. The wallet was there. Hurriedly he opened it, plucked out the sheaf of currency and counted the remaining bills.

"Oh, no, Mother of Moses!" Thoughtlessly, George ran to the window, inserted his fingers into the two-inch opening

along the bottom and pulled it up. He thrust his head out into the hot sunlight. "Police! I've been robbed!"

He brought his head in again to stare at the array of bottles. Once more he counted the money in his wallet. He lifted a naked foot to kick at the nearest empty, and thought the better of it. Slowly then, using a dirty index finger, he made a second count of the number of bottles, multiplied the total by five, and compared that sum with the remaining money. The answer was startling.

"I was robbed," he repeated dully. "Hell, I never get that drunk! Why—I *couldn't* drink all that." George paused to survey the marching line. "I don't think I could." He paused again, considering. "Well, I never could before."

He stepped over the bottles and sat down on the bed. Dust arose, he sneezed. The single bedsheet beneath him was covered with a crust that made his bottom itch. The wallet lay open in his hand.

More than \$400 gone . . . where? Into all that joy-juice? Four hundred bucks, the money he had saved up for his furlough. Four hundred bucks earned the hard way by scrubbing latrines, polishing brass, cleaning the damned rifle, policing the grounds, drilling, drilling, drilling. . . . Eleven months in the army, eleven months of deepest privation and degrading toil, eleven months of saving his meager pay and running it up in crap and poker games; and finally, after eleven months, a ten-day delay-enroute. From Fort Dix, New Jersey, to Camp Walton, California, with a delay-enroute.

All right, so he had delayed enroute. Somewhere. He had climbed down off the train—in somewhere town—and squandered about \$400 on those bottles now surrounding the bed. But where was somewhere town? And still more alarming was a new thought: which of those ten days was it now, today? How far was he from Camp Walton and how many days had he left to reach there?

Hurriedly he arose from the bed in a cloud of dust and jumped the line of bottles, to snatch up the earpiece of the ancient wallphone. There was a layer of dust on it.

"Hey, down there!" George shouted into its mouth, "where the hell is this? And what day is it?"

The phone stayed dead.

"Hell of a note," he declared and let the earpiece bang against the wall. Behind the faded wallpaper some loose plaster dribbled down. "Hell of a note, I say." He turned to appraise the room.

The room was dingy like all cheap hotels, the carpet was ragged and worn as in all firetraps and the bed was a hand-me-down the Salvation Army had thrown away. He looked at the discolored sheet and wondered how he had slept on it, sniffed the odor of the room and wondered how he had stayed alive in it. His body itched, so he scratched. His chest seemed to be encrusted and matted with a sticky, odorous glue. The glue had a familiar smell. Dust covered the bed other than where he had lain, covered the solitary chair and the light fixture hanging from the ceiling. Dust arose from the carpet as he stalked across it. George paused once more to examine the bottles—a thin layer of dust covered the bottles.

"Hell of a note," he repeated and picked up his trousers. He shook the garment, sneezed twice, and put them on. He couldn't find his socks, shoes or shirt—there was nothing in the room other than his trousers. Wearing them, he unlocked the bedroom door to stare at the number. He was on the third floor. Without hesitation he strode into the hallway and sought the stairs, dust flying with every footfall. George clumped down the stairs, taking a savage delight in making as much noise as possible, navigated the second floor landing and continued on to the street floor. The lobby was empty.

"Hey there! Wake up—it's me, George Young."

There was no answer, no sudden appearance.

George strode over to the tiny desk and pounded on it. Dust flew up in his nostrils and he sneezed again. He glanced around the lobby to discover he was still alone. A calendar pad caught his eyes and he whirled it around, blew dust from the surface and read the date.

"The sixteenth," he repeated it aloud. "That was . . . uh, two days after I left Dix. Yeah. The sixteenth . . . so I've got

eight days left anyhow." He pounded on the desk once more and waited several minutes for an answer. The sunlight shining through the unwashed glass of the street door finally caught his eye, and he turned toward it.

George Young pushed out into the bright sun, stood on the hot pavement to stare at the empty street.

"What the hell goes on here?" he demanded.

A collie dog pushed up from the back seat of a nearby automobile, regarded him with some surprise, and leaped out to trot over to him.

"Well—hello, George!" the dog greeted him warmly. "Mother of Moses, am I glad to see you up and around. I am your best friend, George."

"Go to hell," George snapped peevishly and pivoted on the sidewalk to stare both ways along the deserted street. "Where is—" He broke off, whirled back to the dog.

"What did you say?"

"I said," the animal repeated happily, "that I am your best friend. You know—a dog is man's best friend. I am a dog and you are a man, so I am your best friend."

George stared suspiciously at the collie's shining eyes, its open mouth and lolling pink tongue. Then he very carefully backed across the sidewalk and into the lobby, pulling shut the door. The dog padded after him and put its nose to the glass.

"Open the door, George. I am your best friend."

"Nooo . . . not mine, you ain't. Go away."

"But George, I am so. You told me."

"I didn't tell you nothing . . . now seat!"

"You did, George, you *did*," the animal insisted. There was something akin to pleading in its voice. "This is a hell of a note! You were upstairs sleeping on the bed and I came up to see you every day. You taught me to speak, George, you said you didn't want any dumb dogs hanging around. You taught me everything I know."

"I don't bark," George declared hotly.

"You said it was the English language, George, whatever that is. Good old King's English, you told me. Is King a man

too, George? You said a dog was man's best friend, so here I am a dog, eager to be your best friend."

George fixed the collie with a beady eye. "I never saw a talking dog before."

The dog giggled. "I never saw a talking man before. Gee whiz, but you stinked."

"Where are they?" George demanded then. "Where is everybody? Where'd they go?"

"Alas, they were all gone when I arrived."

George Young jumped and searched the visible parts of the street outside, and then whirled around for another inspection of the lobby. He was the sole remaining human in sight. He glared down at the dog, summoned his courage and pushed through the lobby door a second time to stand on the burning pavement. He made a careful survey of the street.

Automobiles stood at the curb before the hotel and were parked elsewhere along the street. None contained an occupant. Office windows and shop doorways were open to the warm summer air, quite empty of life. Debris littered the streets and avenues, moving only on the occasional prompting of some idle breeze. Tall buildings reared along the block, uninhabited. There was no sound but his own hoarse breathing. The thoroughfares were empty, the cars empty, the stores and offices empty, the lobby behind him empty. He saw no people—George chopped off the train of thought to glance into the air, to search the ledges running along the nearer buildings. There were no birds, either. Nothing, no one, but him and the collie.

"Where is everybody?" he asked again, weakly.

"Gone," the dog told him sadly, echoing his emotions. "Alas, all gone, absent without leave, over the hill, taking a powder, vamoosed. Hell of a note."

"But *where*?" the bewildered soldier insisted.

The collie tried and failed to shrug. "Gobbled up."

George growled at him. "You're pretty damned sassy for a dog."

"I am your best friend, George," said the collie. "I came up to see you every day."

"You're nuts. The door was locked."

"Oh, no, George. I flew. I am your best friend."

The soldier contemplated the dog with a weary disgust. "So all right . . . so you flew. If you can sit there and argue with me, I guess you can fly." And then he added triumphantly: "But I was asleep all the time, so how could I teach you anything?"

"Mother of Moses, George, it all came forth from your mind! Oh yes, you were asleep all right, hitting the sack, rolling in the hay, taking 40 and whatnot, but the King's English flowed right out of your mind. Everything I am today I owe to your mind, brain, gray matter, skull-stuffing, sawdust and et cetera. You didn't explain et cetera to me, George. All the while you slept your mind flowed, flowed right out to me in brainwaves. I know it all, I know everything you know. I am your best friend, George, because you said a dog was man's best friend."

The man stared, incredulous. "Do you mean to say you flew upstairs and *read* my mind while I slept?"

"That I did, George, that I did. You smelled, George. We were in perfect sync, fix, communion, tune."

"Oh, brother!"

"Am I really your brother, George?" The collie's tail wagged with sudden pleasure. "Yes, I guess I am your brother. You said once you were a son of a—" The dog yelped with pain and jumped away. "Now, George!"

"Don't you now-George me! Get away from here, go on, shoo. I don't like talking dogs."

"You shouldn't treat your best friend that way, George old pal, bosom buddy, good stick."

He lunged savagely at the animal. "You ain't my best friend—not by a long shot! I don't make friends with talking dogs. I don't make friends with smart-aleck dogs. I don't make friends with flying dogs. I don't ever want to see you again! Now get out of here before I kick your—" and he sent

the kick flying. The frightened collie yelped and scuttled away, to look back just once before vanishing into an alley.

George Young left the hotel behind and strode with a determined purpose to the nearer intersection. Standing at the corner, he raised a hand to shade his eyes from the sun and peer along the four streets. His determination dribbled away. No living thing moved in his line of sight. Down the block a car had gone out of control, veered across the sidewalk and smashed into a store window. He ran to it hopefully, prepared to welcome nothing more than the body of some unlucky motorist. The car was empty, save for a crumpled newspaper.

"The bomb!" he shouted aloud at the sudden thought. "The dirty bastards dropped the bomb. They wiped—" His voice trailed away to nothing as he examined the nearer buildings. None of them showed the slightest traces of a blast, any blast. There was nothing to indicate so small a thing as a black powder bomb going off. Defeated, he reached into the car for the newspaper and smoothed it out.

It held no mention of a bomb, no hint, or threat of a bomb, no clue or forewarning to any sort of a catastrophe. The front page as well as those inside mirrored nothing more than the day-to-day violence at home and abroad. Like the dusty calendar on the hotel desk, the newspaper was dated the sixteenth. A stopping date. He dropped it, uncomprehending. "Hell of a note," George complained.

Why . . . you'd think he was the last man in the world.

George Young sat on the curb in front of a grocery store, watching the summer sun go down and eating his supper from a collection of pilfered cans and jars. He had helped himself to the food, there being no one in the store to serve him or restrain him. The bread he had passed by because it was hard and some of the loaves showed traces of green mold, and that in turn had caused him to doubt the fruits and vegetables. Most of the meats and cheeses in a neutralized refrigerator seemed to be safe, but still it held a peculiar odor and he had slammed the door on the box.

Cans, jars and a box of wax-sealed crackers made up his meal. Unable to locate a coffee pot or running water, he drank canned juices and soda water.

In the several hours since leaving the hotel he had also helped himself to an automobile and wandered the length and breadth of the town, looking for someone, anyone. He had left the car radio running for hours, waiting for a voice, any voice, child, man or woman. The only moving thing he had seen was a flea-bitten sparrow that faithfully followed his wanderings, clearly chirping "George—" at tiresome intervals. He had thrown a rock at the sparrow. The day was gone and empty, the sun setting on a lonesome city and a lonesome man.

"Hell of a note!" he cried for the hundredth time, and hurled an empty can far across the street. It rattled loudly in the deserted silence. The silence puzzled him, frightened him, made him unsure of his future. Should he drive on to Camp Walton—would he find anyone living in California? What about tomorrow, and the next day, and all the days after that? What would it be like to be alone for the rest of his life?

"Hell of a note," he said again, shouting after the can. "Just one woman would do. One lousy woman!"

"George, lamb. . . ."

He stiffened with surprise and swiveled his head on his shoulders. She stood waiting only a few feet away, a vision for his starving eyes. He toppled from the curb with shock and lay in the street, looking up at her. Wow, what a woman!

She possessed the shape of all those lovely, desirable girls in the pin-up pictures he treasured, only more shapely. Her hair was the glorious color of flaming ripe wheat to match the glowing descriptions he had read in a thousand stories, only more glorious. She had a face so breathtakingly beautiful it defied description; eyes like limpid, inviting pools that heroes tumbled into. She was a tall, long-legged, chesty, tanned babe with enough sizzle for five harem dancers. And she was clad in nothing more than a skimpy two-piece swim suit.

Her every line and curve, hollow and hill shrieked a precious commodity which George was always seeking. She had shining golden eyes and a lolling, pink tongue. She was what that guy Smith would describe as a seven-sector call-out. And now she waited there all alone, appealing to him! George struggled up from the gutter.

"Honey . . . baby. . . ," she seemed to whisper.

"Mother of Moses!" George declared. "All mine!"

"Lamb-pie, angel child . . . come to mama." She held out her hands to him.

"Where in hell did you come from?" he demanded.

"Oh, I've been around, George. Are you lonely?"

"Am I lonely!" he shouted, and leaped the curb to put his hands on her. "Baby, where have you been all my life?"

She smiled up into his happy face. "Oh, I'm from Glissix, George, but you don't really care about that. I came here a few days ago. I'm a floozy."

George froze. "Say that again?"

"I'm a floozy, George, a skirt, a doll, a walker, a babe. Do you like me, George? Do you like my skin?"

He raised the palm of his hand to slap his forehead rapidly, knocking out the cobwebs. She was still there. "Look," he pleaded, "I don't get all this. I don't care a damn where you came from and I don't give a damn what you are. You're *people*, and you look like a million to me. All I know is that you're the hottest peach I ever laid eyes on in my life, and I'm craving company." He held onto her arm tightly lest she vanish. "Let's get together. How about a drink?"

"Drink? But I don't need water, George."

"Who said anything about water? Look, doll, you must know the score, you've seen what this town is like. There ain't nobody here—the whole damned population has skipped out and left us. Mass desertion, that's what it is. The place is ours, see? All we have to do is walk along and help ourselves." He tugged at her arm to start her moving. "Look down there—see that saloon? That's for us. And over in the next block is another one, and another one. All ours. We

just help ourselves, doll, free and on the house. Come on, let's you and me have a nip of rotgut."

She was trotting alongside him now to match his eager, rapid pace. "Will I like rotgut, George?"

"Baby, you'll love it!" he told her gustily, watching the jiggle of her garments from the corner of his eye. "It can *do* things for you."

It did things for her.

Dusk had long since fallen and the moon was up, but it failed to top the taller buildings and illuminate the street canyons until near midnight. At that hour, George and the lovely doll had passed freely from the portal of one liquid refreshment to the next, sampling this and that, all unaware of the growing darkness and the absence of electricity. They were only aware of their interest in each other. And rotgut had done some startling things to the blonde whose hair was like ripe wheat. For one thing, the hair exhibited a certain difficulty in maintaining the color of ripe wheat. Had the various saloons been illuminated by electricity the carousing soldier might have noticed that, might have noticed that the hair was sometimes reddish, sometimes brown, sometimes like long green grass and sometimes no color at all.

And for another thing, demon rum had caused the girl to be acutely aware of the confining garments she wore. They were an uncomfortable restraint and she soon slipped out of them. "I'm not used to wearing clothes, George," she said by way of explanation.

George grandly waved the explanation aside, and the upper half of the swim suit now reposed on the antlers of a buck hanging on some lost wall behind them. The lower half he carried in his hip pocket as a souvenir. He had offered to remove his trousers, the only article of clothing he now possessed, but he said he was afraid of catching cold. And somewhere, sometime during the night George discovered the moonlight spilling in the window.

"Come here, buttercup," he said, reaching for her hand. "I want to see how you sparkle in the moonlight."

He turned and marched away with the hand. The girl got up from her chair as quickly as she could and followed it. He paused at the window, to place her in the proper position and her body sparkled in the moonlight. The moon seemed to make it sparkle a bit queerly, as though seen through a haze or a curtain of smoky cellophane. George decided they needed another drink to dispel the illusions. He usually played bartender because she was unfamiliar with the liquids and had mixed some devilish concoctions.

"I ain't been drunk for a long, *long* time," George confided to her, thumping her shoulder with each word. "Not since last night in fact. I counted the bottles—man, what bottles! Only you know what?" He hesitated, groping for the half-remembered details of the episode. "You know what?"

"What?" the sparkling body asked.

He reached for the body, picked her up and placed her on the bar before him. "Gee, you don't weigh a thing." He was pleased with his unexpected strength, and slapped her thigh. "But you sure got what it takes."

"What?" she asked again, smoothing out the indentation his hand had made.

"I didn't really drink all those bottles—no sir! I thought I did, this morning, but I didn't really." He stopped again to collect the memories. "We was talking about those champagne baths, see? Me and some of the guys on the train. One of the guys, this corporal, said he read a piece in the paper about an actress or somebody taking a bath in champagne, and another guy pushes in and says no, it was a tub of milk. They got to arguing about it and to shut them up, I said I'd take a whiskey bath and see how it was. That's what I said." He paused for breath, took a drink and maneuvered a restless hand. "So I did, see honey? I bought all those bottles, must have spent over 400 bucks and got myself all those bottles."

"And took a bath," she finished for him. "Baby."

"Naw, I didn't take a bath! I couldn't—there wasn't no bathtub in my room. So I just laid down on the bed and poured it over me. Of course, I drank *some* you understand, but I

poured it over me. Took a whiskey shower, by damn! Four hundred bucks worth, right on me." George reached down to scratch the dried glue on his chest. "That's why I'm all sticky." He marvelled at himself. "Boy . . . I'll bet I smelled this morning!"

"You certainly did, George. I visited you every day."

"You did? You really did? Do you mean to tell me that I laid there like a log with a hot peach like you in the room? I must be going crazy!"

"Oh, I didn't mind at all, George. I thought you were nice. I am your best—I want to do things with you honey, lambpie, sweet man, snuggles."

"Atta gall" He pinched her but she made no protest. "You're the kind of a doll I go for. I'm glad there ain't no people around here—just me and you, all alone. More fun that way."

"Alas, they are all gone, George. Skedaddled. They've been gone for many days. The Hunters ate them . . . gobbled them up." She sipped at a bottle of rotgut and delightful shivers ran down her body.

"Yeah," he said, watching the shivers and the body. "That's what a dumb dog told me this morning. Everybody gone, except me and you." He swallowed another drink. "Ate them all up, eh? Imagine that, just like cannibals. What hunters?"

"The Hunters from Glissix."

"Never heard of the place. Is it in Jersey?"

"No, George." She shook her head slowly because the rotgut was playing tricks with her equipoise. "Glissix is up there."

"Up where?" he asked the lone reflection in the mirror.

She lifted a slow, lazy arm to point toward the moonlit sky. "Up there." George wasn't watching the arm, he had only moved his head to observe the effect on her chest.

"Glissix is out there," she continued, "away out there beyond the moon and the sun, George. Out there and far away; it's dark and cold and not like *here* at all, it's more like the moonplace, honeyboy. You wouldn't like Glissix, my hero, pet, joyboy, sweetguy."

"Never heard of the town," he declared and opened an-

other bottle by striking its neck against the bar. "Have a nip of this . . . do you a world of good. From Glissix, eh? Are you a Hunter? Hunter-ess?"

"Oh no, George!" She played with his hair. "I can't be a Hunter . . . the Hunters eat living things, like you. I don't eat *living* things, George. I'm a Follower."

"Pleased to meet'cha, follower. I don't know what I am; I ain't voted yet. What did them hunters want to gobble up the people for, babydoll?"

The blonde babydoll leaned forward from her seat on the bar to wrap her legs about his waist and a friendly arm around his shoulders. The arm proved a trifle short because the rotgut was playing tricks on her again, so she lengthened it to stretch all the way around to the opposite shoulder. Babydoll placed her inviting pink lips against his and spoke while she was kissing him. The kiss had a curious dry quality.

"They were hungry, lamb-pie. They always wake up hungry, every spring. And they go everywhere, eating everything that is alive. All summer long they eat, eat, eat, making themselves fat so they can sleep all winter. Sometimes I go hungry too, when they leave nothing behind for me." She broke off the long kiss.

George smacked his lips. "They didn't eat me."

"They couldn't get near you, George boy. *You stunk*. You turned their stomachs, so they left you behind for me. But I can't eat you now, lover mine."

"I'm hungry right now," George announced, eyeing her. "And you look good enough to eat, baby."

"Now, George! You wouldn't like me and I wouldn't like you. You're still alive, George."

"I hope to tell you I'm still alive George!" George responded. He reached for the body. "Come to papa."

Why . . . you'd think he had dishonorable intentions.

It was long after midnight and the moon had vanished behind the opposite rim of the street canyon, leaving it in darkness. George Young lounged in the open doorway of a furniture store, scratching a stubble of beard on his face. The

whiskey seemed to be wearing off, leaving him with a vaguely disappointed feeling. He turned his head to look at the blonde who was stretched out full length on a bed in the display window. She had vaguely disappointed him too, although he couldn't quite identify the cause of the dissatisfaction.

She raised her head and smiled. "Joyboy."

"I need a drink," he answered weakly.

The blonde leaped from the bed and worked her way through the articles in the window to join him. "I love rot-gut!" she whispered, snuggling up to him.

"You and me both; I need a stiff one. All this talk about hunters and followers gives me the creeps."

"Oh, but they don't creep, George. I don't either."

He mumbled something under his breath and moved out to the curb. The girl came gliding after him. He stopped with one foot lifted from the curb to peer across the street, attempting to decipher a sign hanging in the darkness.

"What are you looking for, sweet man?"

"A drugstore. That one over there."

"What's a— Why?"

"To get a drink, quick." George stepped off the curb and crossed over, the girl still trailing after. The magic had somehow left her and he didn't bother to watch for the jiggles. The drugstore doors were closed but not locked, and he pushed in to look around. Bypassing the soda fountain and the candy counters, George made his way to the far side of the store and pawed over the displays until he found flashlights. He flicked a button and lit one.

"Ooooh, that's pretty, George."

Ignoring her, he followed the beam of light to the rear of the store and through a small white door marked PRIVATE. George found himself in the druggist's prescription and mixing room, surrounded by the ingredients of the trade. He flicked the light about the shelves.

"Bottles," the blonde squealed. "Look at all the nice rot-gut!"

"Naw," George contradicted, "some of this stuff ain't fit to drink. Wait until I locate the good stuff."

The good stuff he searched for proved to be a gallon can of carbon tetrachloride, although he wasted the better part of half an hour finding it. Removing the lid, he took a quick sniff and tears formed in his eyes.

"Ahhh," he pronounced in satisfaction, "this is it. Doll, this'll send you."

"Will I like it, George?"

"Baby, you'll love it." He handed her the can and she nearly dropped it, not expecting the weight. "Bottoms up."

"What?"

"Wrap your mouth around that little spout and turn the can upside down. Best little old rotgut you ever tasted!" He stepped back to watch, playing the light on her.

She did as she was told, struggling to hold the heavy can over her head. The liquid made a gurgling noise as it poured from the spout. George waited, expectant.

"Wow!" she exclaimed after a moment and dropped the can. "Wow, George. People certainly make fine rotgut." Her eyes grew round and for a few seconds her head balanced precariously on her shoulders, wobbling from side to side. She put up her hands to steady it. "Why did we waste time in all those saloons?"

"I don't know," George said weakly. "I think I need a drink."

"Try some of mine, hotshot."

"No thanks—I've got ulcers." He turned the light on a display of bottles along the wall, and presently found several dark brown jars in a locked case. Smashing the door, he reached in for them and held the flash close to read the labels. *Strychnin*. He set it aside and turned his attention to the next bottle, *tincture of nux vomica*. The label puzzled him for a moment but he placed it beside the first bottle. In rapid succession he selected *acetanilid*, *aconite*, *cyanid*, *bichlorid of Mercury*, *sodium fluorid*, and *prussic acid*. His hand hesitated over *emetin* and then rejected it on the off chance it might be an emetic. George recognized only a few of the names but he was certain they were potent.

One by one he opened the bottles and dumped their con-

tents into a mixing bowl. Poking around among the large jugs on a lower shelf, he discovered and added to the bowl a pint of methyl alcohol. The blonde obligingly held the light for him while he stirred the powders, dissolving them into the liquid.

"There!" George announced at last, peering into the deadly brew. He wondered if the little bubbles coming to the top would add zing. "I think I'll call it the Peoples' Cocktail." He took the light and handed the bowl to the girl. "Down the hatch."

"Bottoms up?"

"Bottoms up. And goodnight, babydoll."

She tilted the bowl to her lips and drained it. Then she sat down on the floor, hard. George turned the light on her. To his startled, wondering gaze her body seemed to scoot rapidly across the floor and smack against the far wall. The girl's head was completely turned about, facing the rear. An arm came loose at the shoulder and toppled to the floor. The blonde finally fell over. George walked over and played the light on her.

"Gee whiz," he said, quite shaken.

The head turned around again and her eyelids fluttered open. The beautiful golden eyes looked up at him, filled with adoration.

"Oh, George—you sweet man!"

He turned and ran for the street. In a moment he knew she was loping along behind him.

How he came to the bank and what caused him to turn in, George never afterward fully realized. He didn't put much stock in the manipulations of fate, and the guidings of the subconscious mind was but a meaningless phrase he had read somewhere. He was running along the darkened street in desperation, not unmixed with fright, when the gray marble building loomed up in the bobbing beam of the flashlight. He recognized the building as typical of banks everywhere, not actually dwelling on the thought, and turned to run through the double doors without hesitation. The blonde was hard on his heels.

Inside, he could think of nothing but to continue running. He darted through a swinging gate that marked off some manager's office, ran around behind a pair of desks and overturned chairs, and down the aisle behind the tellers' cages. At the far end of the big room the aisle opened onto another and smaller room filled with business machines, and just beyond that, George glimpsed a huge vault door resplendent in bronze and steel trim. He sped for the vault. The girl chased after him.

George dashed into the vault, flicked the light around wildly, and scooped up a brown canvas sack. The girl beside him snatched up its twin, and together they turned to run out again. George dropped his sack just outside the vault.

"Quick," he gasped, breathing hard from the effort, "money! Go get another one!"

She turned and reentered the steel chamber. He slammed the door on her, savagely twisting the spoked wheel that secured it, just as savagely twirling the tumblers of the combination locks. And then there was silence. George was whistling as he left the bank.

Why . . . you'd think he had locked her away forever.

George Young critically examined his face in the mirror, running a hand through his heavy beard and noting the streaks of gray sprouting here and there. It would be turning soon, he decided, turning to match the shaggy gray at his temples. He had long ago given up the task of shaving, because shaving annoyed him and because there was no one else to see him. Now, with a corner of his mind, he toyed with the idea of removing the beard if only to remove those irritating specks of gray from his daily inspection. He didn't want to awaken some morning and have the mirror tell him he was an old man, a graybeard. He preferred to think of himself as a young man, as young as that whippersnapper who had climbed down off a train 30 years ago and taken a whiskey shower, as young as the howling soldier who had owned a blonde and a town for one full night, just once, 30 years ago.

George sighed and turned away from the mirror.

He picked up his carefully wrapped lunch, a book he was slowly reading, and a tin of stale pipe tobacco. Leaving the small cottage he had appropriated for himself, he mounted a bicycle waiting at the bottom of the steps and peddled off toward town, his legs dully aching with the advance of age. The sun was bright and warm on his bare head and he took his time riding down to the bank. There wasn't much of a breeze moving through the empty streets.

He liked to look at the familiar spots—here a saloon where a bit of a swim suit still hung from a buck's antlers, there a bed in a display window where he had briefly slept. He never failed to pass the drugstore without recalling the blonde's last words of endearment. The words and scenes were all quite clear in his memory. Thirty years didn't seem such a long time—until you began thinking of them in another way.

George parked the bicycle outside the bank and entered the double doors, walking across a floor thick with money because it pleased him to walk on it. Several years ago he had scattered the money there, and had pulled a desk over to the vault door, a desk now littered like a housekeeper's nightmare. The desk top was crammed with empty liquor bottles, old tobacco tins, books he had long since read, wadded papers from hundreds or thousands of past lunches, and mounds of pipe ashes. Over everything but the most recently used hung the dust of years. George cleared away a little space on a corner of the desk and put down his fresh lunch, his tobacco and the book he was reading that week. Finally he sat down in a comfortable chair and lit his pipe.

Hitching his chair up to the vault door, he scanned the endless possible combinations he had penciled there and noted those that had already been checked off. George took a heavy drink from the bottle, and leaned forward to put his hands on the tumblers, turning them. Any day now, or any year, he might hit upon the right combination.

Why . . . you'd think he wanted his blonde back again.

MICHAEL SHAARA

The Hucksters and allied works to the contrary notwithstanding, the practice of advertising is not confined to New York and Hollywood. Take, for instance, Mike Shaara, who creates selling copy for a thriving agency located in northern New Jersey. You might think his science fiction is written by night; but the nights are filled with additional schooling, and a vigorous young family accounts for his week ends. It is anybody's guess, then, just when Michael Shaara finds time to create such splendidly moving science fiction as—

Orphans of the Void

IN THE region of the Coal Sack Nebula, on the dead fourth planet of a star called Tyban, Captain Steffens of the Mapping Command stood counting buildings. Eleven. No, twelve. He wondered if there was any significance in the number. He had no idea.

"What do you make of it?" he asked.

Lieutenant Ball, the executive officer of the ship, almost tried to scratch his head before he remembered that he was wearing a spacesuit.

"Looks like a temporary camp," Ball said. "Very few buildings, and all built out of native materials, the only stuff available. Castaways, maybe?"

Steffens was silent as he walked up onto the rise. The flat weathered stone jutted out of the sand before him.

"No inscriptions," he pointed out.

"They would have been worn away. See the wind grooves? Anyway, there's not another building on the whole damn planet. You wouldn't call it much of a civilization."

ORPHANS OF THE VOID by Michael Shaara. Copyright, 1952, by Galaxy Publishing Corp.; reprinted by permission of the author.

"You don't think these are native?"

Ball said he didn't. Steffens nodded.

Standing there and gazing at the stone, Steffens felt the awe of great age. He had a hunch, deep and intuitive, that this was old—*too* old. He reached out a gloved hand, ran it gently over the smooth stone ridges of the wall. Although the atmosphere was very thin, he noticed that the buildings had no airlocks.

Ball's voice sounded in his helmet: "Want to set up shop, Skipper?"

Steffens paused. "All right, if you think it will do any good."

"You never can tell. Excavation probably won't be much use. These things are on a raised rock foundation, swept clean by the wind. And you can see that the rock itself is native—" he indicated the ledge beneath their feet—"and was cut out a long while back."

"How long?"

Ball toed the sand uncomfortably. "I wouldn't like to say offhand."

"Make a rough estimate."

Ball looked at the captain, knowing what was in his mind. He smiled wryly and said: "Five thousand years? Ten thousand? I don't know."

Steffens whistled.

Ball pointed again at the wall. "Look at the striations. You can tell from that alone. It would take even a brisk Earth wind *at least* several thousand years to cut that deep, and the wind here has only a fraction of that force."

The two men stood for a long moment in silence. Man had been in interstellar space for three hundred years and this was the first uncovered evidence of an advanced, space-crossing, alien race. It was an historic moment, but neither of them was thinking about history.

Man had been in space for only three hundred years. Whatever had built these had been in space for thousands of years.

Which ought to give *them*, thought Steffens uncomfortably, one hell of a good head-start.

While the excav crew worked steadily, turning up nothing, Steffens remained alone among the buildings. Ball came out to him, looked dryly at the walls.

"Well," he said, "whoever they were, we haven't heard from them since."

"No? How can you be sure?" Steffens grunted. "A space-borne race was roaming this part of the Galaxy while men were still pitching spears at each other, *that* long ago. And this planet is only a parsec from Varius II, a civilization as old as Earth's. Did whoever built these get to Varius? Or did they get to Earth? How can you know?"

He kicked at the sand distractedly. "And most important, where are they now? A race with several thousand years . . ."

"Fifteen thousand," Ball said. When Steffens looked up, he added: "That's what the geology boys say. Fifteen thousand, at the least."

Steffens turned to stare unhappily at the buildings. When he realized now how really old they were, a sudden thought struck him.

"But why buildings? Why did they have to build in stone, to last? There's something wrong with that. They shouldn't have had a need to build, unless they were castaways. And castaways would have left *something* behind. The only reason they would need a camp would be—"

"If the ship left and some of them stayed."

Steffens nodded. "But then the ship must have come back. Where did it go?" He ceased kicking at the sand and looked up into the blue-black midday sky. "We'll never know."

"How about the other planets?" Ball asked.

"The report was negative. Inner too hot, outer too heavy and cold. The third planet is the only one with a decent temperature range, but *if* has a CO₂ atmosphere."

"How about moons?"

Steffens shrugged. "We could try them and find out."

The third planet was a blank, gleaming ball until they were in close, and then the blankness resolved into folds and piling clouds and dimly, in places, the surface showed through. The

ship went down through the clouds, falling the last few miles on her brakets. They came into the misty gas below, leveled off and moved along the edge of the twilight zone.

The moons of this solar system had yielded nothing. The third planet, a hot, heavy world which had no free oxygen and from which the monitors had detected nothing, was all that was left. Steffens expected nothing, but he had to try.

At a height of several miles, the ship moved up the zone, scanning, moving in the familiar slow spiral of the Mapping Command. Faint dark outlines of bare rocks and hills moved by below.

Steffens turned the screen to full magnification and watched silently.

After a while he saw a city.

The main screen being on, the whole crew saw it. Someone shouted and they stopped to stare, and Steffens was about to call for altitude when he saw that the city was dead.

He looked down on splintered walls that were like cloudy glass pieces rising above a plain, rising in a shattered circle. Near the center of the city, there was a huge, charred hole at least three miles in diameter and very deep. In all the piled rubble, nothing moved.

Steffens went down low to make sure, then brought the ship around and headed out across the main continent into the bright area of the sun. The rocks rolled by below, there was no vegetation at all, and then there were more cities—all with the black depression, the circular stamp that blotted away and fused the buildings into nothing.

No one on the ship had anything to say. None had ever seen a war, for there had not been war on Earth or near it for more than three hundred years.

The ship circled around to the dark side of the planet. When they were down below a mile, the radiation counters began to react. It became apparent, from the dials, that there could be nothing alive.

After a while Ball said: "Well, which do you figure? Did our friends from the fourth planet do this, or were they the same people as these?"

Steffens did not take his eyes from the screen. They were coming around to the daylight side.

"We'll go down and look for the answer," he said. "Break out the radiation suits."

He paused, thinking. If the ones on the fourth planet were alien to this world, they were from outer space, could not have come from one of the other planets here. They had starships and were warlike. Then, thousands of years ago. He began to realize how important it really was that Ball's question be answered.

When the ship had gone very low, looking for a landing site, Steffens was still by the screen. It was Steffens, then, who saw the thing move.

Down far below, it had been a still black shadow, and then it moved. Steffens froze. And he knew, even at that distance, that it was a robot.

Tiny and black, a mass of hanging arms and legs, the thing went gliding down the slope of a hill. Steffens saw it clearly for a full second, saw the dull ball of its head tilt upward as the ship came over, and then the hill was past.

Quickly Steffens called for height. The ship bucked beneath him and blasted straight up; some of the crew went crashing to the deck. Steffens remained by the screen, increasing the magnification as the ship drew away. And he saw another, then two, then a black gliding group, all matched with bunches of hanging arms.

Nothing alive but robots, he thought, *robots*. He adjusted to full close up as quickly as he could and the picture focused on the screen. Behind him he heard a crewman grunt in amazement.

A band of clear, plasticlike stuff ran round the head—it would be the eye, a band of eye that saw all ways. On the top of the head was a single round spot of the plastic, and the rest was black metal, joined, he realized, with fantastic perfection. The angle of sight was now almost perpendicular. He could see very little of the branching arms of the

trunk, but what had been on the screen was enough. They were the most perfect robots he had ever seen.

The ship leveled off. Steffens had no idea what to do; the sudden sight of the moving things had unnerved him. He had already sounded the alert, flicked out the defense screens. Now he had nothing to do. He tried to concentrate on what the League Law would have him do.

The Law was no help. Contact with planet-bound races was forbidden under any circumstances. But could a bunch of robots be called a race? The Law said nothing about robots because Earthmen had none. The building of imaginative robots was expressly forbidden. But at any rate, Steffens thought, he had made contact already.

While Steffens stood by the screen, completely bewildered for the first time in his space career, Lieutenant Ball came up, hobbling slightly. From the bright new bruise on his cheek, Steffens guessed that the sudden climb had caught him unaware. The exec was pale with surprise.

"What were they?" he said blankly. "Lord, they looked like robots!"

"They were."

Ball stared confoundedly at the screen. The things were now a confusion of dots in the mist.

"Almost humanoid," Steffens said, "But not quite."

Ball was slowly absorbing the situation. He turned to gaze inquiringly at Steffens.

"Well, what do we do now?"

Steffens shrugged. "They saw us. We could leave now and let them quite possibly make a . . . a legend out of our visit, or we could go down and see if they tie in with the buildings on Tyban IV."

"Can we go down?"

"Legally? I don't know. If they are robots, yes, since robots cannot constitute a race. But there's another possibility." He tapped his fingers on the screen confusedly. "They don't have to be robots at all. They could be the natives."

Ball gulped. "I don't follow you."

"They could be the original inhabitants of this planet—the brains of them, at least, protected in radiation-proof metal. Anyway," he added, "they're the most perfect mechanicals I've ever seen."

Ball shook his head, sat down abruptly. Steffens turned from the screen, strode nervously across the Main Deck, thinking.

The Mapping Command, they called it. Theoretically, all he was supposed to do was make a closeup examination of unexplored systems, checking for the presence of life-forms as well as for the possibilities of human colonization. Make a check and nothing else. But he knew very clearly that if he returned to Sirius base without investigating this robot situation, he could very well be court-martialed one way or the other, either for breaking the Law of Contact or for dereliction of duty.

And there was also the possibility, which abruptly occurred to him, that the robots might well be prepared to blow his ship to hell and gone.

He stopped in the center of the deck. A whole new line of thought opened up. If the robots were armed and ready . . . could this be an outpost?

An outpost!

He turned and raced for the bridge. If he went in and landed and was lost, then the League might never know in time. If he went in and stirred up trouble . . .

The thought in his mind was scattered suddenly, like a mist blown away. A voice was speaking in his mind, a deep calm voice that seemed to say:

"Greetings. Do not be alarmed. We do not wish you to be alarmed. Our desire is only to serve . . ."

"Greetings, it said! Greetings!" Ball was mumbling incredulously through shocked lips.

Everyone on the ship had heard the voice. When it spoke again, Steffens was not sure whether it was just one voice or many voices.

"We await your coming," it said gravely, and repeated: "Our desire is only to serve."

And then the robots sent a picture.

As perfect and as clear as a tridim movie, a rectangular plate took shape in Steffen's mind. On the face of the plate, standing alone against a background of red-brown, bare rocks, was one of the robots. With slow, perfect movement, the robot carefully lifted one of the hanging arms of its side, of its *right* side, and extended it toward Steffens, a graciously offered hand.

Steffens felt a peculiar, compelling urge to take the hand, realized right away that the urge to take the hand was not entirely his. The robot mind had helped.

When the picture vanished, he knew that the others had seen it. He waited for a while; there was no further contact, but the feeling of the robot's urging was still strong within him. He had an idea that, if they wanted to, the robots could control his mind. So when nothing more happened, he began to lose his fear.

While the crew watched in fascination, Steffens tried to talk back. He concentrated hard on what he was saying, said it aloud for good measure, then held his own hand extended in the robot manner of shaking hands.

"Greetings," he said, because it was what *they* had said, and explained: "We have come from the stars."

It was overly dramatic, but so was the whole situation. He wondered baffledly if he should have let the Alien Contact crew handle it. Order someone to stand there, feeling like a fool, and *think* a message?

No, it was his responsibility; he had to go on:

"We request—we respectfully request permission to land upon your planet."

Steffens had not realized that there were so many.

They had been gathering since his ship was first seen, and now there were hundreds of them clustered upon the hill. Others were arriving even as the skiff landed; they glided

in over the rocky hills with fantastic ease and power, so that Steffens felt a momentary anxiety. Most of the robots were standing with the silent immobility of metal. Others threaded their way to the fore and came near the skiff, but none touched it, and a circle was cleared for Steffens when he came out.

One of the near robots came forward alone, moving, as Steffens now saw, on a number of short, incredibly strong and agile legs. The black thing paused before him, extended a hand as it had done in the picture. Steffens took it, he hoped, warmly; felt the power of the metal through the glove of his suit.

"Welcome," the robot said, speaking again to his mind, and now Steffens detected a peculiar alteration in the robot's tone. It was less friendly now, less—Steffens could not understand—somehow less interested, as if the robot had been—expecting someone else.

"Thank you," Steffens said. "We are deeply grateful for your permission to land."

"Our desire," the robot repeated mechanically, "is only to serve."

Suddenly, Steffens began to feel alone, surrounded by machines. He tried to push the thought out of his mind, because he knew that they *should* seem inhuman. But . . .

"Will the others come down?" asked the robot, still mechanically.

Steffens felt his embarrassment. The ship lay high in the mist above, jets throbbing gently.

"They must remain with the ship," Steffens said aloud, trusting to the robot's formality not to ask him why. Although, if they could read his mind, there was no need to ask.

For a long while, neither spoke, long enough for Steffens to grow tense and uncomfortable. He could not think of a thing to say, the robot was obviously waiting, and so, in desperation, he signaled the Aliencon men to come on out of the skiff.

They came, wonderingly, and the ring of robots widened.

Steffens heard the one robot speak again. The voice was now much more friendly.

"We hope you will forgive us for intruding upon your thought. It is our—custom—not to communicate unless we are called upon. But when we observed that you were in ignorance of our real—nature—and were about to leave our planet, we decided to put aside our custom, so that you might base your decision upon sufficient data."

Steffens replied haltingly that he appreciated their action.

"We perceive," the robot went on, "that you are unaware of our complete access to your mind, and would perhaps be—dismayed—to learn that we have been gathering information from you. We must—apologize. Our only purpose was so that we could communicate with you. Only that information was taken which is necessary for communication and—understanding. We will enter your minds henceforth only at your request."

Steffens did not react to the news that his mind was being probed as violently as he might have. Nevertheless it was a shock, and he retreated into observant silence as the Aliencon men went to work.

The robot which seemed to have been doing the speaking was in no way different from any of the others in the group. Since each of the robots was immediately aware of all that was being said or thought, Steffens guessed that they had sent one forward just for appearance's sake, because they perceived that the Earthmen would feel more at home. The picture of the extended hand, the characteristic handshake of Earthmen, had probably been borrowed, too, for the same purpose of making him and the others feel at ease. The one jarring note was the robot's momentary lapse, those unexplainable few seconds when the things had seemed almost disappointed. Steffens gave up wondering about that and began to examine the first robot in detail.

It was not very tall, being at least a foot shorter than the Earthmen. The most peculiar thing about it, except for the circling eye-band of the head, was a mass of symbols which

were apparently engraved upon the metal chest. Symbols in row upon row—numbers, perhaps—were upon the chest, and repeated again below the level of the arms, and continued in orderly rows across the front of the robot, all the way down to the base of the trunk. If they were numbers, Steffens thought, then it was a remarkably complicated system. But he noticed the same pattern on the nearer robots, all apparently identical. He was forced to conclude that the symbols were merely decoration and let it go tentatively at that, although the answer seemed illogical.

It wasn't until he was on his way home that Steffens remembered the symbols again. And only then did he realized what they were.

After a while, convinced that there was no danger, Steffens had the ship brought down. When the crew came out of the airlock, they were met by the robots, and each man found himself with a robot at his side, humbly requesting to be of service. There were literally thousands of the robots now, come from all over the barren horizon. The mass of them stood apart, immobile on a plain near the ship, glinting in the sun like a vast, metallic field of black wheat.

The robots had obviously been built to serve. Steffens began to feel their pleasure, to sense it in spite of the blank, expressionless faces. They were almost like children in their eagerness, yet they were still reserved. Whoever had built them, Steffens thought in wonder, had built them well.

Ball came to join Steffens, staring at the robots through the clear plastic of his helmet with baffledly widened eyes. A robot moved out from the mass in the field, allied itself to him. The first to speak had remained with Steffens.

Realizing that the robot could hear every word he was saying, Ball was for a while apprehensive. But the sheer unreality of standing and talking with a multi-limbed, intelligent hunk of dead metal upon the bare rock of a dead, ancient world, the unreality of it slowly died. It was impossible not to like the things. There was something in their very lines which was pleasant and relaxing.

Their builders, Steffens thought, had probably thought of that, too.

"There's no harm in them," said Ball at last, openly, not minding if the robots heard. "They seem actually glad we're here. My God, whoever heard of a robot being glad?"

Steffens, embarrassed, spoke quickly to the nearest mechanical: "I hope you will forgive us our curiosity, but—yours is a remarkable race. We have never before made contact with a race like yours." It was said haltingly, but it was the best he could do.

The robot made a singularly human nodding motion of its head.

"I perceive that the nature of our construction is unfamiliar to you. Your question is whether or not we are entirely 'mechanical.' I am not exactly certain as to what the word 'mechanical' is intended to convey—I would have to examine your thought more fully—but I believe that there is fundamental similarity between our structures."

The robot paused. Steffens had a distinct impression that it was disconcerted.

"I must tell you," the thing went on, "that we ourselves are—curious." It stopped suddenly, struggling with a word it could not comprehend. Steffens waited, listening with absolute interest. It said at length:

"We know of only two types of living structure. Ours, which is largely metallic, and that of the *Makers*, which would appear to be somewhat more like yours. I am not a—doctor—and therefore cannot acquaint you with the specific details of the *Makers'* composition, but if you are interested I will have a doctor brought forward. It will be glad to be of assistance."

It was Steffens' turn to struggle, and the robot waited patiently while Ball and the second robot looked on in silence. The *Makers*, obviously, were whoever or whatever had built the robots, and the "doctors," Steffens decided, were probably just that—doctor-robots, designed specifically to care for the apparently flesh-bodies of the *Makers*.

The efficiency of the things continued to amaze him, but the question he had been waiting to ask came out now with a rush:

"Can you tell us where the Makers are?"

Both robots stood motionless. It occurred to Steffens that he couldn't really be sure which was speaking. The voice that came to him spoke with difficulty.

"The Makers—are not here."

Steffens stared in puzzlement. The robot detected his confusion and went on:

"The Makers have gone away. They have been gone for a very long time."

Could that be pain in its voice, Steffens wondered, and then the spectre of the ruined cities rose harsh in his mind.

War. The Makers had all been killed in that war. And these had not been killed.

He tried to grasp it, but he couldn't. There were robots here in the midst of a radiation so lethal that *nothing, nothing* could live; robots on a dead planet, living in an atmosphere of carbon dioxide.

The carbon dioxide brought him up sharp.

If there had been life here once, there would have been plant life as well, and therefore oxygen. If the war had been so long ago that the free oxygen had since gone out of the atmosphere—good God, how old were the robots? Steffens looked at Ball, then at the silent robots, then out across the field to where the rest of them stood. The black wheat. Steffens felt a deep chill.

Were they immortal?

"Would you like to see a doctor?"

Steffens jumped at the familiar words, then realized to what the robot was referring.

"No, not yet," he said, "Thank you." He swallowed hard as the robots continued waiting patiently.

"Could you tell me," he said at last, "how old you are? Individually?"

"By your reckoning," said his robot, and paused to make the calculation, "I am forty-four years, seven months, and

eighteen days of age, with ten years and approximately nine months yet to be alive."

Steffens tried to understand that.

"It would perhaps simplify our conversations," said the robot, "if you were to refer to me by a name, as is your custom. Using the first-letters—of my designation, my name would translate as Elb."

"Glad to meet you," Steffens mumbled.

"You are called 'Stef,'" said the robot obligingly. Then it added, pointing an arm at the robot near Ball: "The age of—Peb—is seventeen years, one month and four days. Peb has therefore remaining some thirty-eight years."

Steffens was trying to keep up. Then the life span was obviously about fifty-five years. But the cities, and the carbon dioxide? The robot, Elb, had said that the Makers were similar to him, and therefore oxygen and plant life would have been needed. Unless—

He remembered the buildings on Tyban IV.

Unless the Makers had not come from this planet at all.

His mind helplessly began to revolve. It was Ball who restored order.

"Do you build yourselves?" the exec asked.

Peb answered quickly, that faint note of happiness again apparent, as if the robot was glad for the opportunity of answering.

"No, we do not build ourselves. We are made by the—" another pause for a word—"by the *Factory*."

"The *Factory*?"

"Yes. It was built by the Makers. Would you care to see it?"

Both of the Earthmen nodded dumbly.

"Would you prefer to use your—skiff? It is quite a long way from here."

It was indeed a long way, even by skiff. Some of the Aliencon crew went along with them. And near the edge of the twilight zone, on the other side of the world, they saw the *Factory* outlined in the dim light of dusk. A huge, fantastic block, wrought of gray and cloudy metal, lay in a valley be-

tween two worn mountains. Steffens went down low, circling in the skiff, stared in awe at the size of the building. Robots moved outside the thing, little black bugs in the distance—moving around their birthplace.

The Earthmen remained for several weeks. During that time, Steffens was usually with Elb, talking now as often as he listened, and the Aliencon team roamed the planet freely, investigating what was certainly the strangest culture in history. There was still the mystery of those buildings on Tyban IV; that, as well as the robots' origin, would have to be cleared up before they could leave.

Surprisingly, Steffens did not think about the future. Whenever he came near a robot, he sensed such a general, comfortable air of good feeling that it warmed him, and he was so preoccupied with watching the robots that he did little thinking.

Something he had not realized at the beginning was that he was as unusual to the robots as they were to him. It came to him with a great shock that not one of the robots had ever seen a living thing. Not a bug, a worm, a leaf. They did not know what flesh was. Only the doctors knew that, and none of them could readily understand what was meant by the words "organic matter." It had taken them some time to recognize that the Earthmen wore suits which were not parts of their bodies, and it was even more difficult for them to understand why the suits were needed.

But when they did understand, the robots did a surprising thing.

At first, because of the excessive radiation, none of the Earthmen could remain outside the ship for long, even in radiation suits. And one morning, when Steffens came out of the ship, it was to discover that hundreds of the robots, working through the night, had effectively decontaminated the entire area.

It was at this point that Steffens asked how many robots there were. He learned to his amazement that there were more than nine million. The great mass of them had politely

remained a great distance from the ship, spread out over the planet, since they were highly radioactive.

Steffens, meanwhile, courteously allowed Elb to probe into his mind. The robot extracted all the knowledge of matter that Steffens held, pondered over the knowledge and tried to digest it, and passed it on to the other robots. Steffens, in turn, had a difficult time picturing the mind of a thing that had never known life.

He had a vague idea of the robot's history—more, perhaps, than they knew themselves—but he refrained from forming an opinion until Aliencon made its report. What fascinated him was Elb's amazing philosophy, the only outlook, really, that the robot could have had.

"What do you do?" Steffens asked.

Elb replied quickly, with characteristic simplicity: "We can do very little. A certain amount of physical knowledge was imparted to us at birth by the Makers. We spend the main part of our time expanding that knowledge wherever possible. We have made some progress in the natural sciences, and some in mathematics. Our purpose in being, you see, is to serve the Makers. Any ability we can acquire will make us that much more fit to serve when the Makers return."

"When they return?" It had not occurred to Steffens until now that the robots expected the Makers to do so.

Elb regarded him out of the band of the circling eye. "I see you had surmised that the Makers were not coming back."

If the robot could have laughed, Steffens thought it would have, then. But it just stood there, motionless, its tone politely emphatic.

"It has always been our belief that the Makers would return. Why else would we have been built?"

Steffens thought the robot would go on, but it didn't. The question, to Elb, was no question at all.

Although Steffens knew already what the robot could not possibly have known—that the Makers were gone and would never come back—he was a long time understanding. What he did was push this speculation into the back of his mind, to keep it from Elb. He had no desire to destroy a faith.

But it created a problem in him. He had begun to picture for Elb the structure of human society, and the robot—a machine which did not eat or sleep—listened gravely and tried to understand. One day Steffens mentioned God.

"God?" the robot repeated, without comprehension. "What is God?"

Steffens explained briefly, and the robot answered:

"It is a matter which has troubled us. We thought at first that you were the Makers returning—" Steffens remembered the brief lapse, the seeming disappointment he had sensed—"but then we probed your minds and found that you were not, that you were another kind of being, unlike either the Makers or ourselves. You were not even—" Elb caught himself—"you did not happen to be telepaths. Therefore we troubled over who made you. We did detect the word 'Maker' in your theology, but it seemed to have a peculiar—" Elb paused for a long while—"an untouchable, intangible meaning which varies among you."

Steffens understood. He nodded.

The Makers were the robots' God, were all the God they needed. The Makers had built them, the planet, the universe. If he were to ask them who made the Makers, it would be like their asking him who made God.

It was an ironic parallel, and he smiled to himself.

But on that planet, it was the last time he smiled.

The report from Aliencon was finished at the end of the fifth week. Lieutenant Ball brought it in to Steffens in his cabin, laid it on the desk before him.

"Get set," Ball advised stiffly, indicating the paper. There was a strained, brittle expression on his face. "I sort of figured it, but I didn't know it was this bad."

When Steffens looked up in surprise, Ball said:

"You don't know. Read it. Go ahead." The exec turned tautly and left the room.

Steffens stared after him, then looked down at the paper. The hint he had of the robots' history came back into his mind. Nervously, he picked up the report and started to read.

The story unfolded objectively. It was clear and cold, the way formal reports must always be. Yet there was a great deal of emotion in it. Even Aliencon couldn't help that.

What it told was this:

The Makers had been almost humanoid. Almost, but with certain notable exceptions. They were telepaths—no doubt an important factor in their remarkable technological progress—and were equipped with a secondary pair of arms. The robot-doctors were able to give flawless accounts of their body chemistry, which was similar to Earth-type, and the rubble of the cities had given a certain amount of information concerning their society and habits. An attached paper described the sociology, but Steffens put it aside until sometime later.

There had been other Factories. The remains of them had been found in several places, on each of the other continents. They had been built sometime prior to the war, and all but one of the Factories had subsequently been destroyed.

Yet the Makers were not, as Steffens had supposed, a war-like people. Telepathy had given them the power to know each others' minds and to interchange ideas, and their record of peace was favorable, especially when compared with Earth's. Nevertheless, a war had begun, for some reason Aliencon could not find, and it had obviously gotten out of hand.

Radiation and bacteria eventually destroyed the Makers; the last abortive efforts created enough radiation to destroy life entirely. There were the germs and the bombs and the burning rays, and in the end everything was blasted and died—everything, that is, but the one lone Factory. By a pure, blind freak, it survived.

And, naturally, it kept turning out robots.

It was powered by an atomic pile, stocked with materials which, when combined with the returning, worn-out robots, enabled it to keep producing indefinitely. The process, even of repair, was entirely automatic.

Year after year, the robots came out in a slow, steady stream. Ungoverned, uninstructed, they gathered around the Factory and waited, communicated only rarely among them-

selves. Gradually the memory of war, of life—of everything but that which was imprisoned in their minds at birth—was lost.

The robots kept coming, and they stood outside the Factory.

The robot brain, by far the finest thing the Makers had ever built, was variable. There was never a genius brain, and never a moron brain, yet the intelligence of the robots varied considerably in between. Slowly, over the long years, the more intelligent among them began to communicate with each other, to inquire, and then to move away from the Factory, searching.

They looked for someone to serve and, of course, there was no one. The Makers were gone, but the crime was not in that alone. For when the robots were built, the Makers had done this:

Along with the first successful robot brain, the Makers had realized the necessity of creating a machine which could never turn against them. The present robot brain was the result. As Steffens had already sensed, *the robots could feel pain*. Not the pain of physical injury, for there were no nerves in the metal bodies, but the pain of frustration, the pressure of thwarted emotion, *mental pain*.

And so, into the robot brain, the Makers had placed this prime Directive: the robots could only feel content, free from the pain, as long as they were serving the Makers. The robots must act for the Makers, must be continually engaged in carrying out the wishes of the Makers, or else there was a slowly growing irritation, a restlessness and discontent which mounted as the unerving days went by.

And there were no more Makers to serve.

The pain was not unbearable. The Makers themselves were not fully aware of the potentialities of the robot brain, and therefore did not risk deranging it. So the pressure reached a peak and leveled off, and for all of the days of the robots' lives, they felt it never-ending, awake and aware, each of them, for fifty-five years.

And the robots never stopped coming.

A millenium passed, during which the robots began to move and to think for themselves. Yet it was much longer before they found a way in which to serve.

The atomic pile which powered the Factory, having gone on for almost five thousand years, eventually wore out. The power ceased. The Factory stopped.

It was the first event in the robots' history. Never before had there been a time when they had known anything at all to alter the course of their lives, except the varying weather and the unvarying pain. There was one among them now that began to reason.

It saw that no more robots were being produced, and although it could not be sure whether or not this was as the Makers had ordained, it formed an idea. If the purpose of the robots was to serve, then they would fail in that purpose if they were to die out. The robot thought this and communicated it to the others, and then, together, they began to rebuild the pile.

It was not difficult. The necessary knowledge was already in their minds, implanted at birth. The significance lay in the fact that, for the first time in their existence, the robots had acted upon their own initiative, had begun to serve again. Thus the pain ceased.

When the pile was finished, the robots felt the return of the pain and, having once begun, they continued to attempt to serve. A great many examined the Factory, found that they were able to improve upon the structure of their bodies, so that they might be better able to serve the Makers when they returned. Accordingly, they worked in the Factory, perfecting themselves—although they could not improve the brains—and many others left the Factory and began to examine mathematics and the physical universe.

It was not hard for them to build a primitive spaceship, for the Makers had been on the verge of interstellar flight, and they flew it hopefully throughout the solar system, looking to see if the Makers were there. Finding no one, they left the buildings on Tyban IV as a wistful monument, with a hope

that the Makers would some day pass this way and be able to use them.

Millenia passed. The pile broke down again, was rebuilt, and so the cycle was repeated. By infinitesimal steps, the robots learned and recorded their learning in the minds of new robots. Eventually they reached the limits of their capability.

The pain returned and never left.

Steffens left his desk, went over and leaned against the screen. For a long while he stood gazing through the mists of carbon air at the pitiful, loyal mechanicals who thronged outside the ship. He felt an almost overwhelming desire to break something, anything, but all he could do was swear to himself.

Ball came back, looked at Steffens' eyes and into them. His own were sick.

"Twenty-five thousand years," he said thickly, "that's how long it was. *Twenty-five thousand years . . .*"

Steffens was pale and wordless. The mass of the robots outside stood immobile, ageless among rock which was the same, hurting, hurting. A fragment of an old poem came across Steffens' mind. "They also serve who only stand and wait. . ."

Not since he was very young had he been so deeply moved. He stood up rigidly and began to talk to himself, saying in his mind:

It is all over now. To hell with what is past. We will take them away from this place and let them serve and, by God . . .

He faltered. But the knowledge of what could be done strengthened him. Earthmen would have to come in ships to take the robots away. It would be a little while, but after all those years a little while was nothing, less than nothing. He stood there thinking of the things the robots could do, of how, in the Mapping Command alone, they would be invaluable. Temperature and atmosphere meant nothing to them. They could land on almost any world, could mine and build and develop. . .

And so it would be ended. The robots would serve Man.

Steffens took one long, painful breath. Then he strode from the room without speaking to Ball, went forward to the lockers and pulled out a suit, and a moment later he was in the airlock.

He had one more thing to do, and it would be at once the gladdest and most difficult job that he had ever attempted. He had to tell the robots.

He had to go out into the sand and face them, tell them that all of the centuries of pain had been for nothing, that the Makers were dead and would never return, that every robot built for twenty-five thousand years had been just surplus, purposeless. And yet—and this was how he was able to do it—he was also coming to tell them that the wasted years were over, that the years of doing had begun.

As he stepped from the airlock he saw Elb standing, immobile, waiting by the ship. In the last few seconds Steffens realized that it was not necessary to put this into words.

When he reached the robot, he put forth a hand and touched Elb's arm, and said very softly:

"Elb, my friend, you must look into my mind—"

And the robot, as always, obeyed.

LESTER DEL REY

As far as is known, Lester del Rey has never gone hawking science-fiction magazines from door to door; but that is about the only possible professional connection with the science-fiction field he has missed. Editor, writer, agent, story coach, technical adviser, critic and leader of most of the important professional organizations at one time or another, del Rey has a simple plan for getting everything done in all of his varied science-fiction activities: He doesn't sleep. This horrifies his doctor and infuriates his wife; but for the rest of us we owe gratitude to his heavy schedule, if only because it brings us a continuing supply of such fine science fiction as—

The Old Order

CAPTAIN JOSH AMES stopped at the bleak and pitted entrance to Marsport rocket-ground. His eyes noted the old scars of the starships, and the dust that had blown over the marks, and his bushy, grey brows came down, almost hiding the pain that was in those eyes. Then he dropped his glance to the sack in his fingers, found a corner out of the thin wind, and began rolling a cigarette.

The crumbled, greenish tobacco had dried out too much in the arid atmosphere of Mars, and even the eddies of wind made it hard to roll. But he was used to the home-grown product of his ship's hydroponic tanks, and his fingers completed shaping the smoke almost automatically, twisting the ends, and lighting it. The first draw brought a dry dust with the smoke, setting him coughing, but he was used to that, too.

There'd been a time when he'd been able to find factory-

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made smokes on the outplanets, but the teleports had ended that, spreading the habit of the smoke-tubes from Aldebaran to Betelgeuse, and replacing the honest smell of tobacco with the perfumed stench of their drugs.

Damn the teleports! Josh looked back at the opulent tower of Teleport, Inc. Even at the distance from the main part of Marsport, he could see the trucks moving in a steady stream into the huge building.

But he jerked his eyes back to the field. After forty years of driving through the starways, it wasn't good to look at the nemesis that had killed the old stellar traffic. Sure, business was business; if they could teleport materials from here to infinity in exactly no time, and at a tenth of the rate it took to ship it, it was natural that people used their service. But the Teleport men, in their foppish maroon uniforms, didn't have to think they owned the whole world, did they? They didn't have to go swaggering around, making cracks about the men who'd opened up the planets and the worlds beyond.

There'd always be need for men who could drive out into space in the big ships. Nobody'd ever built a teleport yet that could handle more than a ton at a transmittal, and nobody would, according to what he'd heard. If they hadn't had laws passed making it mandatory to build heavy equipment in units small enough for the teleports . . .

Out on the field, a planetary ferry boat came roaring-in, its big stacks spitting down flame, for a sloppy landing. They still used them for short run loads, where it was cheaper to ship full assemblies and pilings, logs, and similar material as they were, rather than cutting to fit the teleports.

And by Harry, the same held true for interstellar shipping—or would be true, if Teleport didn't take a loss in disassembling and reassembling, just to make sure it had no competition. Josh could still take a load of green felikka timber out past Deneb for less than Teleport could handle it, if they'd be honest about it. He had done it before, and he'd do it again—if he could find a shipper with guts enough to risk it, minus insurance.

But now that Teleport had managed to get control of the

old interstellar insurance companies, and refused to insure the star ships against loss. . . .

The dust sent up little whirls as his feet went out across the field toward the *Titwillow*. The big ship drew nearer, and Josh let his glance go over her again. Eight hundred feet up, she thrust her nose against the sky, a bit squat and wide for beauty, scarred by the ion streams of space, but the best darned ship that ever grew space legs. Twenty years he'd worked and traded and fought his way up until she was his. And now twenty years she'd been home and wife and mother to him. She lay there waiting, her nose pointed to the stars—and her holds empty.

Pete McIntosh came out from her, a wizzened, gnarled little Scotsman, sucking at a pipe that had been unfilled for as long as Josh could remember. The engineer stopped, studying Josh.

"How's it?" he asked.

Josh shrugged tiredly. "No cargo in Marsport—unless we want to ferry mikkla roots back to Earth! How about overhaul? Did you see the Gannet brothers?"

"Saw 'em," McIntosh nodded. "They're loaded up with work for Teleport, making housings. Josh, there ain't a machine-shop on Mars that can handle the retubing for the *Titwillow*. The Gannets told me so, and they oughta know. What we gonna do now?"

"Ship back the mikkla roots!"

McIntosh stared dumbly at him, and he nodded. They'd lose money on the deal—they weren't equipped for the quick loading and unloading that made planetary ferry work pay off slightly. "Gotta, Pete. Only way we can get clearance into Dock City on Earth is with a load—and we gotta retube the *Titwillow*. Besides, once we get earthside, there's bound to be cargo!"

Pete nodded again, doubtfully, but Josh chose not to see it. There had to be cargo. Earth was the center of the Solar trade. And at Dock City, the finest shops in the system would be available.

"Get set to take on mikkla. We blast off as soon as it's aboard."

But it was a week later before the final clearance was through, and the *Titwillow* rose upwards on a shaky pair of legs. The tubes were misfiring, as they had been doing for the past year, and the huge roots had been stowed away sloppily, leaving a list to the leeward that Josh could barely overcome with the side rockets. He fought her, as he'd been fighting her since the tube trouble began, but she went up. And Mars dropped behind. Finally, Josh reached out for the lever and cut overdrive in.

The automatic threw it out at once, seemingly, but now Earth lay a bare four thousand miles below. The few million miles of planetary distance meant nothing to a ship on overdrive, capable of cutting through all the space between the suns like a train passing telegraph poles. From below, the speaker sent up Pete's whistle, but Josh ignored it. So overdrive wasn't meant to be used between planets; he was in a hurry.

He sent down inquiring signals, and the automatic radar on Earth gave a routine answer, directing him in. It was a formality now, though there had been a time when the starships had had to wait outside in orbits until there was room for them to land. He threw on the tubes, muttering as the growl came through the hull from misfiring; the *Titwillow* couldn't take much more in her condition, with the badly loaded mikkla roots adding to the strain.

Josh reached for the vernier on his timer, breathing on it gently, and hit the overdrive again. From below, a savage groan and stream of curses came up, and he could hear Pete's feet hit the corridor. Then Dock City slapped onto the screens, less than half a mile below, and the *Titwillow* was coming down on her tail, sliding over toward the edge of the field.

For a second, Josh let his eyes turn to the engineer, frozen in the door to the control room, perspiration oozing from his forehead. "You run the engines, Pete. I'll pilot."

Pete stared incredulously at the screen, watching as the ground came up, biting at the broken stem of his pipe. Outside, the whine of the stacks rose to a roar as they touched surface, and then the *Titicillow* was down, and the rockets cut off.

Josh's legs might have been a bit unsteady as he sank back into his chair, but he grinned. "Overdrive can be used that way, Pete . . . when it has to be. It beats burning out a tube." He pointed to the indicator that was flashing crimson on the board. "Number two passed critical limits on the take-off. Until we get new tubing, we're grounded."

The Scotsman wiped off the sweat, stared out through the port at the field that lay below, and nodded. "If we get re-tubing."

"We'll get it—we have to. This is Earth."

It was Earth, all right. The trucks had hardly started pulling out the mikkla before the jeep drew up, and a thin, sallow man came up the ramp, glanced at Josh's cap, and pointed to the ship.

"Own her? Good. I'll give you fifty-five thousand, move her myself."

Josh shook his head and cocked his eyebrows, trying to make sense out of it. "You trying to buy the *Titicillow*?"

"What else?"

"Not for sale. And she's worth twenty times that."

"Not for scrap, she isn't!" The man's eyes were appraising, hard, and a little amused. "Look, I get 'em all; sooner or later, they all come back here, them as can make it. Once, we used parts of some to fix others, and they were worth more. Now . . . well, far as I know, you've got the last one out. And brother, does she need scrapping! You can't tell me you made that last jump on overdrive to show off—I could smell tube-fusing as I came within a mile of her. Top price, take it or leave it. She's no good for planetary ferry work."

Yeah, it was Earth, Josh thought; out on the worlds beyond Sol, they still felt some awe of the big ships that had made the starways possible. But here, business was business.

"You got any tubes that are in A-1 condition?" he asked

quietly, but some of the urgency in his mind must have come through. The other looked at him, and the amusement increased.

"Sure—for a price. I've got a whole set in original packing out on the scrap-pile. You can have 'em for fifty bucks apiece . . . if you want, you can have a dozen of 'em at that price. But if you want 'em put in for you . . . well, that's something else. Oh, we can do it—Acme Scrap used to be Acme Re-fitting. But we'd have to reassemble the shops, and do half of it by hand labor now. Fifty thousand to reline her, or I'll pay fifty-five thousand for her scrap. Better sell now, before the price goes down."

Josh considered his knuckles, and decided the guy would still be amused if he did take a good swing at the thin jaw. Besides, it might be only more time wasted. He forced a grin onto his face. "I'll give you thirty-thousand for the job."

Surprisingly, that wiped out the amusement.

"You kidding? By God, you're not! You really want her re-tubed." He was suddenly businesslike. "Cash in advance. And it'll cost you forty-thousand."

"Thirty-two—and that's tops."

"Ummm. If this weren't the slack season. . . . okay, you've got a deal, old timer, if you've got the cash. Come over to the office this afternoon and we'll draw up the papers. In fact, come on now, and we'll split a drink on it."

Without the condescending amusement, some of the hardness also went, and Josh forgot his resentment of the man. But he shook his head, pointing down to the unloading that still had to be overseen.

The other nodded. "This afternoon then, Captain Ames. And my name's Acme—John Acme, and it's *not* a phoney. Maybe it's because we have the same initials I'm being soft about the price—I won't make much on the deal. But, damn it, I never thought I'd have such a job again, and it'll make a good story to tell the kids. Where'd you get the money, anyhow?"

"Gambling," Josh told him truthfully, neglecting to mention that it had been thirty years before when he'd gambled on

being able to get close enough to a sun to rescue a millionaire party. And it was the last of the money—once it was gone, he'd be flat broke, without money for fuel for take-off. "How come you get the ships for scrap when there are tubes still around?"

Ames stared at him doubtfully. "What good are starships, with or without tubes, when there's no work for 'em? Well, see you."

He went down the ramp again, leaving Josh rolling another cigarette. But the old captain's hands were trembling.

"There's got to be cargo," he said slowly. "There always was cargo."

Behind him, Pete McIntosh sucked at another dry pipe. "Sure, Josh. Sure."

Across the field, the big pile of scrap that had once been starships looked back at them. Josh tossed aside his ruined cigarette and began another. "There's cargo," he repeated. "There has to be cargo."

But two weeks later, Josh Ames sat on a plastileather seat in a room that glistened with chrome and plastic trim, staring at a blank panel. His fingers fumbled for a cigarette before he realized what he was doing; then he reached for the makings, considered the lack of ash-trays, and gave it up.

The space office had changed while he was out in the deeps, and now was only a corner of the Planet Ferry Command—and located in a small part of Teleport, Inc., at that, to make it worse. Once it had been a building of its own, reserved for deep spacemen. And in those days, there had been a bulletin board, listing cargoes, while a busy group of clerks took down quotations and allocated jobs, helped make routings, and arranged for loading.

Now three old men sat in other seats, taking advantage of the honorary right to use it as a sort of club-room, and there was dust on the closed window where someone should have answered about cargoes. The only sign of life was a sweeper who came through, making desultory efforts to find enough work to keep him out of the way of some supervisor who

might give him a real job. But from outside, the busy sounds of the normal routine of Teleport came seeping in.

Josh stirred, wondering when the girl would let him see someone in authority. Finally, he gave up, and reached for his tobacco.

Doubtful feet sounded beside him, and he glanced up to see a stooped man with a grizzled beard staring at him. For a second, the deep-space tan on the other's face held his eyes, and then he began to pierce through the beard.

"Ed Boyles!" Josh came to his feet, his hand out. They'd graduated from the same space academy, same class. Ed had come from a family with money, and had managed to get himself a starship of his own right after graduation, while Josh sweated out his own luck; but that hadn't mattered then, any more than the obvious patches on Boyle's jacket mattered now.

"Hi, Josh. Thought it was you. Figured I might find somebody here I knew. Hey, tobacco! Where'd you get it?"

"Grow it on the *Titwillow*."

"You mean . . ." Puzzlement came onto the other's face. "That's right, I did see 'em retubing a starship. Meant to go over, see what one, but—well, I dunno. Still running?"

Josh nodded, holding out a light while Ed finished his rolling. "Still running, good for forty more years now with new tubes. All I need . . . what you doing?"

"Oiler on a planet ferry. Just got sacked. Too old."

"Oh." There wasn't much else to say. Josh had seen the name of Ed's *Mary Jane* on a piece of scrap in Acme's pile, and he knew that there was no use asking after the ship. Acme had apparently told the truth—all the other starships had either been scrapped or lost. "Want a job, potluck, as mate on the *Titwillow*?"

For a second, Ed seemed to hesitate. Then his face split into a grin. "Tell you the truth, Josh, that's why I came here, hoping I'd find you; your engineer said you'd come here. I went out there to see the ship—I lied to you a little, maybe—and then I figured. . . ."

They let it rest at that while they smoked. Then Ed stirred. "How'd you do it, Josh? I spent three solid years here, waiting for a cargo while the field rent ate up every cent I had, before I let the *Mary Jane* go—and her tubes were getting old, too. You must be better connected."

"I had enough business to keep going," Josh answered slowly. There was no use telling the other about the long, lean hops between stars the last few years, out on the periphery. "I'm waiting for cargo now."

Boyles nodded, still puzzled, but Josh let it go. He had to get cargo—and since there were no other ships, he could ask what he would, practically. Maybe there wasn't much work—but there had to be some. Teleport wouldn't bother undercutting just to keep one single starship off the lanes.

Then the girl came, picking her way daintily past the sleeping older men. "You can come in now, Mr. Ames."

It wasn't even "Captain Ames" now, it seemed. But Josh shrugged, and got up to follow her, motioning Ed Boyles to follow. Well, it had taken two weeks of waiting, but at least there was something doing finally. Now, even if it was a light cargo, he'd have enough to refuel and get off the planet—and they'd know here where the picking was best, so he could go next where they'd have work waiting for him.

He followed out of the little room, down the halls, and into the main shipping center of Teleport. The girl led him past the busy offices, through narrowing corridors, and finally into a little room where a lean young man, with troubled eyes and a look that would have made a starship man of him once, nodded awkwardly.

"Captain Ames, starship *Titewillow*?"

Josh flipped over his identity cards, and the young man ran through them, not seeming to bother reading them.

Finally he cleared his throat. "As you know, Captain Ames, Teleport has taken over the former Space Office. Normally, we don't operate it as a functioning thing, but . . . well, I've been able to do some investigating for you. We like to observe the courtesies. After all, your ship and Teleport are the

only ones left in the business, and we might as well be friendly rivals."

He tried a small laugh, but it didn't come off well. Josh frowned. "And besides, your charter in taking over Space Office says you're responsible for clearing cargo for starships, and your Teleport charter on the periphery depends on your having Space Office. I looked it up."

"Yeah." The man laughed again, more heartily this time. "Okay, Captain Ames. You're right—we're compelled to route you if we can find cargo. And confidentially, we'd be happier if we could keep a starship operating, at least until the right bills can be put through World Parliament to get around the old monopoly claim. If we found a shipper, you'd get the business. But . . ."

Josh waited. "Well?"

"There's no business to be had. No shipper will take the risk without insurance, particularly when it takes weeks to deliver, and we can teleport there in no time—literally. Even if Teleport were to subsidize you, we couldn't get the business for you. Toward the last, too many ships cracked up."

"But I've got new tubes installed."

"Umm. And you were observed making a planet landing practically on overdrive. It made a nice story for the papers—but it isn't the sort of thing that will make shippers want you carrying for them. There's just no work to be had for you."

Josh looked at the man slowly, trying to read duplicity into his face, but it wouldn't wash. The boy was sincere enough—and on his desk were a group of memoes, with enough of their contents showing to prove that he'd been working at it.

"That's all?"

"That's all, Captain Ames. Teleport can't help you, I'm afraid. However, if you'd like to sell the *Tatwillow*, we might get you a better price than normally offered for scrap. No? No, I suppose not. Well, you might call me in a week. I'll keep trying. Just ask for Mr. Dikter."

Boyles started to cut off as they came near the field, but

Josh pulled him back. "There's still food in the galley, Ed. And if Teleport won't get me cargo, I'll get my own."

But he couldn't even make himself believe it now. The boy had been the wrong sort to stall him off. If it had been one of the usual office flunkies, he might have called it cheap politics, but Dikter hadn't been fooling.

He kept most of the thoughts from his mind as he went across the field, rounding past the squat tubs that were loading with cargo for Venus and Io, carrying fertilizer that was too odorous for Teleport to handle without first processing it to kill the smell. He watched the sloppy uniforms around the tubs, and shook his head. The men manning the ferries wouldn't have been allowed aboard a fuel tender, in the old days. Now, this was all that was left.

Then they hit toward the open end of the field, and toward the sheds where Acme Scrap had finally finished with the retubing of the *Titusflow*. She stood there, showing up against the dulling red of late sunset. The last of the machines Acme had used were pulled away now, and the clean polish of the tube brazings stood out sharply against the rest of her pitted hull. Acme might have been high handed at first, but he'd done a good job; Josh had no complaint on that score. The *Titusflow* was good for decades now—or would be, with her holds filled and a starlanding to make.

Boyles sighed beside him, accepting the makings for another cigarette silently. Then they reached the ramp, and stopped by common consent, looking out over the big deserted field.

"I hear they're planning on moving the ferry service out further; gonna turn this into a big park," Boyles said finally.

Josh nodded and turned back toward the entrance, just as a shout came up from below. John Acme was down there, inspecting the job on the tubes, and they went down.

"Satisfied? But I don't have to ask that. Never did a prettier job, even when Dad was running this as a repair center. When you moving her out, Ames?"

"Pretty soon," Josh answered. "Yeah, as soon as . . ."

But he couldn't even say it. Acme waited, then shrugged.

"It'll have to be soon, Ames. According to the old contract form we used, you've got the right to stay here three days after repairs are finished, and I guess I can stretch it a couple days. But next week, I've got a bunch of heavy trucks coming in to deliver scrap, and I'll need every bit of this space for the cranes. If you find a cargo by then, I'll even let you load—but I can't stretch it further."

"Yeah." Josh tried to think of something to say and failed. Finally he gave up. "Okay, Mr. Acme."

Acme hesitated a moment longer, then shrugged, and went back to his office. Boyles was standing back by the ramp, acting as if he had heard nothing, and Pete McIntosh was talking to him. From Pete's face, it was obvious that the engineer must have learned the news from Boyles.

"Supper's on, Josh," McIntosh broke the silence. "There's enough for Ed, too."

They went up together, none of them looking too carefully about as they headed into the living quarters. It had been ten years since Ed Boyles had come aboard the *Titwallow*, out around Rigel, when his *Mary Jane* had docked alongside. Then there had been a regular crew, and a cook, even. The decks had been clean, and the brightwork had sparkled. She was still a clean ship—she always would be, with Josh running her—but the last five years, while Josh and Pete had learned to handle her alone, had taken their toll in appearance.

"How much does it cost at the official Dock?" Josh asked Ed at last. "They got space enough now, and with no business, no attendants, it ought to be cheap."

"City ordinance still stands. When you dock, they have to dig up some bum to dummy as an attendant. Rates are still a thousand a week, two fifty a day, just to lie to. Hey, did I ever tell you what happened in New Irkutsk?"

Josh listened dutifully, but his mind went on clicking along in the same rut, in spite of Ed's attempt to change the subject. He had exactly one hundred and seventy-three dollars left—not enough for dock service for a single day. And there was barely enough fuel left in the tanks to lift the *Titwallow* into new space, even if it cost nothing.

But it would lift her—and once she got up, the overdrive could operate. There was still fuel enough for that. They might not be able to land again, but the old *Titewillow* could head out into deep space. Food enough, or there should be. They'd stocked up on that when the shipper out around Antares had gone broke and been unable to pay freightage.

He considered it slowly, letting the decision sink in. And finally he knew there was no other way. He'd never questioned the traditions of Space Office, and he didn't intend to change now; a man didn't junk a good ship, no matter what the others might have done.

But first, he'd have to get Ed and Pete out on some pretext. It would be tough, taking off without someone in the engine-room, but it could be done, he guessed.

Then, as he relaxed, he heard the call from outside. Pete had heard it, too, and was already throwing the ramp down, for John Acme to come up, puffing a little.

"Dikter, of Teleport, on the phone in the office," he announced. "He says tell you he's got you a job."

Life came back into Josh's legs, and he was down the ramp before Pete's sudden yell could be echoed by Ed Boyles, and across the little strip of field. He spotted the phone in the office, and grabbed it to him, staring at the panel where Dikter's grinning face was looking out.

"You wanted me?"

"I sure did, Captain Ames." The boy was beaming now. "I've got it—the obvious—so damned obvious, I never even thought of it, though I knew vaguely that there was supposed to be another starship operating. How'd you like to have a life-time charter—and at good rates? With just one catch?"

Josh sat down slowly, and began reaching for the makings, as Acme came back into the office. "Okay, son, let's have it. What's the catch?"

"That you take me along. I'm sick of office work—and Dad was a starship Captain, once."

He waited for Josh's nod, and began giving details. Acme listened for a moment, and held out a congratulatory hand.

The man's smile was still amused, but it seemed sincere enough now.

They began loading in the morning, first the bright trucks with fuel, running their hoses up and shooting a stream into the empty belly of the waiting *Titwillow*. Then Dikter came, a boy in working clothes, somehow gangling and awkward in this new job he'd elbowed his way into. And with him came a trunk that he ripped open, not bothering to answer their questions.

"Teleport can get anything," he announced, waving a sealed can of factory-made cigarettes toward them. There were hundreds of such cans still in the trunk. "I figure if I'm going deep space, I might as well do it right."

He stopped to cough as the smoke hit his lungs, and his attempts to cover up the tears that rose to his eyes were failures. But Josh grinned, remembering his own days as a kid, when he was first entering Space Academy, and trying to hide his being under-age by the same manful inhaling. Then he sobered.

"All right, kid, now tell us what in hell we're carrying?"

That was the one thing that the boy had refused to tell, though the rest of the deal had been above-board enough. The charter was direct from Teleport, Inc., paying a flat fee per month for charter, over and above the cost of all supplies. It was something that Josh had known once, complete charter, but had almost forgotten.

Dikter shook his head. "Does it matter?"

Then the trucks began arriving with the big crates, all stamped with the seal of Teleport, and Josh looked for evidence of what they contained. But they were not uniform, and there was no way of telling what was inside.

"No," he decided. "No, maybe not. I've carried cargoes before without knowing what."

But he'd liked some cargoes less than others, he thought to himself. And the kid hadn't been too smart. The two men who were to go along with the shipment as supercargo meant that

it was something special. Still, if the government, or whoever was backing this, wanted to play it that way, it was their business.

"Hell," he decided. "It gets carried, that's enough. Right now, I'd even be willing to think about shipping teleports . . ."

The gasp from Dikter wasn't necessary, then. It should have been obvious, as the kid had said. No matter what the Teleport Company officials claimed, there was one cargo they could never transport. The first teleport on any planet had to be carried there by ship. There'd been a time when Teleport had tried to get the starships to do it for them, and finally had to build their own ship.

Now—well, if they needed a second ship to spread from planet to planet fast enough, he wouldn't be cutting the throat of other shipowners or destroying trade by spreading the machines for them. There were no more shipowners and there was no trade to be destroyed.

"Well, we'd better get below and supervise stowage," he said slowly. "We've got cargo coming aboard. And on the *Titicillou*, when we head for deep space, we stow it right! I've never lost or damaged a cargo, and I don't intend to start now. Mr. Boyles, you're in charge. Mr. McIntosh, Mr. Dikter, you take orders from Mr. Boyles. And step lively, sirs!"

Then he chuckled, wryly at first, but with more spirit after a moment. The joke was on Teleport, Inc., after all. They had spent years driving the starships out, but they'd lost. And they'd always lose.

As long as there were new planets, there'd always be starships. And that meant there'd always be room for a good deep space man. Maybe the service was a little smaller . . . but it wasn't licked yet, and it never could be.

He tossed aside the factory made cigarette and reached for his makings, before heading down to see that the stowage was going as it should.

H. BEAM PIPER

*The citizens of Altoona, Pennsylvania, know H. Beam Piper as a railroadman whose only visible eccentricities are the collection of ancient weapons and the consumption of what are technically termed "Jet-propelled Ice Cream Sundaes"—vanilla ice cream with a figger of creme de cacao over the top. But mystery writers know him well for his *Murder in the Gun Room* (Knopf, 1953); science-fiction fans rank him high on their list of favorite writers for a score of the finest stories the field has seen, of which one of the most enjoyable is—*

Genesis

ABOARD THE ship, there was neither day nor night; the hours slipped gently by, as vistas of star-gemmed blackness slid across the visiscreens. For the crew, time had some meaning—one watch on duty and two off. But for the thousand-odd colonists, the men and women who were to be the spearhead of migration to a new and friendlier planet, it had none. They slept, and played, worked at such tasks as they could invent, and slept again, while the huge ship followed her plotted trajectory.

Kalvar Dard, the army officer who would lead them in their new home, had as little to do as any of his followers. The ship's officers had all the responsibility for the voyage, and, for the first time in over five years, he had none at all. He was finding the unaccustomed idleness more wearying than the hectic work of loading the ship before the blastoff from Doorsha. He went over his landing and security plans again, and found no probable emergency unprepared for. Dard wan-

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dered about the ship, talking to groups of his colonists, and found morale even better than he had hoped. He spent hours staring into the forward visiscreens, watching the disc of Tareesh, the planet of his destination, grow larger and plainer ahead.

Now, with the voyage almost over, he was in the cargo-hold just aft of the Number Seven bulkhead, with six girls to help him, checking construction material which would be needed immediately after landing. The stuff had all been checked two or three times before, but there was no harm in going over it again. It furnished an occupation to fill in the time; it gave Kalvar Dard an excuse for surrounding himself with half a dozen charming girls, and the girls seemed to enjoy being with him. There was tall blonde Olva, the electromagnetician; pert little Varnis, the machinist's helper; Kyna, the surgeon's-aid; dark-haired Analea; Dorita, the accountant; plump little Eldra, the armament technician. At the moment, they were all sitting on or around the desk in the corner of the storeroom, going over the inventory when they were not just gabbling.

"Well, how about the rock-drill bitts?" Dorita was asking earnestly, trying to stick to business. "Won't we need them almost as soon as we're off?"

"Yes, we'll have to dig temporary magazines for our explosives, small-arms and artillery ammunition, and storage-pits for our fissionables and radioactives," Kalvar Dard replied. "We'll have to have safe places for that stuff ready before it can be unloaded; and if we run into hard rock near the surface, we'll have to drill holes for blasting-shots."

"The drilling machinery goes into one of those prefabricated sheds," Eldra considered. "Will there be room in it for all the bitts, too?"

Kalvar Dard shrugged. "Maybe. If not, we'll cut poles and build racks for them outside. The bitts are nono-steel; they can be stored in the open."

"If there are poles to cut," Olva added.

"I'm not worrying about that," Kalvar Dard replied. "We have a pretty fair idea of conditions on Tareesh; our astronomers have been making telescopic observations for the past

fifteen centuries. There's a pretty big Arctic ice-cap, but it's been receding slowly, with a wide belt of what's believed to be open grassland to the south of it, and a belt of what's assumed to be evergreen forest south of that. We plan to land somewhere in the northern hemisphere, about the grassland-forest line. And since Tareesh is richer in water than Doorsha, you mustn't think of grassland in terms of our wire-grass plains, or forests in terms of our brush thickets. The vegetation should be much more luxuriant."

"If there's such a large polar ice-cap, the summers ought to be fairly cool, and the winters cold," Varnis reasoned. "I'd think that would mean fur-bearing animals. Colonel, you'll have to shoot me something with a nice soft fur; I like furs."

Kalvar Dard chuckled. "Shoot you nothing, you can shoot your own furs. I've seen your carbine and pistol scores," he began.

There was a sudden suck of air, disturbing the papers on the desk. They all turned to see one of the ship's rocket-boat bays open; a young Air Force lieutenant named Seldar Glav, who would be staying on Tareesh with them to pilot their aircraft, emerged from an open airlock.

"Don't tell me you've been to Tareesh and back in that thing," Olva greeted him.

Seldar Glav grinned at her. "I could have been, at that; we're only twenty or thirty planetary calibers away, now. We ought to be entering Tareeshan atmosphere by the middle of the next watch. I was only checking the boats, to make sure they'll be ready to launch . . . Colonel Kalvar, would you mind stepping over here? There's something I think you should look at, sir."

Kalvar Dard took one arm from around Analea's waist and lifted the other from Varnis' shoulder, sliding off the desk. He followed Glav into the boat-bay; as they went through the airlock, the cheerfulness left the young lieutenant's face.

"I didn't want to say anything in front of the girls, sir," he began, "but I've been checking boats to make sure we can make a quick getaway. Our meteor-security's gone out. The

detectors are deader than the Fourth Dynasty, and the blasters won't synchronize. . . . Did you hear a big thump, about a half an hour ago, Colonel?"

"Yes, I thought the ship's labor-crew was shifting heavy equipment in the hold aft of us. What was it, a meteor-hit?"

"It was. Just aft of Number Ten bulkhead. A meteor about the size of the nose of that rocket-boat."

Kalvar Dard whistled softly. "Great Gods of Power! The detectors must be dead, to pass up anything like that . . . Why wasn't a boat-stations call sent out?"

"Captain Vlazil was unwilling to risk starting a panic, sir," the Air Force officer replied. "Really, I'm exceeding my orders in mentioning it to you, but I thought you should know . . ."

Kalvar Dard swore. "It's a blasted pity Captain Vlazil didn't try thinking! Gold-braided quarter-wit! Maybe his crew might panic, but my people wouldn't . . . I'm going to call the control-room and have it out with him. By the Ten Gods . . . !"

He ran through the airlock and back into the hold, starting toward the intercom-phone beside the desk. Before he could reach it, there was another heavy jar, rocking the entire ship. He, and Seldar Glav, who had followed him out of the boat-bay, and the six girls, who had risen on hearing their commander's angry voice, were all tumbled into a heap. Dard surged to his feet, dragging Kyna up along with him; together, they helped the others to rise. The ship was suddenly filled with jangling bells, and the red danger-lights on the ceiling were flashing on and off.

"Attention! Attention!" the voice of some officer in the control-room blared out of the intercom-speaker. "The ship has just been hit by a large meteor! All compartments between bulkheads Twelve and Thirteen are sealed off. All persons between bulkheads Twelve and Thirteen, put on oxygen helmets and plug in at the nearest phone connection. Your air is leaking, and you can't get out, but if you put on oxygen equipment immediately, you'll be all right. We'll get you out as soon as we can, and in any case, we are only a few hours

out of Tareeshan atmosphere. All persons in Compartment Twelve, put on . . ."

Kalvar Dard was swearing evilly. "That does it! That does it for good! . . . Anybody else in this compartment, below the living quarter level?"

"No, we're the only ones," Analea told him.

"The people above have their own boats; they can look after themselves. You girls, get in that boat, in there. Glav, you and I'll try to warn the people above . . ."

There was another jar, heavier than the one which had preceded it, throwing them all down again. As they rose, a new voice was shouting over the public-address system:

"Abandon ship! Abandon ship! The converters are back-firing, and rocket-fuel is leaking back toward the engine-rooms! An explosion is imminent! Abandon ship, all hands!"

Kalvar Dard and Seldar Glav grabbed the girls and literally threw them through the hatch, into the rocket-boat. Dard pushed Glav in ahead of him, then jumped in. Before he had picked himself up, two or three of the girls were at the hatch, dogging the cover down.

"All right, Glav, blast off!" Dard ordered. "We've got to be at least a hundred miles from this ship when she blows, or we'll blow with her!"

"Don't I know!" Seldar Glav retorted over his shoulder, racing for the controls. "Grab hold of something, everybody; I'm going to fire all jets at once!"

An instant later, while Kalvar Dard and the girls clung to stanchions and pieces of fixed furniture, the boat shot forward out of its housing. When Dard's head had cleared, it was in free flight.

"How was that?" Glav yelled. "Everybody all right?" He hesitated for a moment. "I think I blacked out for about ten seconds."

Kalvar Dard looked the girls over. Eldra was using a corner of her smock to stanch a nosebleed, and Olva had a bruise over one eye. Otherwise, everybody was in good shape.

"Wonder we didn't all black out, permanently," he said. "Well, put on the visiscreens, and let's see what's going on

outside. Olva, get on the radio and try to see if anybody else got away."

"Set course for Tareesh?" Glav asked. "We haven't fuel enough to make it back to Doorsha."

"I was afraid of that," Dard nodded. "Tareesh it is; northern hemisphere, daylight side. Try to get about the edge of the temperate zone, as near water as you can . . ."

2.

They were flung off their feet again, this time backward along the boat. As they picked themselves up, Seldar Glav was shaking his head, sadly. "That was the ship going up," he said; "the blast must have caught us dead astern."

"All right." Kalvar Dard rubbed a bruised forehead. "Set course for Tareesh, then cut out the jets till we're ready to land. And get the screens on, somebody; I want to see what's happened."

The screens glowed; then full vision came on. The planet on which they would land loomed huge before them, its north pole toward them, and its single satellite on the port side. There was no sign of any rocket-boat in either side screen, and the rear-view screen was a blur of yellow flame from the jets.

"Cut the jets, Glav," Dard repeated. "Didn't you hear me?"

"But I did, sir!" Seldar Glav indicated the firing-panel. Then he glanced at the rear-view screen. "The gods help us! It's yellow flame; the jets are burning out!"

Kalvar Dard had not boasted idly when he had said that his people would not panic. All the girls went white, and one or two gave low cries of consternation, but that was all.

"What happens next?" Analea wanted to know. "Do we blow, too?"

"Yes, as soon as the fuel-line burns up to the tanks."

"Can you land on Tareesh before then?" Dard asked.

"I can try. How about the satellite? It's closer."

"It's also airless. Look at it and see for yourself," Kalvar Dard advised. "Not enough mass to hold an atmosphere."

Glav looked at the army officer with new respect. He had always been inclined to think of the Frontier Guards as a gang of scientifically illiterate dirk-and-pistol bravos. He fiddled for a while with instruments on the panel; an automatic computer figured the distance to the planet, the boat's velocity, and the time needed for a landing.

"We have a chance, sir," he said. "I think I can set down in about thirty minutes; that should give us about ten minutes to get clear of the boat, before she blows up."

"All right; get busy, girls," Kalvar Dard said. "Grab everything we'll need. Arms and ammunition first; all of them you can find. After that, warm clothing, bedding, tools and food."

With that, he jerked open one of the lockers and began pulling out weapons. He buckled on a pistol and dagger, and handed other weapon-belts to the girls behind him. He found two of the heavy big-game rifles, and several bandoliers of ammunition for them. He tossed out carbines, and boxes of carbine and pistol cartridges. He found two bomb-bags, each containing six light antipersonnel grenades and a big demolition-bomb. Glancing, now and then, at the forward screen, he caught glimpses of blue sky and green-tinted plains below.

"All right!" the pilot yelled. "We're coming in for a landing! A couple of you stand by to get the hatch open."

There was a jolt, and all sense of movement stopped. A cloud of white smoke drifted past the screens. The girls got the hatch open; snatching up weapons and bedding-wrapped bundles they all scrambled up out of the boat.

There was fire outside. The boat had come down upon a grassy plain; now the grass was burning from the heat of the jets. One by one, they ran forward along the top of the rocket-boat, jumping down to the ground clear of the blaze. Then, with every atom of strength they possessed, they ran away from the doomed boat.

The ground was rough, and the grass high, impeding them. One of the girls tripped and fell; without pausing, two others pulled her to her feet, while another snatched up and slung

the carbine she had dropped. Then, ahead, Kalvar Dard saw a deep gully, through which a little stream trickled.

They huddled together at the bottom of it, waiting, for what seemed like a long while. Then a gentle tremor ran through the ground, and swelled to a sickening, heaving shock. A roar of almost palpable sound swept over them, and a flash of blue-white light dimmed the sun above. The sound, the shock, and the searing light did not pass away at once; they continued for seconds that seemed like an eternity. Earth and stones pelted down around them; choking dust rose. Then the thunder and the earth-shock were over; above, incandescent vapors swirled, and darkened into an overhanging pall of smoke and dust.

For a while, they crouched motionless, too stunned to speak. Then shaken nerves steadied and jarred brains cleared. They all rose weakly. Trickles of earth were still coming down from the sides of the gully, and the little stream, which had been clear and sparkling, was roiled with mud. Mechanically, Kalvar Dard brushed the dust from his clothes and looked to his weapons.

"That was just the fuel-tank of a little Class-3 rocket-boat," he said. "I wonder what the explosion of the ship was like." He thought for a moment before continuing. "Glav, I think I know why our jets burned out. We were stern-on to the ship when she blew; the blast drove our flame right back through the jets."

"Do you think the explosion was observed from Doorsha?" Dorita inquired, more concerned about the practical aspects of the situation. "The ship, I mean. After all, we have no means of communication, of our own."

"Oh, I shouldn't doubt it; there were observatories all around the planet watching our ship," Kalvar Dard said. "They probably know all about it, by now. But if any of you are thinking about the chances of rescue, forget it. We're stuck here."

"That's right. There isn't another human being within fifty million miles," Seldar Glav said. "And that was the first and only space-ship ever built. It took fifty years to build her, and

even allowing twenty for research that wouldn't have to be duplicated, you can figure when we can expect another one."

"The answer to that one is, never. The ship blew up in space; fifty years' effort and fifteen hundred people gone, like that." Kalvar Dard snapped his fingers. "So now, they'll try to keep Doorsha habitable for a few more thousand years by irrigation, and forget about immigrating to Tareesh."

"Well, maybe, in a hundred thousand years, our descendants will build a ship and go to Doorsha, then," Olva considered.

"Our descendants?" Eldra looked at her in surprise. "You mean, then . . . ?"

Kyna chuckled. "Eldra, you are an awful innocent, about anything that doesn't have a breech-action or a recoil-mechanism," she said. "Why do you think the women on this expedition outnumbered the men seven to five, and why do you think there were so many obstetricians and pediatricians in the med. staff? We were sent out to put a human population on Tareesh, weren't we? Well, here we are."

"But . . . Aren't we ever going to . . . ?" Varnis began. "Won't we ever see anybody else, or do anything but just live here, like animals, without machines or ground-cars or aircraft or houses or anything?" Then she began to sob bitterly.

Analea, who had been cleaning a carbine that had gotten covered with loose earth during the explosion, laid it down and went to Varnis, putting her arm around the other girl and comforting her. Kalvar Dard picked up the carbine she had laid down.

"Now, let's see," he began. "We have two heavy rifles, six carbines, and eight pistols, and these two bags of bombs. How much ammunition, counting what's in our belts, do we have?"

They took stock of their slender resources, even Varnis joining in the task, as he had hoped she would. There were over two thousand rounds for the pistols, better than fifteen hundred for the carbines, and four hundred for the two big-game guns. They had some spare clothing, mostly space-suit undergarments, enough bed-robcs, one hand-axe, two flashlights, a

first-aid kit, and three atomic lighters. Each one had a combat-dagger. There was enough tinned food for about a week.

"We'll have to begin looking for game and edible plants, right away," Glav considered. "I suppose there is game, of some sort; but our ammunition won't last forever."

"We'll have to make it last as long as we can; and we'll have to begin improvising weapons," Dard told him. "Throwing-spears, and throwing-axes. If we can find metal, or any recognizable ore that we can smelt, we'll use that; if not, we'll use chipped stone. Also, we can learn to make snares and traps, after we learn the habits of the animals on this planet. By the time the ammunition's gone, we ought to have learned to do without firearms."

"Think we ought to camp here?"

Kalvar Dard shook his head. "No wood here for fuel, and the blast will have scared away all the game. We'd better go upstream; if we go down, we'll find the water roiled with mud and unfit to drink. And if the game on this planet behave like the game-herds on the wastelands of Doorsha, they'll run for high ground when frightened."

Varnis rose from where she had been sitting. Having mastered her emotions, she was making a deliberate effort to show it.

"Let's make up packs out of this stuff," she suggested. "We can use the bedding and spare clothing to bundle up the food and ammunition."

They made up packs and slung them, then climbed out of the gully. Off to the left, the grass was burning in a wide circle around the crater left by the explosion of the rocket-boat. Kalvar Dard, carrying one of the heavy rifles, took the lead. Beside and a little behind him, Analea walked, her carbine ready. Glav, with the other heavy rifle, brought up in the rear, with Olva covering for him, and between, the other girls walked, two and two.

Ahead, on the far horizon, was a distance-blue line of mountains. The little company turned their faces toward them and moved slowly away, across the empty sea of grass.

3.

They had been walking, now, for five years. Kalvar Dard still led, the heavy rifle cradled in the crook of his left arm and a sack of bombs slung from his shoulder, his eyes forever shifting to right and left searching for hidden danger. The clothes in which he had jumped from the rocket-boat were patched and ragged; his shoes had been replaced by high laced buskins of smoke-tanned hide. He was bearded, now, and his hair had been roughly trimmed with the edge of his dagger.

Anelea still walked beside him, but her carbine was slung, and she carried three spears with chipped flint heads; one heavy weapon, to be thrown by hand or used for stabbing, and two light javelins to be thrown with the aid of the hooked throwing-stick Glav had invented. Beside her trudged a four-year old boy, hers and Dard's, and on her back, in a fur-lined net bag, she carried their six-month-old baby.

In the rear, Glav still kept his place with the other big-game gun, and Olva walked beside him with carbine and spears; in front of them, their three-year-old daughter toddled. Between vanguard and rearguard, the rest of the party walked: Varnis, carrying her baby on her back, and Dorita, carrying a baby and leading two other children. The baby on her back had cost the life of Kyna in childbirth; one of the others had been left motherless when Eldra had been killed by the Hairy People.

That had been two years ago, in the winter when they had used one of their two demolition-bombs to blast open a cavern in the mountains. It had been a hard winter; two children had died, then—Kyna's firstborn, and the little son of Kalvar Dard and Dorita. It had been their first encounter with the Hairy People, too.

Eldra had gone outside the cave with one of the skin water-bags, to fill it at the spring. It had been after sunset, but she

had carried her pistol, and no one had thought of danger until they heard the two quick shots, and the scream. They had all rushed out, to find four shaggy, manlike things tearing at Eldra with hands and teeth, another lying dead, and a sixth huddled at one side, clutching its abdomen and whimpering. There had been a quick flurry of shots that had felled all four of the assailants, and Seldar Glav had finished the wounded creature with his dagger, but Eldra was dead. They had built a cairn of stones over her body, as they had done over the bodies of the two children killed by the cold. But, after an examination to see what sort of things they were, they had tumbled the bodies of the Hairy People over the cliff. These had been too bestial to bury as befitted human dead, but too manlike to skin and eat as game.

Since then, they had often found traces of the Hairy People, and when they met with them, they killed them without mercy. These were great shambling parodies of humanity, long-armed, short-legged, twice as heavy as men, with close-set reddish eyes and heavy bone-crushing jaws. They may have been incredibly debased humans, or perhaps beasts on the very threshold of manhood. From what he had seen of conditions on this planet, Kalvar Dard suspected the latter to be the case. In a million or so years, they might evolve into something like humanity. Already, the Hairy ones had learned the use of fire, and of chipped crude stone implements—mostly heavy triangular choppers to be used in the hand, without helvcs.

Twice, after that night, the Hairy People had attacked them—once while they were on the march, and once in camp. Both assaults had been beaten off without loss to themselves, but at cost of precious ammunition. Once they had caught a band of ten of them swimming a river on logs; they had picked them all off from the bank with their carbines. Once, when Kalvar Dard and Analea had been scouting alone, they had come upon a dozen of them huddled around a fire and had wiped them out with a single grenade. Once, a large band of Hairy People hunted them for two days, but only twice had they come close, and both times, a single shot had

sent them all scampering. That had been after the bombing of the group around the fire. Dard was convinced that the beings possessed the rudiments of a language, enough to communicate a few simple ideas, such as the fact that this little tribe of aliens were dangerous in the extreme.

There were Hairy People about now; for the past five days, moving northward through the forest to the open grasslands, the people of Kalvar Dard had found traces of them. Now, as they came out among the seedling growth at the edge of the open plains, everybody was on the alert.

They emerged from the big trees and stopped among the young growth, looking out into the open country. About a mile away, a herd of game was grazing slowly westward. In the distance, they looked like the little horse-like things, no higher than a man's waist and heavily maned and bearded, that had been one of their most important sources of meat. For the ten thousandth time, Dard wished, as he strained his eyes, that somebody had thought to secure a pair of binoculars when they had abandoned the rocket-boat. He studied the grazing herd for a long time.

The seedling pines extended almost to the game-herd and would offer concealment for the approach, but the animals were grazing into the wind, and their scent was much keener than their vision. This would prelude one of their favorite hunting techniques, that of lurking in the high grass ahead of the quarry. It had rained heavily in the past few days, and the undermat of dead grass was soaked, making a fire-hunt impossible. Kalvar Dard knew that he could stalk to within easy carbine-shot, but he was unwilling to use cartridges on game; and in view of the proximity of Hairy People, he did not want to divide his band for a drive hunt.

"What's the scheme?" Anelea asked him, realizing the problem as well as he did. "Do we try to take them from behind?"

"We'll take them from an angle," he decided. "We'll start from here and work in, closing on them at the rear of the herd. Unless the wind shifts on us, we ought to get within spear-cast. You and I will use the spears; Varnis can come along and cover

for us with a carbine. Glav, you and Olva and Dorita stay here with the children and the packs. Keep a sharp lookout; Hairy People around, somewhere." He unslung his rifle and exchanged it for Olva's spears. "We can only eat about two of them before the meat begins to spoil, but kill all you can," he told Analea; "we need the skins."

Then he and the two girls began their slow, cautious, stalk. As long as the grassland was dotted with young trees, they walked upright, making good time, but the last five hundred yards they had to crawl, stopping often to check the wind, while the horse-herd drifted slowly by. Then they were directly behind the herd, with the wind in their faces, and they advanced more rapidly.

"Close enough?" Dard whispered to Analea.

"Yes; I'm taking the one that's lagging a little behind."

"I'm taking the one on the left of it." Kalvar Dard fitted a javelin to the hook of his throwing-stick. "Ready? Now!"

He leaped to his feet, drawing back his right arm and hurling, the throwing-stick giving added velocity to the spear. Beside him, he was conscious of Analea rising and propelling her spear. His missile caught the little bearded pony in the chest; it stumbled and fell forward to its front knees. He snatched another light spear, set it on the hook of the stick and darted it at another horse, which reared, biting at the spear with its teeth. Grabbing the heavy stabbing-spear, he ran forward, finishing it off with a heart-thrust. As he did, Varnis slung her carbine, snatched a stone-headed throwing axe from her belt, and knocked down another horse, then ran forward with her dagger to finish it.

By this time, the herd, alarmed, had stampeded and was galloping away, leaving the dead and dying behind. He and Analea had each killed two; with the one Varnis had knocked down, that made five. Using his dagger, he finished off one that was still kicking on the ground, and then began pulling out the throwing-spears. The girls, shouting in unison, were announcing the successful completion of the hunt; Glav, Olva, and Dorita were coming forward with the children.

It was sunset by the time they had finished the work of skinning and cutting up the horses and had carried the hide-wrapped bundles of meat to the little brook where they had intended camping. There was firewood to be gathered, and the meal to be cooked, and they were all tired.

"We can't do this very often, any more," Kalvar Dard told them, "but we might as well, tonight. Don't bother rubbing sticks for fire; I'll use the lighter."

He got it from a pouch on his belt—a small, gold-plated, atomic lighter, bearing the crest of his old regiment of the Frontier Guards. It was the last one they had, in working order. Piling a handful of dry splinters under the firewood, he held the lighter to it, pressed the activator, and watched the fire eat into the wood.

The greatest achievement of man's civilization, the mastery of the basic, cosmic, power of the atom—being used to kindle a fire of natural fuel, to cook unseasoned meat killed with stone-tipped spears. Dard looked sadly at the twinkling little gadget, then slipped it back into its pouch. Soon it would be worn out, like the other two, and then they would gain fire only by rubbing dry sticks, or hacking sparks from bits of flint or pyrites. Soon, too, the last cartridge would be fired, and then they would perforce depend for protection, as they were already doing for food, upon their spears.

And they were so helpless. Six adults, burdened with seven little children, all of them requiring care and watchfulness. If the cartridges could only be made to last until they were old enough to fend for themselves . . . If they could avoid collisions with the Hairy People . . . Some day, they would be numerous enough for effective mutual protection and support; some day, the ratio of helpless children to able adults would redress itself. Until then, all that they could do would be to survive; day after day, they must follow the game-herds.

4.

For twenty years, now, they had been following the game. Winters had come, with driving snow, forcing horses and deer

into the woods, and the little band of humans to the protection of mountain caves. Springtime followed, with fresh grass on the plains and plenty of meat for the people of Kalvar Dard. Autumns followed summers, with fire-hunts, and the smoking and curing of meat and hides. Winters followed autumns, and springtimes came again, and thus until the twentieth year after the landing of the rocket-boat.

Kalvar Dard still walked in the lead, his hair and beard flecked with gray, but he no longer carried the heavy rifle; the last cartridge for that had been fired long ago. He carried the hand-axe, fitted with a long helve, and a spear with a steel head that had been worked painfully from the receiver of a useless carbine. He still had his pistol, with eight cartridges in the magazine, and his dagger, and the bomb-bag, containing the big demolition-bomb and one grenade. The last shred of clothing from the ship was gone, now; he was clad in a sleeveless tunic of skin and horsehide buskins.

Analea no longer walked beside him; eight years before, she had broken her back in a fall. It had been impossible to move her, and she stabbed herself with her dagger to save a cartridge. Seldar Glav had broken through the ice while crossing a river, and had lost his rifle; the next day he died of the chill he had taken. Olva had been killed by the Hairy People, the night they had attacked the camp, when Varnis' child had been killed.

They had beaten off that attack, shot or speared ten of the huge submen, and the next morning they buried their dead after their custom, under cairns of stone. Varnis had watched the burial of her child with blank, uncomprehending eyes, then she had turned to Kalvar Dard and said something that had horrified him more than any wild outburst of grief could have.

"Come on, Dard; what are we doing this for? You promised you'd take us to Tareesh, where we'd have good houses, and machines, and all sorts of lovely things to eat and wear. I don't like this place, Dard; I want to go to Tareesh."

From that day on, she had wandered in merciful darkness.

She had not been idiotic, or raving mad; she had just escaped from a reality that she could no longer bear.

Varnis, lost in her dream-world, and Dorita, hard-faced and haggard, were the only ones left, beside Kalvar Dard, of the original eight. But the band had grown, meanwhile, to more than fifteen. In the rear, in Seldar Glav's old place, the son of Kalvar Dard and Analea walked. Like his father, he wore a pistol, for which he had six rounds, and a dagger, and in his hand he carried a stone-headed killing-maul with a three-foot handle which he had made for himself. The woman who walked beside him and carried his spears was the daughter of Glav and Olva; in a net-bag on her back she carried their infant child. The first Tareeshan born of Tareeshan parents; Kalvar Dard often looked at his little grandchild during nights in camp and days on the trail, seeing, in that tiny fur-swaddled morsel of humanity, the meaning and purpose of all that he did. Of the older girls, one or two were already pregnant, now; this tiny threatened beachhead of humanity was expanding, gaining strength. Long after man had died out on Doorsha and the dying planet itself had become an arid waste, the progeny of this little band would continue to grow and to dominate the younger planet, nearer the sun. Some day, an even mightier civilization than the one he had left would rise here . . .

All day, the trail had wound upward into the mountains. Great cliffs loomed above them, and little streams spumed and dashed in rocky gorges below. All day, the Hairy People had followed, fearful to approach too close, unwilling to allow their enemies to escape. It had started when they had rushed the camp, at daybreak; they had been beaten off, at cost of almost all the ammunition, and the death of one child. No sooner had the tribe of Kalvar Dard taken the trail, however, than they had been pressing after them. Dard had determined to cross the mountains, and had led his people up a game-trail, leading toward the notch of a pass high against the skyline.

The shaggy ape-things seemed to have divined his purpose. Once or twice, he had seen hairy brown shapes dodging

among the rocks and stunted trees to the left. They were trying to reach the pass ahead of him. Well, if they did . . . He made a quick mental survey of his resources. His pistol, and his son's, and Dorita's, with eight, and six, and seven rounds. One grenade, and the big demolition bomb, too powerful to be thrown by hand, but which could be set for delayed explosion and dropped over a cliff or left behind to explode among pursuers. Five steel daggers, and plenty of spears and slings and axes. Himself, his son and his son's woman, Dorita, and four or five of the older boys and girls, who would make effective front-line fighters. And Varnis, who might come out of her private dream-world long enough to give account for herself, and even the tiniest of the walking children could throw stones or light spears. Yes, they could force the pass, if the Hairy People reached it ahead of them, and then seal it shut with the heavy bomb. What lay on the other side, he did not know; he wondered how much game there would be, and if there were Hairy People on that side, too.

Two shots slammed quickly behind him. He dropped his axe and took a two-hand grip on his stabbing-spear as he turned. His son was hurrying forward, his pistol drawn, glancing behind as he came.

"Hairy People. Four," he reported. "I shot two; she threw a spear and killed another. The other ran."

The daughter of Seldar Glav and Olva nodded in agreement.

"I had no time to throw again," she said, "and Bo-Bo would not shoot the one that ran."

Kalvar Dard's son, who had no other name than the one his mother had called him as a child, defended himself. "He was running away. It is the rule: *use bullets only to save life, where a spear will not serve.*"

Kalvar Dard nodded. "You did right, son," he said, taking out his own pistol and removing the magazine, from which he extracted two cartridges. "Load these into your pistol; four rounds aren't enough. Now we each have six. Go back to the rear, keep the little ones moving, and don't let Varnis get behind."

"That is right. *We must all look out for Varnis, and take care of her,*" the boy recited obediently. "That is the rule."

He dropped to the rear. Kalvar Dard holstered his pistol and picked up his axe, and the column moved forward again. They were following a ledge, now; on the left, there was a sheer drop of several hundred feet, and on the right a cliff rose above them, growing higher and steeper as the trail slanted upward. Dard was worried about the ledge; if it came to an end, they would all be trapped. No one would escape. He suddenly felt old and unutterably weary. It was a frightful weight that he bore—responsibility for an entire race.

Suddenly, behind him, Dorita fired her pistol upward. Dard sprang forward—there was no room for him to jump aside—and drew his pistol. The boy, Bo-Bo, was trying to find a target from his position in the rear. Then Dard saw the two Hairy People; the boy fired, and the stone fell, all at once.

It was a heavy stone, half as big as a man's torso, and it almost missed Kalvar Dard. If it had hit him directly, it would have killed him instantly, mashing him to a bloody pulp; as it was, he was knocked flat, the stone pinning his legs.

At Bo-Bo's shot, a hairy body plummeted down, to hit the ledge. Bo-Bo's woman instantly ran it through with one of her spears. The other ape-thing, the one Dorita had shot, was still clinging to a rock above. Two of the children scampered up to it and speared it repeatedly, screaming like little furies. Dorita and one of the older girls got the rock off Kalvar Dard's legs and tried to help him to his feet, but he collapsed, unable to stand. Both his legs were broken.

This was it, he thought, sinking back. "Dorita, I want you to run ahead and see what the trail's like," he said. "See if the ledge is passable. And find a place, not too far ahead, where we can block the trail by exploding that demolition-bomb. It has to be close enough for a couple of you to carry or drag me and get me there in one piece."

"What are you going to do?"

"What do you think?" he retorted. "I have both legs broken. You can't carry me with you; if you try it, they'll catch us and

kill us all. I'll have to stay behind; I'll block the trail behind you, and get as many of them as I can, while I'm at it. Now, run along and do as I said."

She nodded. "I'll be back as soon as I can," she agreed.

The others were crowding around Dard. Bo-Bo bent over him, perplexed and worried. "What are you going to do, father?" he asked. "You are hurt. Are you going to go away and leave us, as mother did when she was hurt?"

"Yes, son; I'll have to. You carry me on ahead a little, when Dorita gets back, and leave me where she shows you to. I'm going to stay behind and block the trail, and kill a few Hairy People. I'll use the big bomb."

"The big bomb? The one nobody dares throw?" The boy looked at his father in wonder.

"That's right. Now, when you leave me, take the others and get away as fast as you can. Don't stop till you're up to the pass. Take my pistol and dagger, and the axe and the big spear, and take the little bomb, too. Take everything I have, only leave the big bomb with me. I'll need that."

Dorita rejoined them. "There's a waterfall ahead. We can get around it, and up to the pass. The way's clear and easy; if you put off the bomb just this side of it, you'll start a rock-slide that'll block everything."

"All right. Pick me up, a couple of you. Don't take hold of me below the knees. And hurry."

A hairy shape appeared on the ledge below them; one of the older boys used his throwing-stick to drive a javelin into it. Two of the girls picked up Dard; Bo-Bo and his woman gathered up the big spear and the axe and the bomb-bag.

They hurried forward, picking their way along the top of a talus of rubble at the foot of the cliff, and came to where the stream gushed out of a narrow gorge. The air was wet with spray there, and loud with the roar of the waterfall. Kalvar Dard looked around; Dorita had chosen the spot well. Not even a sure-footed mountain-goat could make the ascent, once that gorge was blocked.

"All right; put me down here," he directed. "Bo-Bo, take

my belt, and give me the big bomb. You have one light grenade; know how to use it?"

"Of course, you have often showed me. I turn the top, and then press in the little thing on the side, and hold it in till I throw. I throw it at least a spear-cast, and drop to the ground or behind something."

"That's right. And use it only in greatest danger, to save everybody. Spare your cartridges; use them only to save life. And save everything of metal, no matter how small."

"Yes. Those are the rules. I will follow them, and so will the others. And we will always take care of Varnis."

"Well, goodbye, son." He gripped the boy's hand. "Now get everybody out of here; don't stop till you're at the pass."

"You're not staying behind!" Varnis cried. "Dard, you promised us! I remember, when we were all in the ship together—you and I and Analea and Olva and Dorita and Eldra and, oh, what was that other girl's name, Kynal! And we were all having such a nice time, and you were telling us how we'd all come to Tareesh, and we were having such fun talking about it. . . ."

"That's right, Varnis," he agreed. "And so I will. I have something to do, here, but I'll meet you on top of the mountain, after I'm through, and in the morning we'll all go to Tareesh."

She smiled—the gentle, childlike smile of the harmlessly mad—and turned away. The son of Kalvar Dard made sure that she and all the children were on the way, and then he, too, turned and followed them, leaving Dard alone.

Alone, with a bomb and a task. He'd borne that task for twenty years, now; in a few minutes, it would be ended, with an instant's searing heat. He tried not to be too glad; there were so many things he might have done, if he had tried harder. Metals, for instance. Somewhere there surely must be ores which they could have smelted, but he had never found them. And he might have tried catching some of the little horses they hunted for food, to break and train to bear burdens. And the alphabet—why hadn't he taught it to Bo-Bo and the daughter of Seldar Glav, and laid on them an obli-

gation to teach the others? And the grass-seeds they used for making flour sometimes; they should have planted fields of the better kinds, and patches of edible roots, and returned at the proper time to harvest them. There were so many things, things that none of those young savages or their children would think of in ten thousand years . . .

Something was moving among the rocks, a hundred yards away. He straightened, as much as his broken legs would permit, and watched. Yes, there was one of them, and there was another, and another. One rose from behind a rock and came forward at a shambling run, making bestial sounds. Then two more lumbered into sight, and in a moment the ravine was alive with them. They were almost upon him when Kalvar Dard pressed in the thumbpiece of the bomb; they were clutching at him when he released it. He felt a slight jar . . .

When they reached the pass, they all stopped as the son of Kalvar Dard turned and looked back. Dorita stood beside him, looking toward the waterfall too; she also knew what was about to happen. The others merely gaped in blank incomprehension, or grasped their weapons, thinking that the enemy was pressing close behind and that they were making a stand here. A few of the smaller boys and girls began picking up stones.

Then a tiny pin-point of brilliance winked, just below where the snow-fed stream vanished into the gorge. That was all, for an instant, and then a great fire-shot cloud swirled upward, hundreds of feet into the air; there was a crash, louder than any sound any of them except Dorita and Varnis had ever heard before.

"He did it!" Dorita said softly.

"Yes, he did it. My father was a brave man," Bo-Bo replied. "We are safe, now."

Varnis, shocked by the explosion, turned and stared at him, and then she laughed happily. "Why, there you are, Dard!" she exclaimed. "I was wondering where you'd gone. What did you do, after we left?"

"What do you mean?" The boy was puzzled, not knowing how much he looked like his father, when his father had been an officer of the Frontier Guards, twenty years before.

His puzzlement worried Varnis vaguely. "You . . . You are Dard, aren't you?" she asked. "But that's silly; of course you're Dard! Who else could you be?"

"Yes, I am Dard," the boy said, remembering that it was the rule for everybody to be kind to Varnis and to pretend to agree with her. Then another thought struck him. His shoulders straightened. "Yes. I am Dard, son of Dard," he told them all. "I lead, now. Does anybody say no?"

He shifted his axe and spear to his left hand and laid his right hand on the butt of his pistol, looking sternly at Dorita. If any of them tried to dispute his claim, it would be she. But instead, she gave him the nearest thing to a real smile that had crossed her face in years.

"You are Dard," she told him; "you lead us, now."

"But of course Dard leads! Hasn't he always led us?" Varnis wanted to know. "Then what's all the argument about? And tomorrow he's going to take us to Tareesh, and we'll have houses and ground-cars and aircraft and gardens and lights, and all the lovely things we want. Aren't you, Dard?"

"Yes, Varnis; I will take you all to Tareesh, to all the wonderful things," Dard, son of Dard, promised, for such was the rule about Varnis.

Then he looked down from the pass into the country beyond. There were lower mountains, below, and foothills, and a wide blue valley, and, beyond that, distant peaks reared jaggedly against the sky. He pointed with his father's axe.

"We go down that way," he said.

So they went, down, and on, and on, and on, and on. The last cartridge was fired; the last sliver of Doorshan metal wore out or rusted away. By then, however, they had learned to make chipped stone, and bone, and reindeer-horn, serve their needs. Century after century, millennium after millennium, they followed the game-herds from birth to death, and birth replen-

ished their numbers faster than death depleted. Bands grew in numbers and split; young men rebelled against the rule of the old and took their women and children elsewhere.

They hunted down the hairy Neanderthalers, and exterminated them ruthlessly, the origin of their implacable hatred lost in legend. All that they remembered, in the misty, confused, way that one remembers a dream, was that there had once been a time of happiness and plenty, and that there was a goal to which they would some day attain. They left the mountains—were they the Caucasus? The Alps? The Pamirs?—and spread outward, conquering as they went.

We find their bones, and their stone weapons, and their crude paintings, in the caves of Cro-Magnon and Grimaldi and Altimira and Mas-d’Azil; the deep layers of horse and reindeer and mammoth bones at their feasting-place at Solutre. We wonder how and whence a race so like our own came into a world of brutish sub-humans.

Just as we wonder, too, at the network of canals which radiate from the polar caps of our sister planet, and speculate on the possibility that they were the work of hands like our own. And we concoct elaborate jokes about the “Men From Mars”—*ourselves*.

HAL CLEMENT

*Writers are a sedentary lot, but the widows of a number of bombed-out Nazis during the late war can testify that whilom B-24 pilot Hal Clement turned out to be quite a man of action. His first stories were largely set on paper between bombardment missions with the Eighth Air Force; when, after the war, he set up as a high-school science teacher for a while, he began to approach the popular impression of the writer as a retiring type. But Uncle Sam had other plans for Captain Clement, and he's back in the air again, flying under such highly classified conditions that it is only possible to say that it has something to do with "t*m*c b*mbx." But nothing stops Hal Clement; in the cockpit or in the classroom, he continues to produce such admirable science-fiction novels as Needle, Ice World and the forthcoming Mission of Gravity, and short stories like—*

Halo

"YOU DISAPPOINT me," the class superintendent said with some feeling. "I have a personal as well as a professional dislike of wastefully run farms, and you seem to have furnished a prime example." He paused briefly, watching in silence as the spheroidal forcing beds drifted smoothly about their central radiator. "Of course, I would be much more sympathetic with you if your own ill-advised actions were not so largely responsible for this situation." He checked his young listener's half-uttered protest. "Oh, I realize that youngsters have to learn, and experiment is the only source of knowledge; but why not use the results of other people's experiments? This sort of thing has happened before, I think you'll find."

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"I didn't know." The answer was sullen despite the grudging respect. "How was I supposed to?"

"Did you get an education or not?" There was some heat in the query. "I can't imagine what the primary teachers do these days. Even though you are so young, I understood that you had some qualifications and even a bit of promise in agriculture. That's why I thought you could be trusted without supervision for a few years. Am I to assume that you became dissatisfied with the yield of this farm?"

"Of course. Why else study agriculture?"

"Until you can answer that for yourself, I won't try to. Tell me in detail what you did. Did you try to step up the output of the central radiator?"

"What do you think I am?" The younger being's indignation flared abruptly.

The other remained calm and exhibited faint traces of amusement, permitting the feeling to show in his answer rather more plainly than was strictly tactful.

"Don't boil your crust off. You might not be able to spare it next time you go in to harvest. People still do try the stunt I mentioned, you know. Every now and then it works for someone after a fashion, so the rest feel it's still worth trying. If it wasn't that, just what did you do? You're missing a culture unit, if I remember this solar system correctly."

The student took a moment to find just the right words. "One of the lots seemed to be practically ideal. When it first solidified, it was just far enough from the radiator and just large enough to retain a thin surface film of light elements; and it responded beautifully to culturing with water-base growths. On the colder ones, by the way, I had good luck with ammonia cultures."

"Quite possible, in that sort of bed. I noticed a couple of them were bare, though. Was that another result of this experiment of yours?"

"Indirectly, yes." The young farmer looked a trifle apprehensive. "There was another plot, a good deal farther out and colder than my ideal one. But it was too hot for ammonia

growths and too small to furnish the pressure they seem to need—at least the ones I'm familiar with." The addition was made hastily.

"I judged that it should have a good supply of food elements, cooling where it did; and since it wasn't doing well where it was, I thought it would be a good idea to move it farther in."

The listener's manner lost some of its amused aspect.

"Just how did you decide to go about that? The energy involved would have demanded several times the mass of your own body, even with total conversion—which I can't believe you've mastered."

"I don't suppose I have. It seemed to me that the unit itself could furnish the mass without serious loss, though."

"I see." The comment was grim. "Go on."

"Well, I went in and set up a conversion reaction. I touched it off as well as I could on the forward side of the unit, though that was a little hard to arrange—the thing was spinning like mad, as most of them do. Maybe that was the reason I let a little too much mass get involved, or maybe the globe wasn't as massive as I had thought."

"You mean you were uncertain of its mass? Is something wrong with your perceptive faculties as well as your judgment? Just how old are you, anyway?"

"Fifteen." The sullenness, which had begun to depart from the youngster's tone as he warmed to his narrative, returned in full strength. The questioner noted it and realized that he was not being as tactful as he might be; but under the circumstances he felt entitled to a little emotion.

"Fifteen years on what scale?"

"Local—this furnace, around the mass-center of the system."

"Hmph. Continue."

"Most of the sphere was volatilized, and most of what wasn't was blown completely out of the system's gravitational influence. The rest—well, it's still circling the furnace in quite a wide variety of orbits but it's not much good to anyone."

There was a pause while the nearly useless outermost unit

swung beneath the two speakers, then on to the far side of the glowing sphere of gas that held it with unbreakable fingers of gravity. The supervisor was not actually boiling—that would be difficult even for a body composed largely of methane, oxygen, and similar solids when it is at a temperature of about half a degree absolute—but his temper was simmering. After a moment he spoke again.

"Let me get this straight. You sent a slave with a message that your farm had gotten out of hand and that you would like advice. Am I to understand that you spent so much time ruining one of your units that some of the others developed culture variations whose taste didn't appeal to you? I'm afraid my sympathy grows rapidly less."

"It's not that I don't like the stuff; it's that I can't eat it." The youngster must have been angry, too; there was no other imaginable reason why he should have made a statement at once so true in fact and so misleading in implication. The superintendent, swallowing the implication whole, permitted the remains of his temper to evaporate completely.

"You can't eat it? That is really too bad. Pardon me while I go to sample some of this repulsive chemical—or perhaps you would like to come along and show me what you have been eating. There is hardly enough drift in this area to support you, particularly with a decent-sized crew of slaves. What have you been feeding them? Perhaps you ought to let someone else take over this farm and get yourself a research job out in one of the drift clouds, soaking up your nourishment from a haze of free atoms ten parsecs across for a few years. You youngsters!"

"I've been eating from the ammonia units. So have the slaves."

"Very well, then I shall look over your water culture, which by elimination must be the one that's been giving trouble. On second thought, you needn't come along. It's the third plot from the furnace. I can find my way." He moved off abruptly, not even waiting for an answer.

And the student, with no slightest shadow of an excuse,

simply because of his own childish loss of temper, let him go without a word of warning.

It might, of course, have made no difference if he had spoken. The superintendent was annoyed, too, and might understandably have chosen to ignore his junior. His attention, as he permitted himself to fall toward the central radiator, was divided between his own irritation and the condition of the various plots. Only gradually did the latter feeling predominate.

He had to admit the outermost was too cold for much chemical action except actual life processes which were too slow to be useful. The fact that the youngster he had left above had induced anything at all to grow there was at least one point to his credit. It swung past only once while he was falling by its orbit. Though his gravity-given speed was slow, its speed was slower—and it had farther to go.

The next two he had noted earlier were bare of useful growths. He remembered now that the student had admitted this fact to be an indirect result of his experiment. The superintendent could not see the connection. The plots themselves, on closer inspection, seemed physically undamaged, and the student himself could not possibly have eaten them both clean, no matter what his hunger. Of course, a crowd of slaves might—but he was not going to accuse anybody yet of letting slaves get that far out from under control. They were not even allowed to approach a culture plot in person, being fed from its produce by their master.

The plots themselves were large bodies, though not the largest in the system, with their solid bulks veiled under mile after mile of hydrogen compounds. The superintendent's senses probed in vain for the enormously complex compounds that were the preferred food of his kind. Several much smaller bodies were gravitating about each of these plots, but none was large enough to hold the light elements in the liquid or gaseous form necessary for food culture.

The next unit had the merit of interesting appearance, if

nothing else. In addition to the more or less standard quota of bodies circling it, it possessed a regular halo of minute particles traveling in a solidly interwoven maze of orbits just outside the atmosphere. On the surface, and even in the atmosphere itself, its cultures were flourishing. The superintendent paused to take a sample, and had to admit that once again the youngster had not done too badly.

His temper cooling, he rode the farm plot most of the way around its orbit, taking an occasional taste and growing calmer by the moment. By the time he left the limits of his atmosphere, he was almost his normal self.

This, however, did not last long enough even for him to get rid of the globe's orbital speed, to say nothing of resuming his drop toward the Sun. He had slanted some distance inward and fallen well behind the ringed sphere when his attention was drawn to another, much smaller object well to one side of his line of flight.

Physically, there was little remarkable about it. It was less massive even than his own body, though a short period of observation disclosed that it was in an orbit about the central furnace, just as the farm plots were. Sometimes its outline was clear, at others it blurred oddly. Its brightness flickered in an apparently meaningless pattern. Merely on its physical description, there was nothing remarkable about it, but it seized and held the superintendent's puzzled attention. Off his planned course though it was, he swung toward it, wondering. The student had mentioned no friends or co-workers—

Gradually, details grew clearer and the superintendent's feelings grew grimmer. He did not like to believe what he saw, but the evidence was crowding in.

"Help! Please help! Master!"

The bubble of horror burst, and one of anger grew in its place. Not one of his own kind, injured or dying and an object of terror and revulsion thereby; this thing was a slave. A slave, moreover, well within the limits of the farm, where it had no business to be without supervision; a slave who dared call on him for help!

"What are you doing here?" The superintendent sent the question crackling along a tight beam toward the apparently helpless creature. "Did you enter this region without orders?"

"No, Master. I was . . . ordered."

"By whom? What happened to you? Speak more clearly!"

"By—I cannot, Master. Help me!" The irregular flickering of the slave's auroral halo brightened fitfully with the effort of radiating speech.

Unsympathetic as the superintendent normally was to such beings, he realized that help must be given if he were to learn anything. Conquering a distinct feeling of repugnance, he moved up beside the slave to investigate its injuries. He expected, naturally, to find the visible results of a thorough ion-lashing, that being the principal occupational hazard faced by the slaves; but what he actually saw almost made him forget his anger.

The unfortunate creature's outer crust was pitted—dotted and cratered with a pattern of circular holes which resembled nothing the superintendent had ever encountered. He knew the long, shallow scars of an ion-lashing and the broad, smoothed areas which showed on the crust of one of his people when close exposure to a sun had boiled away portions of his mass. These marks, however, looked almost as though the slave had been exposed to a pelting by granules of solid matter!

A ridiculous thought, of course. The stupidest slave could detect and avoid the occasional bits of rock and metal which were encountered in the interstellar void. After all, they had the same sensory equipment and physical powers as the masters. An unprejudiced judge might even have said they were of the same species as the masters.

Whatever had caused the creature's injury, there was little that could be done for it. Grudgingly, inspired far more by curiosity than by sympathy, the superintendent did that little, supplying hydrocarbons and other organic matter lately skimmed from the ringed planet.

Food, however, was not enough. Bits of extraneous metal were imbedded in its body, altering the precise pattern of

charged metal nodes that spelled life to these beings. Some of its own field nodes had apparently been chipped or blown away, and others were discharged. The creature's body was only a fraction of its normal size—the regular reserve of "food" compounds that ordinarily made up so much of even a slave's bulk had long since been consumed or had evaporated.

There was no doubt that it was dying. But there was some chance that it might gain strength enough to impart information if it were fed. It was—sparingly, of course.

"No sense wasting food on a slave that's about to die," the superintendent explained without brutality.

"Certainly not, Master," the slave agreed without resentment.

"What happened to you?" the superintendent repeated. The slave was in no condition to be coherent; but a lifetime of conditioning brought some order to its agony-dazed mind, and it answered.

"I was ordered to the inner plots—to harvest." The word-symbols came haltingly, but with sufficient clarity to be unmistakable, shocking as their implication was.

So the student had trusted slaves near a food supply! Perhaps that accounted for the two stripped planets.

"You went to harvest when a young fool like this orders it?"

"He was a master, and he gave the order. Many of us went; many of us have been going for years—and seldom returning. We did not wish it, Master, but he ordered it. What could we do?"

"You could have asked the first superintendent who came here whether it was better to disobey a Prime Order or a young master."

"You are the first to come, Master, as far as I know. And the young master said we were not to speak of this order to anyone. It is only because you command me to speak that I do so now—that and the fact that there is little more that he could do to me, anyway."

The overseer ignored the pointed closing sentence. "You say many of you have been ordered to do this, but few have

returned from the errand? What happened to them? What happened to you?"

"They die. I did not know how; now I suppose it must be—this way."

There was a pause, and the supervisor was moved to sarcasm. "I suppose they are struck by meteoric particles, as you seem to have been. Do slaves absorb personal characteristics such as stupidity from their masters? Could you not dodge the meteors?"

"No, not all of them. The region near the central furnace has more of such matter than any other place I have ever seen. Some pieces are iron, some are of other matter; but they cannot be avoided. They strike too hard. They cannot be absorbed in normal fashion, but simply boil off one's body material into space. The shock is so tremendous that I, at least, could do nothing toward recovering the material until it had dissipated beyond hope of salvage. That is the reason so much of my mass is gone; it was not merely starvation.

"Some of the other slaves did better than I—as I said, some of them have survived—but others did much worse. They would dive in toward the furnace, and their bodies would come falling back out in just about the shape I am."

"And still he sends his slaves in to harvest?"

"Yes. We did not do too badly, actually, on the largest plots; but then he got interested in the others farther in. After all, they're hotter. He ventured in himself almost to the orbit of the plot that was destroyed—did you know that?—but came out very quickly and sent us on all such journeys thereafter.

"We—or, rather, those who preceded me—cleaned off the next inner plot, the fourth from the central furnace, fairly well, though the loss of slaves was high. Then he wanted to start on the third. I was one of the first to work on this project.

"I did not expect to live, of course, after what I had heard from the others; but the order came, and I let myself fall toward the sun. My orbit passed close to the greatest of the plots, which the master has been harvesting himself, and I

hoped to strengthen myself with a little food from it as I passed."

That confession showed how certain the slave felt of his own imminent death, as well as the state of demoralization into which the student's activities had permitted his servitors to fall.

"But I did not dare take any food when the time came," the slave went on feebly. "As I passed through the region where the destroyed plot had been, drifting particles began to grow more numerous. At first there would be an occasional bit of stone or iron, which I could dodge easily. Then they came in twos and threes, and sometimes I would have to change an escape curve in mid-maneuver. Then they came in dozens and clusters, and at last I could avoid them no longer. I was struck several times in rapid succession.

"For a moment I almost turned back—I had never dreamed that anything could feel like that—and then I remembered the order and went on. And I was struck again, and again, and each time the order faded in my mind. I reached the orbit of the fourth planet, crossed it—and turned out again. It didn't seem to help; I was still being pelted. For a time I must have almost lost orientation; but at last I won out to a place near the orbit of the giant planet. That was where I remembered the order again.

"I had never disobeyed a master before, and I didn't know what to do, or say, or think. I'd start back toward the Sun, and remember what had happened, and come back out. Then I'd remember the master, and head in again. I didn't dare go out in the cold where he would be waiting. I didn't dare dive back into that storm of rock and metal from the old fifth planet. But I had to do something. I couldn't float by the orbit of the Giant Planet forever. He would find me there sooner or later, and that would be worse than if I had come out to him. I had to think."

That word struck the superintendent like a shock. The very idea of a slave's thinking—making a decision for himself con-

cerning an action he was to perform—was repugnant to a member of the dominant race. They preferred to think of their slaves as mindless creatures relying on their masters for the necessities of existence—a comforting fiction that had been maintained for so many rotations of the Galaxy that its originators had come to believe it themselves. He had suspected that this particular slave must be an unusual specimen in many ways; now he was sure of it.

It was this that kept him silent while the creature paused, visibly collected its waning energies, and resumed the tale.

"I found what I thought was the answer at last. Since the tremendous number of particles must have come from the farm that had been blown up, it seemed likely that their orbits would be more or less controlled by that and would have at least a slight family resemblance. If I were to take up a powered, nearly elliptical path through that region, matching velocities with most of them instead of falling in a practically parabolic orbit across their path, I should be able to avoid the worst of the blows."

Weakly, the shattered creature shuddered and paused, mustering strength to continue.

"I had about made up my mind to try this when I detected another slave inbound," it went on, "and it occurred to me that two would be better than one. If one died, at least the other could learn from what had happened. I caught him easily since he was in free fall and explained the idea. He seemed willing to follow any suggestion, not thinking for himself at all, so he went with me.

"For a while it worked. We got inside the orbit of the fourth planet without being hit more than a few times each—that was harder on me than on him, because I'd already been hurt quite a lot on the first trip. Into that level, a great deal of the wreckage is formed of quite large particles, anyway; it's easy to see and avoid. Farther in, though, where most of the heavy stuff either never went or was cleared out by collision with the inner planets in a few million of their revo-

lutions, there was much more extremely fine stuff. It actually seems to increase in concentration near the sun. Maybe radiation pressure has something to do with it.

"Anyway, we began to take a bad beating again. It was a little better than before. My idea must have had something to it, but it still wasn't good. The other slave wasn't used to it, either, and lost control of himself just as I had. We were almost to the third farm plot then, but he must have gone completely blind from pain. He apparently never sensed the food so near by—that plot is incredibly rich.

"He went blundering squarely into another, useless plot that accompanies the third one in its orbit; an object too small to hold culture material in that temperature range, though still several hundred times the diameter of my body or his. He rammed it hard, and the energy involved in matching velocities was more than enough to volatilize his mass completely. The object was pretty well scarred with impact craters, but he made one of the neatest.

"I was close enough then to the third planet to start harvesting—at least, I would have been under normal circumstances. I tried, but couldn't concentrate on one course of action long enough. The bombardment was endless. There are simply no words to describe what it was like. I was not twenty of its own diameters from the most amazingly rich farm plot I have ever seen, and was not able to touch a *bit* of it!

"It had been so long since it was harvested that substances completely strange to me had developed in its surface layers. There were carbohydrates, of course, and light-element oxides and carbonates which anyone would expect; but there were proteins more fantastically complex than anyone could well imagine. Their emanations nearly drove me wild. They must have been building up and breaking down at incredible speed at that temperature—I had quite an atmosphere out, as a result of boiling off surface matter to use up incoming radiant energy—and they had evolved to an unheard-of degree. And I couldn't get a taste!

"I could sense them, though, and in spite of the pain of the

meteor bombardment, I stayed near the planet, vacillating as I had done before, for a couple of hundred of its trips around the Sun. That may seem like a short time, but it was long enough to ruin my body past saving. It was only when my senses began to fail that I was able to turn away from it and fight my way out this far. I just managed to get into a stable orbit that would keep me clear of that hellish halo of planet fragments, and every now and then I succeeded in mustering enough energy to call for help, but I knew it was useless. Even had you come much sooner, it would still have been too late for me.

"I live to warn you, however. *Do not go within the orbit of the old fifth planet!* Do not even look within it, for if you sense what lies on that unharvested third world, you will be drawn to your doom as surely as I was ordered to mine!"

The slave fell silent, and the superintendent pondered its tale as they drifted on about the Sun. He could not, offhand, think of any adequate punishment for the student whose recklessness had brought about this state of affairs. The mere cruelty of ordering endless crowds of slaves to nearly certain death did not affect him particularly; but the waste of it did, very much. To him the thought of hundreds of lifeless bodies drifting endlessly about the Sun, boiling off a little more of their masses with each perihelion passage until nothing was left but a loose collection of high melting-point pebbles, was a painful picture of economic loss. The fact that the best farm plot in the system had apparently become unattainable was also to be considered, and the driving of at least one slave to the extreme of thinking for himself was not to be ignored.

Of course, everything should be checked before confronting the student with such charges. Only the last, after all, could be considered as yet a matter of objective knowledge.

The overseer moved abruptly away from the slave—Sunward. The dying creature, seeing him depart, called once more for aid, and was silenced instantly and permanently by a slashing beam of ions. For an instant the overseer regretted

the impulsive act—not from gratitude for the warning, to which he attached little weight and which was part of a slave's duty, but simply because it was impulsive rather than reasoned. But then he reflected that the creature could probably not have told much more anyway, even if it had survived until his return.

He was in no hurry. He let the gravity of the central furnace draw him in to the orbit of the Giant Planet, his senses covering the half-billion-mile sphere of space ahead where death was reputed to lurk.

At this range, all seemed innocuous. He watched the inner planets circling rapidly in their paths—even the giant one made most of a revolution during his fall—and noted that the slave had spoken the truth about a companion body to the third planet. But space seemed otherwise empty.

He did not completely abandon caution, however. What had proven fatal to slaves might be inconvenient or even dangerous to a master.

He stopped at the fifth planet's orbit and began a more minute examination of that suspicious volume of space.

The small bodies were there, all right. Thousands of them, even though he was not trying to detect anything less than a twentieth of his own diameter. They did show a rather vague preference for the orbit of the old fifth planet, as the slave had said. The greater number circled between the present fourth and fifth orbits, at any rate. There seemed no reason why he could not match velocities well enough to keep out of trouble. Why, chance alone could be trusted to protect him from collision with a few thousand asteroids, when they were scattered through something like ten-to-the-twenty-fourth-power cubic miles of space!

Still, there was little wisdom in going into possible danger without a very sound reason. It would be well to judge from his present position if such reason existed. His finer senses could easily operate at the half billion miles that separated him from the farthest point of the third planet's orbit. So,

holding his position, he focused his attention on the elusive farm plot in question.

Being so close to the central furnace, it revolved rapidly. He faced somewhat the same problem in examining it that a man would have trying to recognize a friend on a merry-go-round—assuming that the friend were spinning in his seat like a top at the same time.

It took the superintendent only a few revolutions of the body to adjust to this situation, however, and as details registered more and more clearly on his consciousness, he began to admit grudgingly that the slave had not exaggerated.

The plot was fabulous!

Substances for which he had no name abounded, impressing themselves on the analytical sense that was his equivalent of both taste and smell. Strange as they were, he could tell easily that they were foods—packed with available energy and carrying fascinating taste potentialities, organized to a completely unheard-of degree. They were growths of a type and complexity which simply never had a chance to evolve on the regularly harvested worlds of the Galaxy.

The overseer wondered whether it might not be worth while to let other plots run wild for a few years. His principal vice, by the standards of his people, was gluttony; but the most ascetic of his species would have been tempted uncontrollably by that planet.

He almost regretted the few tons of food he had taken on from the ringed planet—though he had, he told himself quickly, sacrificed much of that in helping the slave and would lose still more if he decided actually to penetrate into the high-temperature zones near the Sun.

Huge as his mass was, his normal temperature was so low that life processes went on at an incredibly slow pace. To him, a chemical reaction requiring only a few millennia to go to completion was like a dynamite explosion. A few pounds of organic compounds would feed his miles-thick bulk for many human lifetimes of high activity.

In short, the slave had been quite right.

Almost involuntarily, rationalizing his appetite as he went, the superintendent permitted himself to drift into the asteroid zone. With only the smallest part of his attention, he assumed a parabolic, free-fall orbit in the general plane of the system, with its perihelion point approximately tangent to the orbit of the third planet. At this distance from the Sun, the difference between parabolic and circular velocities was not too great to permit him to detect even the tiniest particles in time to avoid them. That fact, of course, changed as he fell sunward.

Perhaps he had been counting on a will power naturally superior to that of the slave who had warned him. If so, he had forgotten the effects of an equally superior imagination. The pull of the third planet was correspondingly stronger and, watching the spinning globe, he was jarred out of an almost hypnotic trance by the first collision. It awakened him to the fact that his natural superiority to the slave race might not be sufficient to keep him out of serious trouble.

The space around him—he was now well inside the orbit of the fourth planet—was literally crowded with grain-of-dust meteors, each, as he had seen on the slave's crust, able to blast out a crater many times its own volume in a living body. Individually, they were insignificant; collectively, they were deadly.

His attention abruptly wrenched back to immediate problems of existence, the superintendent started to check his fall and veer once more toward the safe, frozen emptiness of interstellar space. But the spell of the gourmet's paradise he had been watching was not that easily thrown off. For long moments, while the planet circled its primary once and again, he hung poised, with gluttony and physical anguish alternately gaining the upper hand in a struggle for possession of his will. Probably he would have lost, alone; but his student did have a conscience.

"Sir!" The voice came faintly but clearly to his mind. "Don't stay! You mustn't! I should never have let you come—but I was angry! I know I was a fool; I should have told you everything!"

"I learned. It was my own fault." The superintendent found it curiously difficult to speak. "I came of my own free will and I still think that plot is worth investigation."

"No! It's not your own free will—no will could remain free after seeing what that planet has to offer. I knew it and expected you to die—but I couldn't go through with it. Come, and quickly. I will help."

The student was in an orbit almost identical with that of the superintendent, though still a good deal farther out. Perhaps it was the act of looking at him, which took his attention momentarily from the alluring object below, that made the older being waver. Whatever it was, the student perceived the break and profited by it.

"Don't even look at it again, sir. Look at me, and follow—or if you'd rather not look at me, look at *that*!"

He indicated the direction plainly, and the dazed listener looked almost involuntarily.

The thing he saw was recognizable enough. It consisted of a small nucleus which his senses automatically analyzed. It consisted of methane and other hydrocarbons, some free oxygen, a few other light-element compounds, and had nuggets of heavier elements scattered through it like raisins in a plum pudding. Around it for thousands of miles there extended a tenuous halo of the more volatile of its constituent compounds. The thing was moving away from the Sun in an elliptical orbit, showing no sign of intelligent control. A portion of its gaseous envelope was driven on ahead by the pressure of sunlight from below.

It was a dead slave, but it could as easily have been a dead master.

A dead slave was nothing; *but the thing that had killed it could do the same to him.*

It was the first time in his incredibly long life that the personal possibility of death had struck home to him; and probably nothing less than that fear could have saved his life.

With the student close beside, he followed the weirdly glowing corpse out to the farthest point of its orbit; and as it

started to fall back into the halo of death girdling that harmless-looking star, he pressed on out into the friendly darkness.

Perhaps some day that third planet would be harvested; but it would not be by one of his kind—not, at least, until that guarding haze had been swept up by the planets that drifted through its protecting veil.

It was not a very good group, Wright reflected. That always seemed to be the case. When he had luck with observing weather, he had no one around to appreciate the things that could be seen. He cast a regretful glance toward the dome of the sixty-inch telescope, where a fellow candidate was taking another plate of his series, and wondered whether there were not some better way than part-time instructing to pay the expenses of a doctorate program.

Still, the night was good. Most of the time in the latitude—"Mr. Wright! Is that a cloud or the Aurora?"

"If you will stop to consider the present position of the Sun below the horizon," he answered indirectly, "you will discover that the patch of light you are indicating is directly opposite that point. It lies along the path of the Earth's shadow, though, of course, well beyond it. It is called the *Gegenschein* and, like the Zodiacal Light, is not too commonly visible at this latitude. We did see the Light some time ago, if you remember, on an evening when we started observing earlier. Actually, the *Gegenschein* is a continuation of the luminous band we call the Zodiacal Light. The latter can sometimes be traced all the way around the sky to the point we are now watching."

"What causes them?"

"The most reasonable assumption is that they are light reflected from small, solid particles—meteors. Apparently a cloud of such matter extends outward for some distance past the Earth's orbit, though just how far, it is hard to say. It grows fainter with distance from the Sun, as would be expected, except for the patch we call the *Gegenschein*."

"Why the exception?"

"I think one of you can answer that."

"Would it be for the same reason that the full Moon is so much more than twice as bright as either quarter? Simply because the particles are rough, and appear dark in most positions because of the shadows of irregularities on their own surfaces—shadows which disappear when the light is behind the observer?"

"I think you will agree that that would account for it," Wright said. "Evidently the meteors are there, are large compared to wavelengths of visible light, and form a definite part of the Solar System. I believe it was once estimated that if the space inside the Earth's orbit contained particles one millimeter in diameter and five miles apart, they would reflect enough light to account for what we are observing. They might, of course, be smaller and more numerous. Only that amount of reflecting surface is necessary."

"You had me worried," another voice broke in. "I'd been hearing for years that there would be little reason to fear collision with meteors when we finally get a rocket out of the atmosphere. For a moment, I thought a cloud such as you were working up to would riddle anything that got into space. One pinhead every five miles isn't so bad, though."

"There is a fairly good chance of collision, I would say," returned Wright, "but just what damage particles of that size would do, I am not sure. It seems rather likely that they would be volatilized by impact. How the hull of a rocket would react, we will have to find out by experience. I wouldn't mind taking the risk myself. I think we can sum up the greatest possibilities by saying that the meteoric content of the Solar System has and will have nothing but nuisance value to the human race, whether or not we ever leave our own planet."

A streak of white fire arced silently across the sky, putting a fitting period to the subject.

Wright wondered whether it would appear on his friend's photographic plate.

JAMES BLISH

John Campbell has pointed out that a great many of the best science-fiction writers—Asimov, de Camp, both of the Smiths—are scientists first and writers only with the fraction of time one ordinarily gives to a moderately entertaining hobby. Like all such rules, the exceptions are legion; and one of the most apparent is James Blish. Blish has contributed a good number of the most brilliantly conceived and beautifully executed stories in the science-fiction magazines of the past decade and more; but, large though the number is, it is only a fraction of his total fiction output of Westerns, detective stories, sports yarns and just about every other form of fiction for which a market existed. It is not necessary to point out that Blish breaks other rules as well, including the old one about Jacks of all trades; for there can be no doubt of the mastery of science-fiction techniques of the man who wrote the Okie stories, Surface Tension, A Case of Conscience, Bridge and—

Common Time

1.

Don't move.

It was the first thought that came into Garrard's mind when he awoke, and perhaps it saved his life. He lay where he was, strapped against the padding, listening to the round hum of the engines. That in itself was wrong; he should be unable to hear the overdrive at all.

He thought to himself: Has it begun already?

Otherwise everything seemed normal. The DFC-3 had crossed over into interstellar velocity, and he was still alive, and the ship was still functioning. The ship should at this

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moment be travelling at 22.4 times the speed of light—a neat 4,157,000 miles per second.

Somehow Garrard did not doubt that it was. On both previous tries, the ships had whiffed away toward Alpha Centauri at the proper moment when the overdrive should have cut in, and the split-second of residual image after they had vanished, subjected to spectroscopy, showed a Doppler shift which tallied with the acceleration predicted for that moment by Haertel.

The trouble was not that Brown and Cellini hadn't gotten away in good order. It was simply that neither of them had ever been heard from again.

Very slowly, he opened his eyes. His eyelids felt terrifically heavy. As far as he could judge from the pressure of the couch against his skin, the gravity was normal; nevertheless, moving his eyelids seemed almost an impossible job.

After long concentration he got them fully open. The instrument chassis was directly before him, extended over his diaphragm on its elbow-joint. Still without moving anything but his eyes, and those only with the utmost patience, he checked each of the meters. Velocity: 22.4 c. Operating temperature; normal. Ship temperature: 37° C. Air pressure: 778 mm. Fuel: No. 1 tank full, No. 2 tank full, No. 3 tank full, No. 4 tank nine-tenths full. Gravity: 1 g. Calendar: stopped.

He looked at it closely, though his eyes seemed to focus very slowly, too. It was, of course, something more than a calendar—it was an all-purpose clock, designed to show him the passage of seconds, as well as of the ten months his trip was supposed to take to the double star. But there was no doubt about it: the second-hand was motionless.

That was the second abnormality. Garrard felt an impulse to get up and see if he could start the clock again. Perhaps the trouble had been temporary and safely in the past. Immediately there sounded in his head the injunction he had drilled into himself for a full month before the trip had begun—

Don't move!

Don't move until you know the situation as far as it can be known without moving. Whatever it was that had snatched Brown and Cellini irretrievably beyond human ken was potent and totally beyond anticipation. They had both been excellent men, intelligent, resourceful, trained to the point of diminishing returns and not a micron beyond that point, the best men in the Project; and preparations for every knowable kind of trouble had been built into their ships, as they had been built into the DFC-3. Therefore, if there was nevertheless something wrong, it would be something that might strike from some commonplace quarter—and strike only once.

He listened to the humming. It was even and placid, and not very loud, but it disturbed him deeply. The overdrive was supposed to be inaudible, and the tapes from the first unmanned test vehicles had recorded no such hum. The noise did not appear to interfere with the overdrive's operation, or to indicate any failure in it. It was just an irrelevancy for which he could find no reason.

But the reason existed. Garrard did not intend to move until he found out what it was.

While he lay thinking about it, he noticed for the first time that he was not breathing. Though he felt not the slightest discomfort, the discovery called up so overwhelming a flash of panic that he very nearly sat bolt upright on the couch. Luckily—or so it seemed after the panic had begun to ebb—the curious lethargy which had affected his eyelids seemed to involve his whole body, for the impulse was gone before he could summon the energy to answer it. And the panic, poignant though it had been for an instant, turned out to be wholly intellectual. In a moment he was observing that his failure to breathe in no way discommoded him as far as he could tell—it was just there, waiting to be explained—

Or to kill him. But it hadn't, yet.

Engines hum; eyelids heavy; breathing absent; calendar stopped. The four facts added up to nothing. The temptation to move something, even if it were only a big toe, was strong, but he fought it back. He had been awake only a short while, half an hour at most, and already had noticed four abnormali-

ties. There were bound to be more, anomalies more subtle than these four, but available to close examination before he had to move. Nor was there anything in particular that he had to do, aside from caring for his own wants: the Project, on the chance that Brown's and Cellini's failures to return had resulted from some tampering with the overdrive, had made everything in the DFC-3 subject only to the computer, so that Garrard was in a very real sense just along for the ride. Only when the overdrive was off could he—

Pock.

It was a soft, low-pitched noise, rather like a cork coming out of a wine bottle. It seemed to have come just from the right of the control chassis. He halted a sudden jerk of his head on the cushions toward it with a flat fiat of will. Slowly, he moved his eyes in that direction.

He could see nothing that might have caused the sound. The ship's temperature dial showed no change, which ruled out a heat-noise from differential contraction or expansion, the only possible explanation he could bring to mind.

He closed his eyes—a process which turned out to be just as difficult as opening them had been—and tried to visualize what the calendar had looked like when he had first come out of anesthesia. After he got a clear and, he was almost sure, accurate picture, he opened his eyes again.

The sound had been the calendar, advancing one second. It was now motionless again, apparently stopped.

He did not know how long it normally took the second-hand to make that jump. The question had never come up. Certainly the jump, when it came at the end of each second, had been too fast for the eye to follow.

Belatedly, he realized what all this cogitation was costing him in terms of essential information. The calendar had moved. Above all and before anything else, he must know exactly how long it took it to move again—

He began to count, allowing an arbitrary five seconds lost. One-and-a-six, one-and-a-seven, one-and-a-eight—

Garrard had gotten only that far when he found himself plunged into Hell.

First, and utterly without reason, a sickening fear flooded swiftly through his veins, becoming more and more intense. His bowels began to knot, with infinite slowness. His whole body became a field of small, slow pulses, not so much shaking him as putting his limbs into contrary joggling motions and making his skin ripple gently under his clothing. Against the hum another sound became audible, a nearly subsonic thunder which seemed to be inside his head. Still the fear mounted, and with it came the pain, and the tenesmus—a board-like stiffening of his muscles, particularly across his abdomen and his shoulders, but affecting his forearms almost as grievously. He felt himself beginning, very gradually, to double at the middle, a motion about which he could do precisely nothing, a terrifying kind of dynamic paralysis . . .

It lasted for hours. At the height of it, his mind, even his very personality, was washed out utterly; he was only a vessel of horror. When some few trickles of reason began to return over that burning desert of reasonless emotion, he found that he was sitting up on the cushions, and that with one arm he had thrust the control chassis back on its elbow so that it no longer jutted over his body. His clothing was wet with perspiration which stubbornly refused to evaporate or to cool him. And his lungs ached a little, although he could still detect no breathing.

What under God had happened? Was it this that had killed Brown and Cellini? For it would kill him too, of that he was sure, if it happened often—or even if it happened only twice more, if the next two such things followed the first one closely. At the very best it would make a slobbering idiot of him, and though the computer might bring him and the ship back to Earth, it would not be able to tell the Project about this tornado of senseless fear.

The calendar said that the eternity in hell had taken three seconds. As he looked at it in academic indignation, it said *Pock* and condescended to make the total seizure four seconds long. With grim determination, Gerrard began again to count.

He took care to establish the counting as an absolutely

even, automatic process which would not stop at the back of his mind no matter what other problem he tackled along with it, or what emotional typhoons should interrupt him. Really compulsive counting cannot be stopped by anything, not the transports of love nor the agonies of empires. Garrard knew the dangers in deliberately setting up such a mechanism in his mind, but he also knew how desperately he needed to time that clock-tick. He was beginning to understand what had happened to him—but he needed exact measurement before he could put that understanding to use.

Of course there had been plenty of speculation on the possible effect of the overdrive on the subjective time of the pilot, but none of it had come to much. At any speed below the velocity of light, subjective and objective time were exactly the same as far as the pilot was concerned. For an observer on Earth, time aboard the ship would appear to be vastly slowed at near-light speeds, but for the pilot himself there would be no apparent change.

Since flight beyond the speed of light was impossible, although for slightly differing reasons, by both the current theories of relativity, neither theory had offered any clue as to what would happen on board a trans-light ship. They would not allow that any such ship could even exist. The Haertel transformation, on which, in effect, the DFC-3 flew, was non-relativistic: it showed that the apparent elapsed time of a trans-light journey should be identical in ship time and in the time of observers at both ends of the trip.

But since ship and pilot were part of the same system, both covered by the same expression in Haertel's equation, it had never occurred to anyone that the pilot and the ship might keep different times. The notion was ridiculous.

One-and-a-sevenhundredone, one-and-a-sevenhundredtwo, one-and-a-sevenhundredthree, one-and-a-sevenhundredfour

...
The ship was keeping ship time, which was identical with observer time. It would arrive at the Alpha Centauri system in ten months. But the pilot was keeping Garrard time, and

it was beginning to look as though he wasn't going to arrive at all.

It was impossible, but there it was. Something—almost certainly an unsuspected physiological side-effect of the overdrive field on human metabolism, an effect which naturally could not have been detected in the preliminary, robot-piloted tests of the overdrive—had speeded up Garrard's subjective apprehension of time, and had done a thorough job of it.

The second-hand began a slow, preliminary quivering as the calendar's innards began to apply power to it. Seventy-hundred-forty-one, seventy-hundred-forty-two, seventy-hundred-forty-three . . .

At the count of 7,058 the second-hand began the jump to the next graduation. It took it several apparent minutes to get across the tiny distance, and several more to come completely to rest. Later still, the sound came to him:

Pock.

In a fever of thought, but without any real physical agitation, his mind began to manipulate the figures. Since it took him longer to count an individual number the larger the number became, despite the dropping of the compensating "one-and-a" as soon as the numbers passed one thousand, the interval between the two calendar-ticks probably was closer to 7,200 seconds than to 7,058. Figuring backward brought him quickly to the equivalence he wanted:

One second in ship time was two hours in Garrard time.

Had he really been counting for what was, for him, two whole hours? There seemed to be no doubt about it. It looked like a long trip ahead.

Just how long it was going to be struck him with stunning force. Time had been slowed for him by a factor of 7200. He would get to Alpha Centauri in just 720,000 months.

Which was—

Six thousand years!

2.

Garrard sat motionless for a long time after that, the Nessus-shirt of warm sweat swathing him persistently, refusing even to cool. There was, after all, no hurry.

Six thousand years. There would be food and water and air for all that time, or for sixty or six hundred thousand years; the ship would synthesize his needs as a matter of course for as long as the fuel lasted, and the fuel bred itself. Even if Garrard ate a meal every three seconds of objective or ship time (which, he realized suddenly, he wouldn't be able to do, for it took the ship several seconds of objective time to prepare and serve up a meal once it was ordered; he'd be lucky if he ate once a day, Garrard time), there would be no reason to fear any shortage of supplies. That had been one of the earliest of the possibilities for disaster that the Project engineers had ruled out in the design of the DFC-3.

But nobody had thought to provide a mechanism which would indefinitely refurbish Garrard. After six thousand years, there would be nothing left of him but a faint film of dust on the DFC-3's dully-gleaming horizontal surfaces. His corpse might outlast him a while, since the ship itself was sterile—but eventually he would be consumed by the bacteria which he carried in his own digestive tract, the bacteria which he needed to synthesize part of his B-vitamin needs while he lived, but which would consume him without compunction once he had ceased to be as complicated and delicately balanced a thing as a pilot—or as any other kind of life.

He was, in short, to die before the DFC-3 had gotten fairly away from Sol; and when, after 12,000 apparent years, the DFC-3 returned to Earth, not even his mummy would be still aboard.

The chill that went through him at that seemed almost unrelated to the way he thought he felt about the discovery: it lasted an enormously long time, and insofar as he could characterize it at all, it seemed to be a chill of urgency and

excitement, not at all the kind of chill he should be feeling at a virtual death-sentence. Luckily it was not as intolerably violent as the last such emotional convulsion, and when it was over, two clock-ticks later, it left behind a residuum of doubt.

Suppose that this effect of time-stretching was only mental? The rest of his bodily processes might still be keeping ship time; he had no immediate reason to believe otherwise. If so, he would be able to move about only on ship time, too; it would take many apparent months to complete the simplest task.

But he would live, if that were the case. His mind would arrive at Alpha Centauri six thousand years older, and perhaps madder, than his body, but he would live.

If, on the other hand, his bodily movements were going to be as fast as his mental processes, he would have to be enormously careful. He would have to move slowly and exert as little force as possible. The normal human hand movement, in such a task as lifting a pencil, took the pencil from a state of rest to another state of rest by imparting to it an acceleration of about two feet per second per second—and, of course, decelerated it by the same amount. If Garrard were to attempt to impart to a two-pound weight which was keeping ship time an acceleration of $14,400 \text{ ft/sec}^2$ in his time, he'd have to exert a force of 900 pounds on it.

The point was not that it couldn't be done—but that it would take as much effort as pushing a stalled jeep. He'd never be able to lift that pencil with his forearm muscles alone; he'd have to put his back into the task.

And the human body wasn't engineered to maintain stresses of that magnitude indefinitely. Not even the most powerful professional weight-lifter is forced to show his prowess throughout every minute of every day.

Pock.

That was the calendar again; another second had gone by. Or another two hours. It had certainly seemed longer than a second, but less than two hours, too. Evidently subjective time was an intensively recompllicated measure—

even in this world of micro-time in which his mind, at least, seemed to be operating, he could make the lapses between calendar-ticks seem a little shorter by becoming actively interested in some problem or other. That would help, during the waking hours, but it would help only if the rest of his body were not keeping the same time as his mind. If it were not, then he would lead an incredibly active, but perhaps not intolerable mental life during the many centuries of his awake-time, and would be mercifully asleep for nearly as long.

Both problems—that of how much force he could exert with his body, and how long he could hope to be asleep in his mind—emerged simultaneously into the forefront of his consciousness while he still sat inertly on the hammock, their terms still much muddled together. After the single tick of the calendar, the ship—or the part of it that Gerrard could see from here—settled back into complete rigidity. The sound of the engines, too, did not seem to vary in frequency or amplitude, at least as far as his ears could tell. He was still not breathing. Nothing moved, nothing changed.

It was the fact that he could still detect no motion of his diaphragm or his rib-cage that decided him at last. His body had to be keeping ship time, otherwise he would have blacked out from anoxia long before now. That assumption explained, too, those two incredibly prolonged, seemingly sourceless saturnalias of emotion through which he had suffered: they had been nothing more nor less than the response of his endocrine glands to the purely intellectual reactions he had experienced earlier. He had discovered that he was not breathing, had felt a flash of panic and had tried to sit up; long after his mind had forgotten those two impulses, they had inched their way from his brain down his nerves to the glands and muscles involved, and actual, *physical* panic had supervened; when that was over, he actually was sitting up, though the flood of adrenalin had prevented his noticing the motion as he had made it. The later chill, less violent and only apparently associated with the discovery that he might die long before the trip was completed, actually had been his body's response to a much earlier mental command—the

abstract fever of interest he had felt while computing the time-differential had been responsible for it.

Obviously, he was going to have to be very careful with apparently cold and intellectual impulses of any kind—or he would pay for them later with a prolonged and agonizing glandular reaction. Nevertheless, the discovery gave him considerable satisfaction, and he allowed it free play; it certainly could not hurt him to feel pleased for a few hours, and the glandular pleasure might even prove helpful if it caught him at a moment of mental depression. Six thousand years, after all, provided a considerable number of opportunities for feeling down in the mouth, so it would be best to encourage all pleasure-moments and let the after-reaction last as long as it might. It would be the instants of panic, of fear, of gloom which he would have to regulate sternly the moment they came into his mind; it would be those which would otherwise plunge him into four, five, six, perhaps even ten Garrard-hours of emotional inferno.

Pock.

There now, that was very good: there had been two Garrard-hours which he had passed with virtually no difficulty of any kind, and without being especially conscious of their passage. If he could really settle down and become used to this kind of scheduling, the trip might not be as bad as he had at first feared. Sleep would take immense bites out of it, and during the waking periods he could put in one hell of a lot of creative thinking.

During a single day of ship time, Garrard could get in more thinking than any philosopher of Earth could have managed during an entire lifetime. Garrard could, if he disciplined himself sufficiently, devote his mind for a century to running down the consequences of a single thought, down to the last detail, and still have millennia left to go on to the next thought. What panoplies of pure reason could he not have assembled by the time 6,000 years had gone by? With sufficient concentration, he might come up with the solution to the Problem of Evil between breakfast and dinner of a single ship's day,

and in a ship's month might put his finger on the First Cause!
Pock.

Not that Garrard was sanguine enough to expect that he would remain logical or even sane throughout the trip. The vista was still grim in much of its detail. But the opportunities, too, were there. He felt a momentary regret that it hadn't been Haertel, rather than himself, who had been given such an opportunity—

Part

—for the old man could certainly have made better use of it than Garrard could; the situation demanded someone trained in the highest rigors of mathematics to be put to the best conceivable use. Still and all Garrard began to feel—

Print

—that he would give a good account of himself, and it tickled him to realize that (as long as he held onto his essential sanity) he would return—

Figure 1

—to Earth after ten Earth months with knowledge centuries advanced beyond anything—

For

—that Haertel knew, or that anyone could know—

Figure 1

-who had to work within a normal lifetime. Pock. The whole prospect tickled him. Pock. Even the clock-tick seemed more cheerful. Pock. He felt fairly safe now Pock in disregarding his drilled-in command Pock against moving Pock, since in any Pock event he Pock had already Pock moved Pock without Pock being Pock harmed Pock Pock Pock Pock Pock pockpockpockpockpockpockpock . . .

He yawned, stretched, and got up. It wouldn't do to be too pleased, after all. There were certainly many problems that still needed coping with, such as how to keep the impulse toward getting a ship-time task performed going while his higher centers were following the ramifications of some purely philosophical point. And besides . . .

And besides, he had just moved.

More than that: he had just performed a complicated maneuver with his body *in normal time!*

Before he looked at the calendar itself, the message it had been ticking away at him had penetrated. While he had been enjoying the protracted, glandular backwash of his earlier feeling of satisfaction, he had failed to notice, at least consciously, that the calendar was accelerating.

Goodbye, vast ethical systems which would dwarf the Greeks. Goodbye, calculi aeons advanced beyond the spinor-calculus of Dirac. Goodbye, cosmologies by Garrard which would allot God a job as third-assistant-waterboy in an n -dimensional backfield. Goodbye, also, to a project he had once tried to undertake in college—to describe and count the positions of love, of which, according to under-the-counter myth, there were supposed to be at least 48. Garrard had never been able to carry his tally beyond 20, and he had just lost what was probably his last opportunity to try again.

The micro-time in which he had been living had worn off, only a few objective minutes after the ship had gone into overdrive and he had come out of the anesthetic. The long intellectual agony, with its glandular counterpoint, had come to nothing. Garrard was now keeping ship time.

Garrard sat back down on the hammock, uncertain whether to be bitter or relieved. Neither emotion satisfied him in the end; he simply felt unsatisfied. Micro-time had been bad enough while it lasted, but now it was gone, and everything seemed normal. How could so transient a thing have killed Brown and Cellini? They were stable men, more stable, by his own private estimation, than Garrard himself. Yet he had come through it. Was there more to it than this?

And if there was—what, conceivably, could it be?

There was no answer. At his elbow, on the control chassis which he had thrust aside during that first moment of infinitely protracted panic, the calendar continued to tick. The engine noise was gone. His breath came and went in natural rhythm. He felt light and strong. The ship was quiet, calm, unchanging.

The calendar ticked, faster and faster. It reached and passed the first hour, ship time, of flight in overdrive.

Pock.

Garrard looked up in surprise. The familiar noise, this time, had been the hour-hand jumping one unit. *The minute-hand was already sweeping past the half-hour.*

The second-hand was whirling like a propeller—and while he watched it, it speeded up to complete invisibility—

Pock.

Another hour. The half-hour already passed. *Pock.* Another hour. *Pock.* Another. *Pock. Pock. Pock. Pock, Pock, Pock, Pock, Pock-pock-pock-pock-pock-pock-pock-pock . . .*

The hands of the calendar swirled toward invisibility as time ran away with Garrard. Yet the ship did not change. It stayed there, rigid, inviolate, invulnerable. When the date-tumblers reached a speed at which Garrard could no longer read them, he discovered that once more he could not move—and that, although his whole body seemed to be aflutter like that of a humming-bird, nothing coherent was coming to him through his senses. The room was dimming, becoming redder; or no, it was . . .

But he never saw the end of the process, never was allowed to look from the pinnacle of macro-time toward which the Haertel overdrive was taking him.

The psuedo-death took him first.

3.

That Garrard did not die completely and within a comparatively short time after the DFC-3 had gone into overdrive was due to the purest of accidents, but Garrard did not know that. In fact, he knew nothing at all for an indefinite period, sitting rigid and staring, his metabolism slowed down to next to nothing, his mind almost utterly inactive. From time to time a single wave of low-level metabolic activity passed through him—what an electrician might have termed a “maintenance turnover”—in response to the urgings of some

occult survival urge, but these were of so basic a nature as to reach his consciousness not at all.

This was the psuedo-death.

Then, it was as if a single dim light had been turned on in the midst of an enormous cavern. He was—no, not conscious again, but at least he was once more alive, and in the deep levels of his mind that fact registered. He began to breathe normally. An observer might have judged him to be asleep, as in fact he was. The sleep was very deep, but at least it was no longer the pseudo-death.

When the observer actually arrived, however, Garrard woke. He could make very little sense out of what he saw or felt even now, but one fact was clear: the overdrive was off—and with it the crazy alterations in time-rates—and there was strong light coming through one of the ports. The first leg of the trip was over. It had been these two changes in his environment which had restored him to life.

The thing or things which had restored him to consciousness, however, was—it was what? It made no sense. It was a construction, a rather fragile one, which completely surrounded his hammock. No, it wasn't a construction, but evidently something alive, a living being, organized horizontally, that had arranged itself in a circle about him. No, it was a number of beings. Or a combination of all of these things.

How it had gotten into the ship was a mystery, but there it was. Or there they were.

"How do you hear?" the creature said abruptly. Its voice, or their voices, came at equal volume from every point in the circle, but not from any particular point in it. Garrard could think of no reason why that should be unusual.

"I—" he said. "Or we—we hear with our ears. Here."

His answer, with its unintentionally long chain of open vowel-sounds, rang ridiculously. He wondered why he was speaking such an odd language.

"We-they wooed to pitch you-yours thiswise," the creature said. With a thump, a book from the DFC-3's ample library fell to the deck beside the hammock. "We wooed there and

there and there for a many. You are the being-Garrard. We-they are the clinesterton beademung, with all of love."

"With all of love," Garrard echoed. The beademung's use of the language they both were speaking was odd, but again Garrard could find no logical reason why the beademung's usage should be considered wrong.

"Are—are you-they from Alpha Centauri?" he said hesitantly.

"Yes, we hear the twin radiocoeles, that show there beyond the gift-orifices. We-they pitched that the being-Garrard wooed with most adoration these twins and had mind to them, soft and loud alike. How do you hear?"

This time the being-Garrard understood the question. "I hear Earth," he said. "But that is very soft, and does not show."

"Yes," said the beademung. "It is a harmony, not a first, as ours. The All-Devouring listens to lovers there, not on the radiocoeles. Let me-mine pitch you-yours so to have mind of the rodalent beademung and other brothers and lovers, along the channel which is fragrant to the being-Garrard."

Garrard found that he understood the speech without difficulty. The thought occurred to him that to understand a language on its own terms, without having to put it back into English in one's own mind, is an ability that is won only with difficulty and long practice; but instantly his mind said, But it is English; which of course it was. The offer the clinesterton beademung had just made was enormously hearted, and he in turn was much minded and of love, to his own delighting as well as to the beademungen; that almost went without saying.

There were many matings of ships after that, and the being-Garrard pitched the harmonies of the beademungen, leaving his ship with the many gift orifices in harmonic for the All-Devouring to love, while the beademungen made show of they-theirs.

He tried, also, to tell how he was out of love with the over-drive, which wooed only spaces and times, and made feature-

lings. The rodalent beademung wooed the overdrive, but it did not pitch he-them.

Then the being-Garrard knew that all the time was devoured, and he must hear Earth again.

"I pitch you-them to fullest love," he told the beademungen. "I shall adore the radiocoles of Alpha and Proxima Centauri, 'on Earth as it is in Heaven.' Now the overdrive my-other must woo and win me, and make me adore a featureling much like silence."

"But you will be pitched again," the clinesterton Beademung said. "After you have adored Earth. You are much loved by Time, the All-Devouring. We-they shall wait for this othering."

Privately Garrard did not faith as much, but he said, "Yes, we-they will make a new wooing of the beademungen at some other radiant. With all of love."

On this the beademungen made and pitched adorations, and in the midst the overdrive cut in. The ship with the many gift orifices and the being-Garrard him-other saw the twin radiocoles sundered away.

Then, once more, came the pseudo-death.

4.

When the small candle lit in the endless cavern of Garrard's psuedo-dead mind, the DFC-3 was well inside the orbit of Uranus. Since the sun was still very small and distant, it made no spectacular display through the nearby port, and nothing called him from the post-death sleep for nearly two days.

The computers waited patiently for him. They were no longer immune to his control; he could now tool the ship back to Earth himself if he so desired. But the computers were also designed to take into account the fact that he might be truly dead by the time the DFC-3 got back. After giving him a solid week, during which time he did nothing but sleep, they took over again. Radio signals began to go out, tuned to a special channel.

An hour later, a very weak signal came back. It was only a directional signal, and it made no sound inside the DFC-3—but it was sufficient to put the big ship in motion again.

It was that which woke Garrard. His conscious mind was still glazed over with the icy spume of the pseudo-death, and as far as he could see the interior of the cabin had not changed one whit, except for the book on the deck—

The book. The clinesterton beademung had dropped it there. But what under God was a clinesterton beademung? And what was he, Garrard, crying about? He did not understand. He remembered dimly some kind of experience out there by the Centauri twins—

—*the twin radiocetes*—

There was another one of those words. It seemed to have Greek roots, but he knew no Greek—and besides, why would Centaurians speak Greek?

He leaned forward and actuated the switch which would roll the shutter off the front port, actually a telescope with a translucent viewing screen. It showed a few stars and a faint numbus off on one edge which might be the Sun. At about one o'clock on the screen was a planet about the size of a pea which had tiny projections, like tea-cup handles, on each side. The DFC-3 hadn't passed Saturn on its way out; at that time the planet had been on the other side of the sun from the route the starship had had to follow. But Saturn was certainly difficult to mistake.

He was on his way home—and he was still alive and sane. Or was he still sane? These fantasies about Centaurians, which still seemed to have such a profound emotional effect upon him, did not argue very well for the stability of his mind.

But they were fading rapidly. When he discovered, clutching at the handiest fragments of the "memories," that the plural of *beademung* was *beademungen*, he stopped taking the problem seriously. Obviously a race of Centaurians who spoke Greek wouldn't also be forming weak German plurals. The whole garbled business had obviously been thrown up by his unconscious.

But what *had* he found by the Centaurus stars?

There was no answer to that question but that incomprehensible mumbo-jumbo about love, the All-Devouring, and beademungen. Possibly he had never seen the Centaurus stars at all, but had been lying here cold as a mackeral for the entire twenty months.

Or had it been 12,000 years? After the tricks the overdrive had played with time, there was no way to tell what the objective date actually was. Frantically Garrard put the telescope into action. Where was the Earth? After 12,000 years—

The Earth was there. Which, he realized swiftly, proved nothing. The Earth had lasted for many millions of years; 12,000 years was nothing to a planet. The Moon was there, too; both were plainly visible, on the far side of the Sun, but not too far to pick them out clearly with the telescope at highest power. Garrard could even see a clear sun-highlight on the Atlantic Ocean, not far east of Greenland; evidently the computers were bringing the DFC-3 in on the Earth from about 23° north of the plane of the ecliptic.

The Moon, too, had not changed. He could even see on its face the huge splash of white, mimicking the sun-highlight on Earth's ocean, which was the magnesium hydroxide landing beacon which had been dusted over the Mare Vaporum in the earliest days of spaceflight, with a dark spot on its southern edge which could only be the crater Monilius.

But that again proved nothing. The Moon never changed. A film of dust laid down by modern man on its face would last for millennia—what, after all, existed on the Moon to blow it away? The Mare Vaporum beacon covered more than 4000 square miles; age would not dim it, nor could man himself undo it either accidentally or on purpose in anything under a century. When you dust an area that large on a world without atmosphere, it stays dusted.

He checked the stars against his charts. They hadn't moved; why should they have, in only 12,000 years? The pointer-stars in the Dipper still pointed to Polaris. Draco, like a fantastic bit of tape, wound between the two Bears and Cepheus and Cassiopeia as it always had done. These con-

stellations told him only that it was spring in the northern hemisphere of Earth.

But spring of what year?

Then, suddenly, it occurred to him that he had a method of finding the answer. The Moon causes tides in the Earth, and action and reaction are always equal and opposite. The Moon cannot move things on Earth without itself being affected—and that effect shows up in the Moon's angular momentum. The Moon's distance from the Earth increases steadily by 0.6 inches every year. At the end of 12,000 years, it should be 600 feet farther away from the Earth than it had been when Garrard left it.

Was it possible to measure? Garrard doubted it, but he got out his ephemeris and his dividers anyhow, and took pictures. While he worked, the Earth grew nearer. By the time he had finished his first calculation, which was indecisive because it allowed a margin for error greater than the distances he was trying to check, Earth and Moon were close enough in the telescope to permit much more accurate measurements.

Which were, he realized wryly, quite unnecessary. The computer had brought the DFC-3 back, not to an observed sun or planet, but simply to a calculated point. That Earth and Moon would not be near that point when the DFC-3 returned was not an assumption that the computer could make. That the Earth was visible from here was already good and sufficient proof that no more time had elapsed than had been calculated for from the beginning.

This was hardly new to him; it had simply been retired to the back of his mind. Actually he had been doing all this figuring for one reason, and one reason only: because deep in his brain, set to work by himself, there was a mechanism that demanded counting. Long ago, while he was still trying to time the ship's calendar, he had initiated compulsive counting—and it appeared that he had been counting ever since. That had been one of the known dangers of deliberately starting such a mental mechanism, and now it was bearing fruit in these perfectly useless astronomical exercises.

The insight was healing. He finished the figures roughly,

and that unheard moron deep inside his brain stopped counting at last. It had been pawing its abacus for twenty months now, and he imagined that it was as glad to be retired as he was to feel it go.

His radio squawked and said anxiously, "DFC-3. DFC-3. Garrard, do you hear me? Are you still alive? Everybody's going wild down here. Garrard, if you hear me, call us!"

It was Haertel's voice. Garrard closed the dividers so convulsively that one of the points nipped into the heel of his hand.

"Haertel, I'm here. DFC-3 to the Project. This is Garrard." And then, without knowing quite why, he added: "With all of love."

Haertel, after all the hoopla was over, was more than interested in the time-effects. "It certainly enlarges the manifold in which I was working," he said. "But I think we can account for it in the transformation. Perhaps even factor it out, which would eliminate it as far as the pilot is concerned. We'll see, anyhow."

Garrard swirled his highball reflectively. In Haertel's cramped old office in the Project's administration shack, he felt both strange and as old and compressed, constricted. He said, "I don't think I'd do that, Adolph. I think it saved my life."

"How?"

"I told you that I seemed to die after a while. Since I got home I've been reading, and I've discovered that the psychologists take far less stock in the individuality of the human psyche than you and I do. You and I are physical scientists, so we think about the world as being all outside our skins, something which is to be observed, but which doesn't alter the essential I. But evidently that old solipsistic position isn't quite true. Our very personalities, really, depend in large part upon all the things in our environment, large and small, that exist outside our skins. If by some means you could cut a human being off from every sense impression that comes to him from

outside, he would cease to exist as a personality within two or three minutes. Probably he would die."

"Unquote: Harry Stack Sullivan," Haertel said, drily. "So?"

"So," Garrard said, "think of what a monotonous environment the inside of a spaceship is. It's perfectly rigid, sterile, unchanging, lifeless. In ordinary interplanetary flight in such an environment, even the most hardened spaceman may go off his rocker now and then. You know the typical spaceman's psychosis as well as I do, I suppose. The man's personality goes rigid, just like his surroundings. It used to happen to submariners, too. Usually he recovers as soon as he makes port and makes contact with a more or less normal world again.

"But in the DFC-3, I was cut off from the world around me much more severely. I couldn't look outside the ports—I was in overdrive and there was nothing to see. I couldn't communicate with home, because I was going faster than light. And then I found I couldn't move, too, for an enormous long while, and that even the instruments that are in constant change for the usual spaceman wouldn't be in motion for me. Even those were fixed.

"After the time rate began to pick up, I found myself in an even more impossible box. The instruments moved, all right, but they moved too fast for me to read them. The whole situation was now utterly rigid—and, in effect, I died. I froze as solid as the ship around me, and stayed that way as long as the overdrive was on."

"By that showing," Haertel said drily, "the time effects were hardly your friends."

"But they were, Adolph. Look. Your engines act on subjective time; they keep it varying along continuous curves, from far-too-slow to far-too-fast, and, I suppose, back down again. Now, this is a *situation of continuous change*. It wasn't marked enough, in the long run, to keep me out of pseudo-death; but it was sufficient to protect me from being obliterated altogether, which I think is what happened to Brown and Cellini. Those men knew that they could shut down the

overdrive if they could just get to it, and they killed themselves trying. But I knew that I just had to sit and take it—and, by my great good luck, your sine-curve time-variation made it possible for me to survive."

"Ah, ah," Haertel said. "A point worth considering—though I doubt that it will make interstellar travel very popular!"

He dropped back into silence, his thin mouth pursed. Garrard took a grateful pull at his drink. At last Haertel said:

"Why are you in trouble with the authorities over these Centaurians? It seems to me that you have done a good job. It was nothing that you were a hero, any fool can be brave, but I see also that you thought, where Brown and Cellini evidently only reacted. Is there some secret about what you found when you reached those two stars?"

"Yes, there is," Garrard said. "But I've already told you what it is. When I came out of the pseudo-death, I was just a sort of plastic palimpsest upon which anybody could have made a mark. My own environment, my ordinary Earth environment, was a hell of a long way away. My present surroundings were nearly as rigid as they had ever been. When I met the Centaurians—if I did, and I'm not at all sure of that—they became the most important thing in my world, and my personality changed to accommodate and understand them. That was a change about which I couldn't do a thing.

"Possibly I did understand them. But the man who understood them wasn't the same man you're talking to now, Adolph. Now that I'm back on Earth, I don't understand that man. He even spoke English in a way that's gibberish to me. If I can't understand myself during that period—and I can't, I don't even believe that that man was the Garrard I know—what hope have I of telling you or the Project about the Centaurians? They found me in a controlled environment, and they altered me by entering it. Now that they're gone, nothing comes through; I don't even understand why I think they spoke English!"

"Did they have a name for themselves?"

"Sure," Garrard said. "They were the heademungen."

"What did they look like?"

"I never saw them."

Haertel leaned forward. "Then how—"

"I heard them. I think." Garrard shrugged, and tasted his Scotch again. He was home, and on the whole he was pleased.

But in his malleable mind he heard someone say, *On Earth, as it is in Heaven*: and then, in another voice, which might also have been his own (why had he thought "him-other"?), *It is later than you think*.

"Adolph," he said, "is this all there is to it? Or are we going to go on with it from here? How long will it take to make a better starship, a DFC-4?"

"Many years," Haertel said, smiling kindly. "Don't be anxious, Garrard. You've come back, which is more than the others managed to do, and nobody will ask you to go out again. I really think that it's hardly likely that we'll get another ship built during your lifetime, and even if we do, we'll be slow to launch it. We really have very little information about what kind of a playground you found out there."

"I'll go," Garrard said. "I'm not afraid to go back—I'd like to go. Now that I know how the DFC-3 behaves, I could take that again, bring you back proper maps, tapes, photos."

"Do you really think," Haertel said, his face suddenly serious, "that we could let the DFC-3 go out again? Garrard, we're going to take that ship apart practically molecule by molecule; that's preliminary to the building of any DFC-4. And no more can we let you go. I don't mean to be cruel, but has it occurred to you that this desire to go back may be the result of some kind of post-hypnotic suggestion? If so, the more badly you want to go back, the more dangerous to us all you may be. We are going to have to examine you just as thoroughly as we do the ship. If these beademungen wanted you to come back, they must have had a reason—and we have to know that reason."

Garrard nodded, but he knew that Haertel could see the slight movement of his eyebrows and the wrinkles forming in his forehead, the contractions of the small muscles which stop the flow of tears only to make grief patent on the rest of the face.

"In short," he said, "*don't move.*"

Haertel looked politely puzzled. Garrard, however, could say nothing more. He had returned to humanity's common time, and would never leave it again.

Not even, for all his dimly-remembered promise, with all there was left in him of love.

RICHARD WILSON

Richard Wilson holds what may be a record as the newest old-timer in the science fiction field; after a number of splendid little short stories before the war, he turned to other fields for almost a decade. After several years with a news wire service, first as a reporter and in time as news editor for the whole national net, he returned to science fiction and New York at the same time. The present sensitive and brilliant tale owes much in the way of help and inspiration to his charming wife (known to science fiction fans a few years ago by her pen-name, Leslie Perri); which makes it remarkably appropriate that its title should be—

Love

He was from Mars and she was from Earth; and you know what they thought of Martians in those days. He wasn't very tall, as Martians weren't; but that was all right, because she was unusually tiny and only came to his shoulder. They made fun of a Martian's anatomy then. There were a lot of jokes made by professional so-called comedians, just as it had once been considered funny to tell stories about Jews and Scotsmen.

Maybe Jac wasn't much to look at, by standards of Earth model agencies, but he was intelligent and kind and Ellen loved him. She shouldn't have told her father that, she knew now. It had been difficult enough to be with Jac before the night she'd gone to her father with the confession of her love. He'd stormed up and down the living room of their house at the edge of the spaceport. He'd talked about position and family and biological impossibility. He'd invoked the memory of her dead mother and reminded her of the things he had

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sacrificed to give her the education *he'd* never had: the special schools and the tutoring. He said that if she could see this Martian—this Jac person—she'd understand his point of view and thank him for his efforts to spare her the anguish she would experience as a girl who had crossed the planet line. He didn't stop till he had brought tears to the blind eyes of his daughter.

Only then did he become calm and, with a faint twinge of conscience, tell her as gently as he could that she was not to see the boy again. He would see Jac, he told her, and explain to him that the thing was impossible.

Ellen felt her way to her room and locked the door against him, and finally she heard her father go down the hall and slam his own door.

She refused to go down for breakfast the next morning. She waited till she heard her father leave the house to go to his job in the weather station of the spaceport. Then she left by the back way.

She heard the rattle of Pug's chain against the kennel and his bark of greeting. She knelt and took the paw he offered. It had been broken once and never properly set. She stroked it gently, although it no longer hurt him; it just made him limp. Ellen unhooked the chain from his collar and fastened a short leash to it. She and the dog went through the streets and into the Martian section of the town.

The whole community had been the Martians' originally. But after the coming of the Earth people they'd been gradually uprooted and forced into one end of town. Spidertown, she'd heard some people call it. Damn people like that, she thought. People like her father! "Damn them," she said aloud. And Pug growled in sympathy.

She bent down to pet him. He whimpered inquiringly. "Poor crippled Pug," she said. "A blind girl, a lame dog, and a Martian. Outcasts, Pug. That's us." Then she shrugged off her self-pity and walked on.

There was only one really bad crossing. It was a highway and the ore trucks rolled along it all day long, carrying their loads to the spaceport and the great Earthbound cargo ships.

But the traffic man at the edge of the highway knew her and walked across with her and Pug.

"Beautiful morning, Miss Hanson," he said.

She said it smelled good and the air felt real fresh and thanked him.

Jac met her in the park at the edge of the lake. She tingled to the touch of his hand on her arm. His fingers were slender and quite bony and his arm, when he put hers in his, was thin. But he was strong, she knew: once he had picked her up and carried her across a rough patch of ground in the hills where they sometimes walked. He had carried her effortlessly, she remembered, and she had heard the strange rhythm of his heart as she leaned her head against his hard chest.

"Hello," Jac said. "Hello, my girl and my girl's dog."

"Hello, Jac," she said, and Pug wagged his tail so furiously that it beat against her leg. Pug didn't care if Jac was a Martian, and she wished her father had as much judgment.

They went arm-in-arm across the park to the meadows beyond. Pug was unleashed now and frisked about them, his bark echoing flatly in the Martian air.

"This is a beautiful day—one should be so happy," Jac said. "And yet you look unhappy. Why?"

And so Ellen told him, and Jac was silent. For a long time they walked in silence until the ground began to rise and Ellen knew they were nearing the hills.

Jac said at last, "Your father is a good man, and the things he wishes for you are things I cannot give you."

"If you're going to sound like my father," she told him, "I won't listen."

Then he was silent again for a time, but soon he began to speak seriously, and the gist of what he said was that she must forget him because he had been selfish about her. He said he had never really considered that there would be more to their life than just the two of them, and that they must not break her father's heart.

And she asked him, what about *her* heart? And his, too, he said.

And so they were silent again.

"Where are we?" she asked, after a while. They had been climbing for some time.

"I don't know," he said. "I have been thinking too much about us."

"Are we lost?"

"No," he said. "I can see the way we have come. But this is a part of the hills I don't know. You must be tired from the climb. We will rest."

They sat on the soft moss-covered ground amid some rocks and she leaned against his chest. Was he so different from Earth men? she wondered. It was so hard to know—for a blind person to know. If she could see Jac, would her father's warnings mean more to her? Or was her father merely intolerant of anyone who was different?

She had known so few men. Mostly, after childhood, her companions had been men who were kind to her for her father's sake. Many of them had been good fun and friendly, but none had ever been interested in her as a woman. Why should they waste their time with a blind girl? They hadn't, and Ellen had known no intimacy, no real happiness, until Jac.

But now she asked herself if she really loved him, as she maintained to her father, or whether she was grateful to him. What did she know of love? If she had once loved an Earth man, could she now love Jac?

It was so difficult. Her standards were confused. She did not even know what an Earth man looked like.

"Let me touch you, Jac," she said.

He gave her his hand and she seemed to feel his eyes on her face.

Her fingers traveled up his familiar arm, to his shoulder. The shoulder was bony and sharp, but so was hers. His neck was thick and his chin was not so well defined as her father's. Jac's nose was broader, too, and his eyes were sunk deep in his head. The head was hairless, not partially, like her father's, but completely. Ellen knew it was not usual for Earth men to be hairless, not men as young as Jac. Ellen put her hand

against his chest. It was hard and rounded and there was that strange rhythm of his heartbeat. She took her hand away.

"How do I seem to you?" she asked.

If their races were so different, wouldn't he be repelled by her—by the thought of her body and his together in marriage?

"You are beautiful to me, Ellen," he said. "You are lovely."

She sighed.

"But this does not mean that *I* would seem attractive to you," he went on. "I must say to you truthfully that I believe Earth people are more appealing to Martians—from an esthetic point of view, if not a political one—than Martians are to Earth people. But," he added, "I believe a Martian retains his good physical attributes until death. He does not become fat, or senile, or ill. He doesn't wrinkle and sag as do some of your people. I think this is in favor of your happiness."

"I must seem cruel to you," Ellen said, "to be so questioning of our love."

"No," Jac said, "you have a special problem. You must really know me before you can be sure."

Would he look strange if I could see him? she thought. Would I be ashamed that he is bald and big-nosed and chinless? She used these descriptions in her thoughts deliberately to see if they bothered her. Would the rest of his body disgust me if I knew it? I know him to be intelligent and loving, brave and devoted, honest and good. But would these qualities have meant anything to me, if I had been able to see and I had discovered them in him?

There was no answer.

"Where's Pug?" she asked.

"I don't know. He went over a rise some time ago."

Ellen stood up. "Let's look for him. You must want to know where we are, anyhow."

They walked slowly in the direction the dog had gone. The way was rocky and the path seemed to become narrower. It grew chill as the sun became hidden by a cliff. They walked along the base of the cliff and soon a second cliff was on the other side and they were in a canyon.

Jac described it to her as they went.

Suddenly he touched her elbow and they stopped.

"Now I know where we are," he said. "I've never been here before, but I know from the stories I've heard."

"Where?"

"This is the Valley of the Stars. We have a legend that it was first found at night. And at the end of it is the Cave of Violet Light. It's a beautiful legend. The Cave was found long ago. Then the way to it became lost. That was many years ago, before my father's time. But it is just as *his* father described it. The walls of the Valley are carved with life-like figures from our antiquity. Here, some of the carvings are down low and you can feel them."

He placed her fingers and she traced out figures of people.

"We do not know what period of our history they represent, but the figures are Martian. Here," he said, "is the carving of a very young child—and a woman." He led her fingers.

Hesitantly, her fingers explored the carvings while his hand rested reassuringly on her shoulder. "The figures are unclothed," she said.

"Yes."

The carvings were right to her touch and yet elusively, indefinitely wrong. Perhaps she could not judge the relative proportions. She could not tell. She became uneasy. "Why, it's only a baby—the child," she said.

"No," Jac said. "The child is three or four years old."

Her hand dropped.

Jac took her arm. "Come," he said, "we'll see if Pug went this way. Toward the Cave."

She walked in silence beside him.

"The Cave is the real source of the legend. The Cave of the Violet Light. They say it is magic. They say it has healing properties—the Violet Light. That whoever stands in its glow is made well. That the lame walk, and the deaf hear, and the—"

He stopped, and Ellen felt him looking at her.

"Yes?" she said. "And the blind?"

"And the blind see."

Jac continued, "It is a legend that linked with a time when we Martians ceased to become ill and to suffer the effects of age and deterioration. Our forefathers, so cured, bestowed the gift on all their descendants."

There was a barking in the Valley, echoing around a bend, and in a moment the dog was frisking toward them.

Ellen knelt and petted him.

"Hello, you Pug," she said. "Were you exploring? Were you in the Cave of the Violet Light?"

She could feel the dog's body moving as the tail wagged hugely.

"Were you?" she asked. "Were you in the Cave? Let me have your paw!"

The dog extended his paw to Ellen. She felt it.

"The other one!" she cried.

It, too, was whole. No bump or sign of a break anywhere.

"Jac!" she cried. "Does he limp? Pug, I mean. Is he healed?"

"Silly girl. It's just a legend."

"Look at him!" she said. "Does he limp?"

"No. It is amazing, but he's well. Come here, Pug. Let me see your paw. The bad one. He is well, Ellen."

"Oh, Jac!"

"I have never really believed it possible—and never really disbelieved," he said slowly. "I suppose we Martians are less preoccupied with miraculous cures because we have so little need of them."

"But, Jac, it *must* be true!"

He took her hand, and they started down the Valley of the Stars in the direction of the Cave.

"Here is the bend," Jac said. "And there is the Cave."

"Describe it to me," she said. "Tell me how it looks."

"The entrance is like a triangle. As high as three men. There is rubble of fallen rock in front and a little way inside. And then it is clean and the floor is smooth, polished rock. And farther back there is a violet glow. It seems to come from the slanting walls, and the floor is like a deep pond."

"I've never seen in my life," Ellen said. "I was born sightless."

She felt herself trembling.

"I'm told violet is a beautiful color," she said. "Is it beautiful?"

"It is the most beautiful color I've seen. It's past description. It's so beautiful that you must be able to feel it if the light touches you."

Then he asked: "Will you go in?" His voice was hushed. It caressed her and soothed her and she stopped trembling. She loved him, now, the way she knew him. His thin hand was gentle and strong—holding hers.

The words leaped into her mind: Bald. Big-nosed. Chinless. What did these words mean visually? What were ugliness and beauty to one who had never seen anything?

She remembered the figures her fingers had traced in the wall of the Valley of the Stars. The woman. The child—who was not a baby.

And she shivered.

Jac's hand tightened until her hand hurt. "You are afraid you will see me and find me ugly. In your mind they have made me something monstrous because I am different!"

"Let us go away," she said miserably. "I love you."

He was silent for a long while.

"If the Cave will let you see me," he said at last, "then you must. In the darkness, shadows become terrible things."

Her hand touched his face gently. He kissed the slim, cold fingers.

"Will you go in?"

"Yes," she whispered.

JAMES E. GUNN

The phylogeny of the publishing world is well established: One starts out as a writer, flops on his face, and turns to editing as a last resort. Jimmie Gunn, late of Racine, Wisconsin, and now a Civil Defense officer in Kansas City, Missouri, chose to stand the system on its head; he first spent his time as an editor of books, and only later got around to trying his hand at writing the stuff he was publishing. He did so spectacularly well that the job went out the window; and since then he has been devoting the greater part of his time to concocting high-order science-fiction stories like—

The Misogynist

HARRY is a wit. Someone has defined a wit as a person who can tell a funny story without cracking a smile. That's Harry.

"You know," Steve said at the office one day, "I'll bet Harry will walk right up to the flaming gates of Hell, keeping the Devil in stitches all the time, and never change expression."

That's the kind of fellow Harry is. A great guy to have around the office. Makes you laugh just to see him, thinking about the last story he told. Smart, too. Keeps at a thing, digging away, piling up facts and stuff until you finally see something straight for the first time. Everybody says he's going places.

But the kind of story Harry likes—he likes them long. They start kind of slow, you know, and sort of build up with a tickle here and a tickle there until each new touch makes you helpless, you're so weak with laughter. The kind of story you take home to your wife and you get part way through, laughing like a fool, and you notice she's just sitting there, sort

of patient and martyred, thinking maybe about tomorrow's dinner or the dress sale downtown, and you stop laughing and sigh and say, "It must be the way he tells it" or "Nobody can tell stories like Harry."

But then women don't think Harry's funny.

Take the other night, for instance. Harry and I were sitting in his living room while the women—Lucille and Jane—were out in the kitchen, whipping up something after the last rubber, and Harry started this story. Only at first I didn't know it was a story.

"Did you ever stop to think," Harry said, "about what strange creatures women really are? The way they change, I mean, after you marry them. You know, they stop hanging on your words, they stop catering to your likes and dislikes, they stop laughing at your jokes."

I have a minor reputation as a humorist myself—oh, nothing in Harry's class, but ready with quip or pun, if you know what I mean. I came in with a laugh and said, "So the honeymoon is over," Harry and Lucille being married only a month or so.

"Yes," said Harry seriously. "Yes, I guess you could say that. The honeymoon is over."

"Tough," I said, feeling sorry for the guy. "The girl you marry and the woman you're married to are two different people."

"Oh, no," Harry disagreed, shaking his head. "They're not. That's just the point."

"The point?" I asked, getting an inkling that Harry's thoughtful face hid a purpose not entirely serious. "You mean there is a point?"

"Of course. It's not just a matter of superficial differences, you see. It's something fundamental. Women think differently, their methods are different, their goals are different. So different, in fact, that they are entirely incomprehensible."

"I gave up trying to understand them a long time ago."

"That's where we make our mistake," Harry said soberly. "We accept when we should try to understand. We must understand why. As the Scotch say, 'All are good lasses, but where come the ill wives?'"

"Why?" I wanted to know, a little puzzled. "They're built differently, and not just outside. Glands, bearing children—all kinds of differences."

"That's their excuse," said Harry, sneering, "and it's not good enough. They should do best what their differences best fit them for. But their greatest career is marriage—and their greatest failure. A man to them is only the necessary evil they must have before they can get the other things they want."

"Like the black widow spider and her mate?" I suggested.

"In a way. And yet not entirely. *The spiders, at least, are of the same species.*"

I nodded over that for a moment before it soaked in. "And men and women aren't?" I practically yelled.

"Sh!" he warned, and glanced nervously at the kitchen door.

Then was when I began to chuckle. Harry should have been in the movies. And yet I had to admire the guy, making a joke out of what is—every husband can tell you—one of the greatest and most secret tragedies of life, greater even because no one can talk about it. No one but Harry.

My chuckle must have been the right response, because he nodded, relaxed, and stopped glancing at the door out of the corner of his eye. Or maybe that was after Lucille peeked around the corner and said, "Harry off on one of his stories again? Tell us when he's through, so we can bring in the refreshments."

She was pretty light about it and you could tell it was a running joke and I couldn't help thinking what a lucky guy Harry was—if a fellow has to get married, that is, and most of us do.

"The alien race," Harry whispered and leaned back.

It was a good line and I laughed; there wasn't anything forced about it, either.

"What better way," he continued, "to conquer a race than to breed it out of existence? The Chinese learned that a long time ago. Conqueror after conqueror took the country and

each one was passively accepted, allowed to intermarry . . . and eventually was absorbed. Only this case is the reverse. Conquest by marriage might be a good term for it. Breed in the conqueror, breed out the slave. Breed in the alien, breed out the human."

I nodded appreciatively. "Makes sense."

"How did it all start?" asked Harry. "And when? If I knew those answers, I'd know the whole thing. All I've got is a theory. An alien race of women landed on Earth—when man was still a cave-dwelling animal, maybe, or it could even have been in historic times—and my guess is they were dropped here by their men. Jettisoned. Dumped. Why? To get rid of them, obviously."

"But what did their men do then?" I had to ask, feeding him the next point.

"How do I know?" he replied irritably. "They were aliens, remember. Maybe they had some solution, some procreative substitute for women. Maybe these women were just the worst of the lot and the remaining ones were better. Maybe the men didn't give a damn and preferred racial suicide to surrender."

He angrily shoved the coffee table aside, grumbling something about women's ideas of furnishing a home, and pulled his chair closer. "Sure, surrender. They couldn't exterminate the men, could they? Who has the weapons, the military knowledge? Besides, women don't think like that. Their minds work in devious ways; they win what they want by guile and subtlety. That's why they married into the human race."

I looked blank, which is always a good way to push him on.

"Well, look," he said earnestly, just as I figured he would, "how about the Amazons? Once a year, you know, they visited the Gargareans, a neighboring tribe; any resulting male children were put to death. That didn't work very long, of course. Their purpose and their very alienness were too obvious. And the matriarchies—too blatant, you see, might give the whole thing away. Besides, men are useful in ways that women

aren't. Men are inventive, artistic, creative—and can be nagged or coaxed into doing what women want them to do."

I lit a cigarette and looked for an ashtray to put the match. He shoved over some silly little object that would suffocate a cigarette the minute you laid it down. No grooves, either, of course.

"That's what women buy when they're on their own," he pointed out disgustedly. "Lights that they think look pretty and make you blind or put a crick in your back when you try to read. You get a house with a southern exposure so you'll have sunlight, and then they put up heavy drapes to keep the furniture from fading. That's not enough, so they dress the furniture in slipcovers that always get twisted and creased. They shed bobbypins like dandruff, hang stockings over towels to dry, never screw a cap on a bottle or jar, so it always falls and breaks when you pick it up by the top, 'straighten up the house,' as they call it, by shoving everything into drawers where you never can find what you want."

I dug an uncomfortable cushion out from behind me and threw it on another chair. "All of them?" I asked. "Are they all alike?"

"I've wondered about that," he admitted, frowning. "There must be some human women left. One hears about happy marriages, although that might just be female propaganda. The women who like to read and use their minds, I'd say. Those who aren't so damned practical that they'd get up off their deathbeds to straighten a crooked picture. Women who can grasp abstract ideas. I don't think the—the aliens can." He looked up, brightening. "Those could be tests for alienness. That is," he added, frowning again, "if I'm right and there actually are any human women."

"How about those," I chipped in, "who prefer men and dislike other women?"

He thought that over seriously. "Most other women. It could be that they sense the aliens better than we can and don't want anything to do with them. Yes, that would—no, the aliens probably stick together, so that's out as a test."

"There are women who are satisfied with just a comfortable life," I suggested. "Those who don't drive their husbands to so much insurance that they're worth more dead than alive and then work them to death. That sounds pretty human to me."

Harry shrugged helplessly. "I guess so, but we'll never really know the answers. Or, if we do, it'll be too late."

"Too late?"

"Well, certainly," he said, tapping me on the knee. That's my ticklish spot and I was having enough trouble not laughing. "It's only in the last few generations that their plans have been coming closer to success. They have the vote, equal rights without giving up any of their privileges, and so forth. They're outliving men—and it's men, of course, who are extending the life span for them. They control about ninety per cent of the wealth. And there's something else men are doing for them." His voice sank to a significant whisper. "We're experimenting with fertilization by salt water, electrical stimulus, that sort of thing. Once we work it out properly . . ."

"We won't be needed any more," I spluttered.

"That's right," he agreed gravely. "They'll just refuse to marry, use prenatal sex determination to produce nothing but girls, and then you'll have a single race—the female race. That's what I think they want."

"It figures," I answered, trying to crush out my cigarette in the ridiculous tray.

He nodded. "Don't think I haven't got more than vague suspicions. And it's been damned hard; knowledge of the female conspiracy has died out in the last fifty years or so. There's no longer even that subconscious knowledge that alerted the centuries of men before—that body of tradition and folklore which is a sort of inherited wisdom of a people. We've been taught to scorn all that as superstition. Most teachers are women, of course."

"Before our time, men knew?" I gave him his straight line.

"Oh, yes," Harry said. "Homer, Ovid, Swift—'A dead wife under the table is the best goods in a man's house,' said Swift. Antiphanes, Menander, Cato—there was a wise one.

'Suffer women once to arrive at an equality with you, and they will from that moment become your superiors.' Plautus, Clement of Alexandria, Tasso, Shakespeare, Dekker, Fletcher, Thomas Browne—the list is endless. The Bible: 'How can he be clean that is born of woman?'; 'All wickedness is but little to the wickedness of a woman'; 'I suffer not a woman to teach, nor to usurp authority over the man, but to be in silence' . . ."

For fifteen minutes he continued, covering the Greeks, the Romans, the Renaissance, and hadn't begun to run dry. Even for Harry this was digging deep for a story. *This is Harry's peak*, I said to myself, a little awed. *He will never do anything better than this.*

Then Harry began getting closer to modern times.

"Women are much more like each other than men," said Lord Chesterfield. And Nietzsche: 'Thou goest to women? Don't forget thy whip.' Then there was Strindberg, touched by a divine madness which gave him visions of hidden truths. Shaw concealed his suspicions in laughter lest he be torn to pieces—"

"Ibsen?" I suggested, chuckling, dredging a name out of my school days that I vaguely remembered was somehow connected with the subject.

Harry spat, as if he had something vile in his mouth.

"Ibsen! That traitor! That blind fool! It was he who first dramatized the insidious propaganda which led, eventually, to the so-called emancipation of women, and was really the loosing of the chains which kept them from ravening unrestrained."

"Ravening," I chortled. "That's the word, all right—ravening!"

"You must go back to folk sayings to get real truth," Harry went on, quieting a little. "'A man is happy only two times in his life,' say the Yugoslavs, 'when he marries a wife and when he buries her.' Or the Rumanians: 'When a man takes a wife, he ceases to dread Hell.' Or the Spanish: 'Who hath a wife hath also an enemy.' 'Never believe a woman, not even a dead one,' advise the German peasants. The wisdom of the

Chinese: 'Never trust a woman, even though she has given you ten sons'."

He stopped, not as if he were near the end of his material, but to begin brooding.

"Did you ever look for something," he asked, "a collar button, say, or a particular pair of socks—and it isn't there and you tell your wife? Why is it that she can come and pick it up and it's been right under your nose all the time?"

"What else have they got to think about?"

"It makes you wonder," he insisted. "It makes you wonder if it really was there when you looked."

I agreed with him, and thought, *Strange, the odd truths that Harry can link into something excruciatingly funny.*

"They have no respect for logic," said Harry. "No respect at all for the sanctity of a man's mind, for what his world is built upon. They argue as it suits them, waving away contradictions and inconsistencies as meaningless. How many of us have our Xanthippes, bent on dragging us down from our contemplation of divine truth to the destructive turmoil of daily strife? It's maddening, maddening!"

A thought struck me. So far, Harry had a number of strings, amusing in themselves, but lacking the climax that would wind them all up into a neat ball of laughter.

"What would they do," I asked, smiling, "if they discovered that someone knew their secret? They couldn't let it get around, could they?"

Harry smiled in return. For one unwary second, I thought he was slipping, giving the joke away.

"There," said Harry, "you have hit upon the crux. If my surmises are true, why has no one else discovered it? And the answer is—they have!"

"They have?" I repeated, a little surprised.

"Oh, yes," Harry answered, nodding. "And it provides the clincher. The women would have to do away with them, of course. Silence them. And it would have to show up somewhere—if one knew where to look."

"Yes?" I prompted, breathlessly.

"Why," he said, pointing a finger at me, "are there more men in asylums than women?"

"You mean—?"

He nodded.

I collapsed, hysterical. I choked with laughter. It was only with difficulty that I was able to speak when the women came in a moment later with their bowls and potato chips and glasses of beer.

"Hi, alien," I spluttered at Jane.

And I laughed some more, especially when I looked at Harry and saw the stricken face he was putting on, horrified, terribly frightened, sort of all sunk in on himself—better, much better, than I've seen a professional actor do it on the screen.

Finally the look on the women's faces brought me around—the bored look—and I tried to share the joke. Harry was laughing, too, kind of weakly—surprising, because he always is sort of bland and mildly curious when one of his stories gets everybody writhing.

So I started telling it and got part way through and—well, you know the way it ends. I looked at Harry for help, but he wasn't giving any, and I kind of died away slowly.

"It must be the way he tells it," I sighed. "Nobody can tell stories like Harry."

You see what I mean. Women don't think Harry's funny.

The evening turned out all right, though. A little flat at the end, the way evenings usually are.

As we were going out, I heard Lucille say, kind of sharp, "Harry, there's something wrong with the hot water heater. You've been promising to look at it for days, and you've just got to do something about it tonight because I'm going to be washing tomorrow," and I heard Harry answer, "Yes, dear," mild and obedient, and I thought, *The guy's got to blow off steam somewhere*, and figured that I'd be hearing the story again at the office.

Which goes to show how wrong a man can be.

Next morning, Lucille called up and said Harry was sick—a stroke or a heart attack or something—and couldn't come to

work. I called there a couple of times, but Lucille told me he was too sick to see anybody. I knew Harry was really sick because Lucille had Dr. Clarke, that woman doctor, and Harry's said he wouldn't have her treat his sick dog if he wanted the dog to get well. So I knew Harry was too sick to care.

It's funny how quick a fellow can go, and I got to thinking what a shame it was that Harry's finest effort, the climax of his wit, so to speak, should go with him, and how it's too bad that great vocal art should vanish without leaving a trace.

So I began trying to remember—and I couldn't remember very good, particularly the quotations—so I did a little research of my own, just to be able to give a sample. I ran across a couple Harry missed.

One of them everybody knows. The one of Kipling's that begins, "The female of the species . . ." The other one I worked up by myself, just thinking. *Why*, I asked myself one day, *are there more widows than widowers?* Of course, I couldn't think of an answer.

It's a shame about Harry. A great guy like that, a humorist who never was given the chance to share his gift with the world—if you ask me, funnier than anybody on radio or TV or the stage; anywhere, for that matter—and here he is getting set to kick off. The least I can do is reconstruct this biggest gag he ever put together as a kind of monument to him.

Well, it's finished. I'll show it to the boys in the office tomorrow. They'll get a real kick out of it. No sense showing it to the girls, even Jane—like I said, women never thought Harry was funny.

Something else he left out, but probably only because he didn't have enough time to develop the gag the way he usually does. What kind of planet did the aliens come from? It must have a lot of carbon dioxide. Ever notice how women always complain when you open a window? It must be a hot world, too; they're cold all the time, especially their feet, which they like to put against their husband's legs, making the poor guy practically leap out of bed. I'm an expert on that—Jane's toes would chill any highball. But their world can't be that hot, because women can trot around in the cold-

est weather with practically nothing underneath their coats. And how about those open-toe shoes?

It doesn't add up at all. I suppose Harry would shrug it off as another proof of their alienness. Possibly he'd say it was just *outside* that women were warm; it's *in the house* that they're cold.

Well, there you are—Jane is calling me to come down to the cellar and fix the furnace. There isn't a thing wrong with it. I'm sweating, as a matter of fact. But if I don't go down and monkey around with the grate and draft, I'll never hear the end of it. And I'd better go just to save the furnace; Jane's banging it with a poker, yelling up to me that she'll fix it if I don't.

Jane with a poker; there's a laugh for you. She can't even wind a clock without breaking the mainspring.

SIMON EISNER

The by-line of "Simon Eisner" has appeared only once to date in a science-fiction magazine (though readers in other fields know him well for such penetrating novels as The Naked Storm); but that one appearance was on one of the best short stories of the year in which it was published. The art of writing good science fiction is the art of extrapolation—of seeing what would happen if—and for an example of a logical development of an illogical but very real present-day problem, you can hardly do better than—

The Luckiest Man in Denv

MAY'S MAN Reuben, of the eighty-third level, Atomist, knew there was something wrong when the binoculars flashed and then went opaque. Inwardly he cursed, hoping that he had not committed himself to anything. Outwardly he was unperturbed. He handed the binoculars back to Rudolph's man Almon, of the eighty-ninth level, Maintainer, with a smile.

"They aren't very good," he said.

Almon put them to his own eyes, glanced over the parapet and swore mildly. "Blacker than the heart of a crazy Angel, eh? Never mind; here's another pair."

This pair was unremarkable. Through it, Reuben studied the thousand setbacks and penthouses of Denv that ranged themselves below. He was too worried to enjoy his first sight of the vista from the eighty-ninth level, but he let out a murmur of appreciation. Now to get away from this suddenly sinister fellow and try to puzzle it out.

"Could we—?" he asked cryptically, with a little upward jerk of his chin.

THE LUCKIEST MAN IN DENV by Simon Eisner. Copyright, 1952, by Galaxy Publishing Corp.; reprinted by permission of the author.

"It's better not to," Almon said hastily, taking the glasses from his hands. "What if somebody with stars happened to see, you know? How'd you like it if you saw some impudent fellow peering up at you?"

"He wouldn't dare!" said Reuben, pretending to be stupid and indignant, and joined a moment later in Almon's sympathetic laughter.

"Never mind," said Almon. "We are young. Some day, who knows? Perhaps we shall look from the ninety-fifth level, or the hundredth."

Though Reuben knew that the Maintainer was no friend of his, the generous words sent blood hammering through his veins; ambition for a moment.

He pulled a long face and told Almon: "Let us hope so. Thank you for being my host. Now I must return to my quarters."

He left the windy parapet for the serene luxury of an eighty-ninth-level corridor and descended slow moving stairs through gradually less luxurious levels to his own Spartan floor. Selene was waiting, smiling, as he stepped off the stairs.

She was decked out nicely—too nicely. She wore a steely hued corselet and a touch of scent; her hair was dressed long. The combination appealed to him, and instantly he was on his guard. Why had she gone to the trouble of learning his tastes? What was she up to? After all, she was Griffin's woman.

"Coming down?" she asked, awed. "Where have you been?"

"The eighty-ninth, as a guest of that fellow Almon. The vista is immense."

"I've never been . . ." she murmured, and then said decisively: "You belong up there. And higher. Griffin laughs at me, but he's a fool. Last night in chamber we got to talking about you, I don't know how, and he finally became quite angry and said he didn't want to hear another word." She smiled wickedly. "I was revenged, though."

Blank-faced, he said: "You must be a good hand at revenge, Selene, and at stirring up the need for it."

The slight hardening of her smile meant that he had scored and he hurried by with a rather formal salutation.

Burn him for an Angelo, but she was easy enough to take! The contrast of the metallic garment with her soft, white skin was disturbing, and her long hair suggested things. It was hard to think of her as scheming something or other; scheming Selene was displaced in his mind by Selene in chamber.

But what was she up to? Had she perhaps heard that he was to be elevated? Was Griffin going to be swooped on by the Maintainers? Was he to kill off Griffin so she could leech onto some rising third party? Was she perhaps merely giving her man a touch of the lash?

He wished gloomily that the binoculars-problem and the Selene-problem had not come together. That trickster Almon had spoken of youth as though it were something for congratulation; he hated being young and stupid and unable to puzzle out the faulty binoculars and the warmth of Griffin's woman.

The attack alarm roared through the Spartan corridor. He ducked through the nearest door into a vacant bedroom and under the heavy steel table. Somebody else floundered under the table a moment later, and a third person tried to join them.

The firstcomer roared: "Get out and find your own shelter! I don't propose to be crowded out by you or to crowd you out either and see your ugly blood and brains if there's a hit. Go, now!"

"Forgive me, sir! At once, sir!" the latecomer wailed; and scrambled away as the alarm continued to roar.

Reuben gasped at the "sirs" and looked at his neighbor. It was May! Trapped, no doubt, on an inspection tour of the level.

"Sir," he said respectfully, "if you wish to be alone, I can find another room."

"You may stay with me for company. Are you one of mine?" There was power in the general's voice and on his craggy face.

"Yes, sir. May's man Reuben, of the eighty-third level, Atomist."

May surveyed him, and Reuben noted that there were pouches of skin depending from cheekbones and the jaw line—dead-looking, coarse-pored skin.

"You're a well-made boy, Reuben. Do you have women?"

"Yes, sir," said Reuben hastily. "One after another—I *always* have women. I'm making up at this time to a charming thing called Selene. Well-rounded, yet firm, soft but supple, with long red hair and long white legs—"

"Spare me the details," muttered the general. "It takes all kinds. An Atomist, you said. That has a future, to be sure. I myself was a Controller long ago. The calling seems to have gone out of fashion—"

Abruptly the alarm stopped. The silence was hard to bear.

May swallowed and went on: "—for some reason or other. Why don't youngsters elect for Controller any more? Why didn't you, for instance?"

Reuben wished he could be saved by a direct hit. The binoculars, Selene, the raid, and now he was supposed to make intelligent conversation with a general.

"I really don't know, sir," he said miserably. "At the time there seemed to be very little difference—Controller, Atomist, Missiler, Maintainer. We have a saying, 'The buttons are different,' which usually ends any conversation on the subject."

"Indeed?" asked May distractedly. His face was thinly filmed with sweat. "Do you suppose Ellay intends to clobber us this time?" he asked almost hoarsely. "It's been some weeks since they made a maximum effort, hasn't it?"

"Four," said Reuben. "I remember because one of my best Servers was killed by a falling corridor roof—the only fatality and it had to happen to my team!"

He laughed nervously and realized that he was talking like a fool, but May seemed not to notice.

Far below them, there was a series of screaming whistles as the interceptors were loosed to begin their intricate, double basketwork wall of defense in a towering cylinder about Denv.

"Go on, Reuben," said May. "That was most interesting." His eyes were searching the underside of the steel table.

Reuben averted his own eyes from the frightened face, feeling some awe drain out of him. Under a table with a general! It didn't seem so strange now.

"Perhaps, sir, you can tell me what a puzzling thing, that happened this afternoon, means. A fellow—Rudolph's man Almon, of the eighty-ninth level—gave me a pair of binoculars that flashed in my eyes and then went opaque. Has your wide experience—"

May laughed hoarsely and said in a shaky voice: "That old trick! He was photographing your retinas for the blood-vessel pattern. One of Rudolph's men, eh. I'm glad you spoke to me; I'm old enough to spot a revival like that. Perhaps my good friend Rudolph plans—"

There was a thudding volley in the air and then a faint jar. One had got through, exploding, from the feel of it, far down at the foot of Denv.

The alarm roared again, in bursts that meant all clear; only one flight of missiles and that disposed of.

The Atomist and the general climbed out from under the table; May's secretary popped through the door. The general waved him out again and leaned heavily on the table, his arms quivering. Reuben hastily brought a chair.

"A glass of water," said May.

The Atomist brought it. He saw the general wash down what looked like a triple dose of xxx-green capsules which it was better to leave alone.

May said after a moment: "That's better. And don't look so shocked, youngster; you don't know the strain we're under. It's only a temporary measure which I shall discontinue as soon as things ease up a bit. I was saying that perhaps my good friend Rudolph plans to substitute one of his men for one of mine. Tell me, how long has this fellow Almon been a friend of yours?"

"He struck up an acquaintance with me only last week. I should have realized—"

"You certainly should have. One week. Time enough and more. By now you've been photographed, your fingerprints taken, your voice recorded and your gait studied without your knowledge. Only the retinascope is difficult, but one must risk it for a real double. Have you killed your man, Reuben?"

He nodded. It had been a silly brawl two years ago over precedence at the refectory; he disliked being reminded of it.

"Good," said May grimly. "The way these things are done, your double kills you in a secluded spot, disposes of your body and takes over your role. We shall reverse it. You will kill the double and take over *his* role."

The powerful, methodical voice ticked off possibilities and contingencies, measures, and countermeasures. Reuben absorbed them and felt his awe return. Perhaps May had not really been frightened under the table; perhaps it had been he reading his own terror in the general's face. May was actually talking to him of backgrounds and policies. "Up from the eighty-third level!" he swore to himself as the great names were uttered.

"My good friend Rudolph, of course, wants the five stars. You would not know this, but the man who wears the stars is now eighty years old and failing fast. I consider myself a likely candidate to replace him. So, evidently, must Rudolph. No doubt he plans to have your double perpetrate some horrible blunder on the eve of the election, and the discredit would reflect on me. Now what you and I must do—"

You and I—May's man Reuben and May—up from the eighty-third! Up from the bare corridors and cheerless bedrooms to marble halls and vaulted chambers! From the clatter of the crowded refectory to small and glowing restaurants where you had your own table and servant and where music came softly from the walls! Up from the scramble to win this woman or that, by wit or charm or the poor bribes you could afford, to the eminence from which you could calmly command your pick of the beauty of Denv! From the moiling intrigue of tripping your fellow Atomist and guarding against

him tripping you to the heroic thrust and parry of generals! Up from the eighty-third!

Then May dismissed him with a speech whose implications were deliriously exciting. "I need an able man and a young one, Reuben. Perhaps I've waited too long looking for him. If you do well in this touchy business, I'll consider you very seriously for an important task I have in mind."

Late that night, Selene came to his bedroom.

"I know you don't like me," she said pettishly, "but Griffin's such a fool and I wanted somebody to talk to. Do you mind? What was it like up there today? Did you see carpets? I wish I had a carpet."

He tried to think about carpets and not the exciting contrast of metallic cloth and flesh.

"I saw one through an open door," he remembered. "It looked odd, but I suppose a person gets used to them. Perhaps I didn't see a very good one. Aren't the good ones very thick?"

"Yes," she said. "Your feet sink into them. I wish I had a good carpet and four chairs and a small table as high as my knees to put things on and as many pillows as I wanted. Griffin's such a fool. Do you think I'll ever get those things? I've never caught the eye of a general. Am I pretty enough to get one, do you think?"

He said uneasily: "Of course you're a pretty thing, Selene. But carpets and chairs and pillows—" It made him uncomfortable, like the thought of peering up through binoculars from a parapet.

"I want them," she said unhappily. "I like you very much, but I want so many things and soon I'll be too old even for the eighty-third level, before I've been up higher, and I'll spend the rest of my life tending babies or cooking in the creche or the refectory."

She stopped abruptly, pulled herself together and gave him a smile that was somehow ghastly in the half-light.

"You bungler," he said, and she instantly looked at the door with the smile frozen on her face. Reuben took a pistol

from under his pillow and demanded, "When do you expect him?"

"What do you mean?" she asked shrilly. "Who are you talking about?"

"My double. Don't be a fool, Selene. May and I—" he savored it—"May and I know all about it. He warned me to beware of a diversion by a woman while the double slipped in and killed me. When do you expect him?"

"I really *do* like you," Selene sobbed. "But Almon promised to take me up there and I *knew* when I was where they'd see me that I'd meet somebody really important. I really do like you, but soon I'll be too old—"

"Selene, listen to me. Listen to me! You'll get your chance. Nobody but you and me will know that the substitution didn't succeed!"

"Then I'll be spying for you on Almon, won't I?" she asked in a choked voice. "All I wanted was a few nice things before I got too old. All right, I was supposed to be in your arms at 2350 hours."

It was 2349. Reuben sprang from bed and stood by the door, his pistol silenced and ready. At 2350 a naked man slipped swiftly into the room, heading for the bed as he raised a ten-centimeter poignard. He stopped in dismay when he realized that the bed was empty.

Reuben killed him with a bullet through the throat.

"But he doesn't look a bit like me," he said in bewilderment, closely examining the face. "Just in a general way."

Selene said dully: "Almon told me people always say that when they see their doubles. It's funny, isn't it? He looks just like you, really."

"How was my body to be disposed of?"

She produced a small flat box. "A shadow suit. You were to be left here and somebody would come tomorrow."

"We won't disappoint him." Reuben pulled the web of the shadow suit over his double and turned on the power. In the half-lit room, it was a perfect disappearance; by daylight it would be less perfect. "They'll ask why the body was shot

instead of knifed. Tell them you shot me with the gun from under the pillow. Just say I heard the double come in and you were afraid there might have been a struggle."

She listlessly asked: "How do you know I won't betray you?"

"You won't, Selene." His voice bit. "You're *broken*."

She nodded vaguely, started to say something and then went out without saying it.

Reuben luxuriously stretched in his narrow bed. Later, his beds would be wider and softer, he thought. He drifted into sleep on a half-formed thought that some day he might vote with other generals on the man to wear the five stars—or even wear them himself, Master of Denv.

He slept healthily through the morning alarm and arrived late at his regular twentieth-level station. He saw his superior, May's man Oscar of the eighty-fifth level, Atomist, ostentatiously take his name. Let him!

Oscar assembled his crew for a grim announcement: "We are going to even the score, and perhaps a little better, with Ellay. At sunset there will be three flights of missiles from Deck One."

There was a joyous murmur and Reuben trotted off on his task.

All forenoon he was occupied with drawing plutonium slugs from hyper-suspicious storekeepers in the great rock-quarried vaults, and seeing them through countless audits and assays all the way to Weapons Assembly. Oscar supervised the scores there who assembled the curved slugs and the explosive lenses into sixty-kilogram warheads.

In mid-afternoon there was an incident. Reuben saw Oscar step aside for a moment to speak to a Maintainer whose guard fell on one of the Assembly Servers, and dragged him away as he pleaded innocence. He had been detected in sabotage. When the warheads were in and the Missilers seated, waiting at their boards, the two Atomists rode up to the eighty-third's refectory.

The news of a near-maximum effort was in the air; it was

electric. Reuben heard on all sides in tones of self-congratulation: "We'll clobber them tonight!"

"That Server you caught," he said to Oscar. "What was he up to?"

His commander stared. "Are you trying to learn my job? Don't try it, I warn you. If my black marks against you aren't enough, I could always arrange for some fissionable material in your custody to go astray."

"No, no! I was just wondering why people do something like that."

Oscar sniffed doubtfully. "He's probably insane, like all the Angelos. I've heard the climate does it to them. You're not a Maintainer or a Controller. Why worry about it?"

"They'll brainburn him, I suppose?"

"I suppose. *Listen!*"

Deck One was firing. One, two, three, four, five, six. One, two, three, four, five, six. One, two, three, four, five, six.

People turned to one another and shook hands, laughed and slapped shoulders heartily. Eighteen missiles were racing through the stratosphere, soon to tumble on Ellay. With any luck, one or two would slip through the first wall of interceptors and blast close enough to smash windows and topple walls in the crazy city by the ocean. It would serve the lunatics right.

Five minutes later an exultant voice filled most of Denv.

"Recon missile report," it said. "Eighteen launched, eighteen perfect trajectories. Fifteen shot down by Ellay first-line interceptors, three shot down by Ellay second-line interceptors. Extensive blast damage observed in Griffith Park area of Ellay!"

There were cheers.

And eight Full Maintainers marched into the refectory silently, and marched out with Reuben.

He knew better than to struggle or ask futile questions. Any question you asked of a Maintainer was futile. But he goggled when they marched him onto an upward-bound stairway.

They rode past the eighty-ninth level and Reuben lost

count, seeing only the marvels of the upper reaches of Denv. He saw carpets that ran the entire length of corridors, and intricate fountains, and mosaic walls, stained-glass windows, more wonders than he could recognize, things for which he had no name.

He was marched at last into a wood-paneled room with a great polished desk and a map behind it. He saw May, and another man who must have been a general—Rudolph?—but sitting at the desk was a frail old man who wore a circlet of stars on each khaki shoulder.

The old man said to Reuben: "You are an Ellay spy and saboteur."

Reuben looked at May. Did one speak directly to the man who wore the stars, even in reply to such an accusation?

"Answer him, Reuben," May said kindly.

"I am May's man Reuben, of the eighty-third level, an Atomist," he said.

"Explain," said the other general heavily, "if you can, why all eighteen of the warheads you procured today failed to fire."

"But they did!" gasped Reuben. "The Recon missile report said there was blast damage from the three that got through and it didn't say anything about the others failing to fire."

The other general suddenly looked sick and May looked even kindlier. The man who wore the stars turned inquiringly to the chief of the Maintainers, who nodded and said: "That was the Recon missile report, sir."

The general snapped: "What I said was that he would *attempt* to sabotage the attack. Evidently he failed. I also said he is a faulty double, somehow slipped with great ease into my good friend May's organization. You will find that his left thumb print is a clumsy forgery of the real Reuben's thumb print and that his hair has been artificially darkened."

The old man nodded at the chief of the Maintainers, who said: "We have his card, sir."

Reuben abruptly found himself being fingerprinted and deprived of some hair.

"The f.p.s. check, sir," one Maintainer said. "He's Reuben."

"Hair's natural, sir," said another.

The general began a rear-guard action: "My information about his hair seems to have been inaccurate. But the fingerprint means only that Ellay spies substituted his prints for Reuben's prints in the files—"

"Enough, sir," said the old man with the stars. "Dismissed. All of you. Rudolph, I am surprised. All of you, go."

Reuben found himself in a vast apartment with May, who was bubbling and chuckling uncontrollably until he popped three of the green capsules into his mouth hurriedly.

"This means the eclipse for years of my good friend Rudolph," he crowed. "His game was to have your double sabotage the attack warheads and so make it appear that my organization is rotten with spies. The double must have been under post-hypnotic, primed to admit everything. Rudolph was so sure of himself that he made his accusations before the attack, the fool!"

He fumbled out the green capsules again.

"Sir," said Reuben, alarmed.

"Only temporary," May muttered, and swallowed a fourth. "But you're right. You leave them alone. There are big things to be done in your time, not in mine. I told you I needed a young man who could claw his way to the top. Rudolph's a fool. He doesn't need the capsules because he doesn't ask questions. Funny, I thought a coup like the double affair would hit me hard, but I don't feel a thing. It's not like the old days. I used to plan and plan, and when the trap went *snap* it was better than this stuff. But now I don't feel a thing."

He leaned forward from his chair; the pupils of his eyes were black bullets.

"Do you want to *work*?" he demanded. "Do you want your world stood on its head and your brains to crack and do the only worthwhile job there is to do? Answer me!"

"Sir, I am a loyal May's man. I want to obey your orders and use my ability to the full."

"Good enough," said the general. "You've got brains, you've

got push. I'll do the spade work. I won't last long enough to push it through. You'll have to follow. Ever been outside of Denv?"

Reuben stiffened.

"I'm not accusing you of being a spy. It's really all right to go outside of Denv. I've been outside. There isn't much to see at first—a lot of ground pocked and torn up by shorts and overs from Ellay and us. Farther out, especially east, it's different. Grass, trees, flowers. Places where you could grow food.

"When I went outside, it troubled me. It made me ask questions. I wanted to know how we started. Yes—started. *It wasn't always like this.* Somebody built Denv. Am I getting the idea across to you? *It wasn't always like this!*

"Somebody set up the reactors to breed uranium and make plutonium. Somebody tooled us up for the missiles. Somebody wired the boards to control them. Somebody started the hydroponics tanks.

"I've dug through the archives. Maybe I found something. I saw mountains of strength reports, ration reports, supply reports, and yet I never got back to the beginning. I found a piece of paper and maybe I understood it and maybe I didn't. It was about the water of the Colorado River and who should get how much of it. How can you divide water in a river? But it could have been the start of Denv, Ellay, and the missile attacks."

The general shook his head, puzzled, and went on: "I don't see clearly what's ahead. I want to make peace between Denv and Ellay, but I don't know how to start or what it will be like. I think it must mean not firing, not even making any more weapons. Maybe it means that some of us, or a lot of us, will go out of Denv and live a different kind of life. That's why I've clawed my way up. That's why I need a young man who can claw with the best of them. Tell me what you think."

"I think," said Reuben measuredly, "it's magnificent—the salvation of Denv. I'll back you to my dying breath if you'll let me."

May smiled tiredly and leaned back in the chair as Reuben tiptoed out.

What luck, Reuben thought—what unbelievable luck to be at a fulcrum of history like this!

He searched the level for Rudolph's apartment and gained admission.

To the general, he said: "Sir, I have to report that your friend May is insane. He has just been raving to me, advocating the destruction of civilization as we know it, and urging me to follow in his footsteps. I pretended to agree—since I can be of greater service to you if I'm in May's confidence."

"So?" said Rudolph thoughtfully. "Tell me about the double. How did that go wrong?"

"The bunglers were Selene and Almon. Selene because she alarmed me instead of distracting me. Almon because he failed to recognize her incompetence."

"They shall be brainburned. That leaves an eighty-ninth-level vacancy in my organization, doesn't it?"

"You're very kind, sir, but I think I should remain a May's man—outwardly. If I earn any rewards, I can wait for them. I presume that May will be elected to wear the five stars. He won't live more than two years after that, at the rate he is taking drugs."

"We can shorten it," grinned Rudolph. "I have pharmacists who can see that his drugs are more than normal strength."

"That would be excellent, sir. When he is too enfeebled to discharge his duties, there may be an attempt to rake up the affair of the double to discredit you. I could then testify that I was your man all along and that May coerced me."

They put their heads together, the two saviors of civilization as they knew it, and conspired ingeniously long into the endless night.

DEAN EVANS

The mystery field's loss is often science fiction's gain; to such names as Lewis Padgett, Frederic Brown and a dozen others must be added that splendid alumnus of Black Mask and most of the rest of the country's top crime-story magazines, Dean Evans. This story should properly bear the label "Not to be opened till Christmas"; but it is hardly likely that you'll want to defer the pleasure of reading it for any length of time. Imagine, then, that this is Christmas; that you've settled before the Tree . . . and have found, with Evans, that—

Not a Creature Was Stirring

HE WAS a tall, hard man with skin the color of very old iodine. When he climbed up out of the vertical shaft of his small gold mine, *The Lousy Disappointment*, he could have been taken for an Indian, he was that dark. Except, of course, that Indians didn't exist any more in 1982. His name was Tom Gannett and he was about forty years old and he didn't realize his own uniqueness.

When he made it to his feet, the first thing he did was to squint up at the sun. The second was to sneeze, and the third to blow his nose.

"Hey, you old sun!" he growled. "You old crummy sun, you look sicker'n a dog."

Which was literally true, for the sun seemed to be pretty queer. The whole sky seemed to be pretty queer, for that matter. Skies should be blue and the sun should be a bloated golden bauble drifting serenely across them. But the skies

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were not blue; they were a dirty purplish-gray. And the sun wasn't a bloated golden bauble; somebody had it by the scruff of the neck and was dragging it.

Gannett planted his big feet wide apart and frowned sourly around and sniffed the air like a dog at a gopher hole. "The damn world smells sick," he grunted.

Which was also true. The world did smell sick. The world smelled something like that peculiar odor that comes from an old graveyard carefully tended by an old man with dank moss sticking to the soles of his old shoes. That kind of smell.

Gannett didn't know why the sun looked sick, and he didn't know why the world smelled sick. Indeed, there were many things Gannett didn't know, among which would be these in particular:

(a) He did not know (since, for the last six months, he had been living and working all alone at his little mine, which was in the remotest of the most remote desert regions of Nevada) that a little less than three weeks earlier, mankind had finally achieved the inevitable: man's own annihilation.

(b) He did not know that he was going to be the loneliest man on Earth—he who was used to, and perfectly content with, the hermitlike existence of a desert rat.

(c) He furthermore did not know that there were four of the Ten Commandments which he wasn't going to be able to break any more—not even if he stayed up nights trying and lived for centuries.

Gannett snorted the smell from his nostrils and shrugged. Hell with it. He thought about Reno and how he hadn't been there for nearly a year. He thought of the dimly lighted, soft-carpeted cocktail lounges in Reno where drinks come in long-stemmed glasses and blondes in long-stemmed legs. Reno at Christmastime, he thought. There was a town, Reno!

He grinned, showing big gold teeth that blazed out of his mouth like the glittering grille on a Buick. He dug his feet into the hard ground and walked the hundred feet or so to his cabin where he sometimes slept when he didn't happen to sleep in the mine. He stripped off his grime-sodden clothes.

He stepped out of them, in fact, and stretched luxuriously as though he hadn't felt the good joy of being unclothed for a long time.

He got up and went to a corner of the cabin, rummaged out a pair of dusty clogs and pushed his feet into them. Then—and they don't come any nakeder than he was—he went outside and around the shack to the rear where he kept his jeep and where the shower was.

He stepped into it, for it was nothing more ornate than a large oil drum suspended on long four by sixes. He yanked on a rope that hung down from the drum. The result of doing that made him leap out again dripping wet and colder than a buried mother-in-law.

He shivered, eyes blinking fast. He took a deep breath. His gold teeth went together tightly and the big muscles in his neck corded defensively. He deliberately went under the shower again. Pawing a sliver of laundry soap from a ledge on one of the four by sixes, he went to work with it, and when he finally tripped the hanging rope once more, he was a clean man.

He went into the cabin. It wasn't any warmer than the great outdoors, but that was where his clothes were. He shaved from an old granite basin full of cold water. After that he went to a hook on the wall and got down a suit of clothes which looked as though it had shriveled up waiting for somebody to wear it. The last thing he did before leaving was to pry up one of the boards behind the door and lift out of this hiding place a small leather bag.

The bag was filled with gold.

The sun was gone now. Leg-like rays of light still sprawled, dirty-looking, in the sky over toward the California line, but aside from these extremities, most of it was somewhere out in the Pacific. The purplish sky was darker now. Drab. Dead, somehow.

The old jeep started nicely. It always started nicely; that was one of the good things about a jeep. The only funny

thing was that out of its exhaust pipe in the rear came angry purplish flames. Queer flames. Cannett stared at them, surprised.

"Even the damn jeep is sick," he muttered. He was wrong, of course, but he had no way of knowing that. He backed around, finally, and went down what he called his driveway, which was little more than rock-strewn ground, until he came to a small dirt road. This led him to another, larger dirt road, which in turn led him to route #395, which was a U.S. Highway.

A hundred miles farther on, he came to the outskirts of Carson City. It wasn't until he pulled into a gas station that he realized something was wrong. Nobody jumped out to wipe his windshield. The attendant who still leaned in the doorway of the station had a rag in his hand, but he didn't budge. He couldn't. His face looked like weathered leather and he was dead.

"Holy. . . I" whispered Cannett incredulously. He forgot about needing gas. He jumped in the jeep and drove down the main stem and found Police Headquarters in an old gray stone building. He knew it was Police Headquarters for the green neon over the revolving door had CPD on it and it was still burning.

He went up the steps two at a time, banged through the swinging doors and stamped straight to where the Sergeant sat at a desk over in the corner by the switchboard.

"Hey, by God!" yelled Cannett to the Desk Sergeant. "There's a guy down the street in a gas station and he's standing up in the doorway and he's dead as a mackerel!"

Dramatic words. But the Desk Sergeant was no longer among the living and didn't appreciate them. It took Cannett a long while to get over that. He slowly backed away. He made the big oak doors, still backing. He went down the stairs on legs as stiff as icicles.

He got back in his jeep and started up again. He knew there was something terribly wrong, but before he thought about it, he knew he had to have a drink. He pulled up in

front of a saloon that had nice, cheery, glowing lights showing through the big front window. He got out of the jeep. He went through the swinging glass doors and straight to the bar.

"Scotch!"

Nobody answered. The barman behind the mahogany, facing him, didn't make a move. The barman had a dead cigarette between his cold colorless lips. The cigarette had a half inch of ash on it. The ash looked as though it was sculptured out of purple marble.

Gannett put both hands flat on the bar and swallowed hard. He twisted his head and looked over the shoulder of a customer on his left, who was leaning negligently on the bar with one elbow. There was a half-full bottle in front of the leaning man and it had an alert-looking horse's head stuck in the neck of it for a pouring spout.

"Excuse me, Mac," Gannett whispered.

The leaning man didn't twitch a muscle.

Gannett sucked in a deep breath. He reached. He got the bottle. He blinked stupidly at the bottle and then he put it down very carefully and took another breath and looked at a highball glass in front of the leaning man. The highball glass was empty and clean, but the leaning man's fingers were curled lightly and gracefully around it. They were nice fingers. White fingers. Fingers that looked as if they hadn't had to do any hard work lately. Slender, tapering, carefully manicured fingers.

Gannett swore softly. He yanked the horse's head out and then poked the bottle into his mouth and tilted it up. He held it until there wasn't anything left but the very glass it was made of plus the bright little paper label. His throat burned. He coughed. He banged the empty bottle down on the bartop and coughed again—hard.

The leaning man stirred, seemed to turn slowly, stiffly, in a half arc that put him face to face with Gannett. Then he went down backward and all in one piece, like a tall tree on top of a hill on a very still night.

He went down with the glass in his hand and, when he

hit, swirls of thick dust rose lazily from the floor and then settled back over his rigid form like freshly falling snow blanketing something left out on the front lawn.

The night was black. There wasn't a star and there wasn't a sound except for Earth sounds, which are never very loud. Gannett sat in his jeep with the motor running and the purple flames coming out of the tailpipe. His hands were tight around the wheel, but the Jeep wasn't moving. Gannett was staring off into space and his eyes looked as though somebody had peeled them back.

He said it to himself mentally, for the first few times. Then, as if he couldn't contain them any longer, the words tumbled out of his mouth into the night air:

"Everybody's dead, by God!"

He drove through deserted streets until he found an all-night drugstore. It didn't seem funny to him just yet that the streets were deserted; that was something he would think of later. He walked into the drugstore and went to the newsstand and picked up a copy of the *Carson Daily Bugle*. The date struck him first. It was the wrong date; it was three weeks ago. He dropped it and picked up another, a Reno paper this time. Same trouble with the date. He read the headline then:

REDS STRIKE AT TURKEY!
Unveil New Weapon

He blinked at it. There was a little more—pitifully little—to the effect that Congress had been asked for a declaration of war in order to defend the assaulted member of the Atlantic Pact nations.

Gannett swallowed hard. He dropped the paper and turned to the clerk who was leaning over the glass counter watching him.

"Jeez!" Gannett said. "When did all this happen? I didn't even know about it."

He didn't get any answer from the clerk. He knew he wouldn't from the way the clerk's eyes looked. They looked as if they should have been under refrigeration.

"People around dead," he muttered. "By God, the Governor oughta know about this!"

He left the drugstore and drove straight for the State Capitol Building, which wasn't far away, for Carson City isn't very large. He walked up the long concrete ribbon to the big stone steps. He mounted them. He stood before the bronze doors for an instant, a feeling of awe coming over him despite what he knew he was going to tell the Governor. He pulled on the handle of the nearest of the bronze doors.

Nothing happened.

It was locked, of course. The Capitol is never open at three A.M. (which was the exact time when it had happened three weeks ago—but he didn't know that).

A feeling of rage came over Gannett slowly, like heat radiating through soft wood. He stood on the stone steps and faced the broad expanse of lawn, which, in the summertime, at least, was very lovely. He slowly pulled his leather bag of gold from his coat pocket and raised it up so he could see it. Then he turned once more to the bronze doors and smashed the bag of gold through one of the glass panes.

"Gannett done it!" he roared. "If anybody wants to know, tell them Gannett, by God!"

He went back to his jeep. The big, darkly hulking form of the red brick Post Office Building went by and faded into the night. He passed a jewelry store. He looked in. An electric mantel clock in the store window indicated the time as nine-ten. He passed a supermarket. The big illuminated clock on the facade said nine-seven. The clock in the service station, where he finally pulled in for gas, pointed at nine exactly. Cycles have to be controlled if electric clocks are to keep correct time, but that was something else he did not know.

After he put back the gasoline hose, he left one more observation on the silence of the night before driving to Reno. He said it loudly, and there was angry frustration in every word of it:

"Hell with Carson City. To *hell* with it!"

Approaching downtown Reno at night is a pleasant, cheerful experience. There are lights all around, like a store selling electric fixtures. On the right hand side of Virginia Street they glow brightly, each one a little gaudier than the last. Big lights. Neon lights in all the colors neon lights can come in. Signs on the fronts of the big gaming houses that stay open until lights aren't needed any more; and the one flash of light across Virginia Street at the intersection of Commercial Row which had been photographed more times than the mind of man could have conjectured:

RENO

The Biggest Little City in the World

He drove slowly by the Happy Times Club. He could see quite a few people inside. You wouldn't think there was anything wrong when you looked at something like that.

At the corner of First Street, he stopped for the signal. He pulled around a military vehicle that seemed to be waiting for the signal, too. It was an open vehicle, painted the olive drab of the Army, and sitting stiffly erect behind the wheel was a natty-looking first lieutenant with his cap at just the right angle over one eye.

The signal bell up on the corner poles clanged loudly and the lights turned green. Gannett crossed the intersection, but the lieutenant and his military vehicle stayed behind.

He went by the Golden Bubble, which was perhaps the largest and gaudiest of all the gaming places in Reno. Its big front, done in glass bricks with multicolored lights behind them, looked like some monstrous kaleidoscope built for the use of the Man in the Moon. Seen from his jeep, through the plate glass of the wide door, the interior of the Golden Bubble seemed to be a happy, carousing place full of the joyous laughter of folks having a fine time. Only that wasn't so, of course, for the only sounds to be heard were the jeep's motor and the signals bells on the corner poles.

Gannett parked. He walked back, went slowly through the doors of the Golden Bubble. The first thing that met his eyes was the flashing welcome grin of the head waiter, who was dressed in a tuxedo just inside the doors. The head waiter had his hand half out, as if to shake the hand of Gannett as he came in. Gannett almost stuck out his own hand in return—but not quite.

He went to the bar. He didn't look at the barman lying on the floor with his ear in the spittoon. He shambled around the end of the bar, took a full bottle of scotch off the backbar shelf, broke the seal and took a long swallow. The bartender didn't notice.

After that he took the bottle with him out on the floor. He went around a man in an overcoat who looked to be uncomfortably warm but wasn't. He went over to a roulette table and stared the croupier straight in the eyes. He reached for a pile of chips under the croupier's right hand and slid them over.

"Double zero," he said.

The croupier looked bored, which was the way a croupier should look. Gannett reached down and gave the wheel a spin and then stood back and waited. The croupier waited. Two women and one man, on Gannett's right, also waited. The ball clicked merrily, came to a stop. The wheel slowed, finally rested.

It wasn't double zero. Gannett reached for the croupier's rake and shoved his pile of chips back under the croupier's protecting right hand.

"Lousy wheel is fixed," Gannett said.

Nobody argued with him on that.

He uncorked his scotch bottle and took a long pull. Nobody objected to that, either, the croupier still looked bored; and the two women and the one man waited patiently for the Day of Judgment.

Gannett went over to a cashier window and reached in and got a handful of silver dollars. He took them to the machines over against the far wall and stuck in a couple and pulled the two handles simultaneously. For his investment he got back

five dollars, which one of the machines disgorged with a loud clatter. He put more dollars in. He put them in fast and pulled the levers fast. He went down the entire row of machines and pulled the levers as he went. He didn't linger to see what happened at any of them.

He began to feel cold. He took out his scotch bottle again and half emptied it. A woman who looked as if she were someone's great-grandmother, except that her hair was bleached and fingernails were sharp talons, and who sat in a chrome and leather chair not six feet away from him, stared a little disapprovingly. Gannett caught the look.

"Lady," he said defensively, "I earned me a holiday, see? It's none of your business if I do some celebrating, is it?"

The lady didn't change her mind. She looked as though she might prefer gin herself.

Gannett belched. He wasn't so cold now. He threw back his head and laughed and listened to the sound of it bounce off walls. He did it again. He was feeling fine.

He went back to the roulette wheel, got around behind it and nudged the croupier gently. The croupier went over like a broom sliding down the side of a wall.

Gannett picked up the little plastic rake and looked at the two women and one man.

"Place your bets, folks," he said, in a low tone that was a pretty good imitation of the drone of a professional man.

He separated the chips into four neat piles. He pushed a pile each at the two women, one to the man. The last he kept for himself.

"Place your bets, folks," he repeated.

Nobody did, but that was okay anyhow. Grinning happily, he made bets for them. One of the women—the one that was red-headed—looked to him as if she might be a plunger. He shoved her pile of chips over onto zero and then he gave her a friendly little wink. The other woman was the careful type, he thought. Her chips—not all of them, of course—he shoved for red. He disposed of the man perfunctorily: ten dollars on plain number nine. His own bet was due a little

more deliberation. He carefully spread around five hundred dollars until the strip looked as if eighteen people were playing it all at once.

The effort made him sweat. He reached for his bottle, emptied it, then dropped it on the fallen croupier.

"Folks," Gannett said in an apologetic tone, "you'll have to pardon me a minute. It seems I'm out of fuel. Don't go away; I'll be right back."

Everybody was agreeable. Gannett went back to the bar, went around behind it.

He said to the barman: "I got a party out there, Doc. A big party, see? The house might stand to make a mint. How's about drinks?"

The barman considered it. The barman was still considering it when Gannett went back to the wheel with a fifth of scotch and four glasses and a dish of olives. He made drinks. In each one he put an olive. By this time, of course, he was getting a little loud, but nobody could blame him for that. When the drinks were made and placed before the two women and the man, he was ready. He grinned around, rubbed his hands together and winked a sly little leering wink at the redhead.

The wheel spun, stopped. Zero. The redhead had brought down the house.

"By God!" whispered Gannett in frank admiration. "Lady, you sure got luck. 'Nother little snifter just to nail it tight?"

Gannett liked the idea. He drank her drink for her and made a face over the olive. He poured another. He made more bets for everybody and then thought of something. Excusing himself once more, he got a roll of quarters from the cashier cage and, breaking it open, fed them into a big glittering juke box over in the corner. That done, he pushed down a row of tabs and went back to the table.

Everybody seemed to be having a time. The redhead just couldn't lose. Three separate times Gannett was forced to collect chips from other tables in order to keep the game going, but he didn't mind. He even said to the redhead once:

"Lady, ten more minutes and we sign the joint over to you. But have fun; you're doing swell."

Once more he consulted the thoughtful barman, and more than once he had to go back to the juke box and punch tabs, but that was all right. He liked music.

At ten minutes past three in the morning, with all the chips in the place before the lucky redhead he finished his last bottle.

He lifted his eyes and considered a crystal chandelier which hung from the exact center of the broad ceiling. It was a beautiful chandelier. It looked as though it might have graced the banquet hall of some castle over in England, back in the days when England was a tight little isle. He grinned appreciatively at it. He pitched the empty bottle upward.

There was a crash. Half the lights in the place went out.

Bowing solemnly to the scattered immobile figures, Cannett lurched to the big door up front. He tried a bow to the friendly floorman, but it didn't quite go over. He banged through the doors and out into the street.

Cannett groaned his aching body out of bed and padded heavily to the window. He put his big hands on the sill and looked out. Purple snow was falling on a quiet world. The flakes came down softly, big wet, colored things like fluffy bits of cotton candy escaping from a circus in the sky. There was his jeep down on the street where he had left it. He could recognize it, for it was the only jeep on the block.

"Then it wasn't no lousy dream," he said miserably.

He went back to the bed and sat down on the edge of it. He recalled the headlines in the paper.

"Them lousy Reds," he whispered. "They done this, sure as hell."

That made him think a little. Everybody was dead, even the redhead in the Golden Bubble who couldn't lose.

"What the hell am I doin' alive, then?" he asked himself.

There was no answer to that. He thought of his mine, *The Lousy Disappointment*, and wondered if, living most of the

time below the surface as he did, he had been protected from some sort of purple gas or something that seemed to have killed off everybody else. It could be. Some very light gas, maybe, that wouldn't seep below the surface.

"Aw, for cripe sakes!" he grunted disgustedly.

He dressed and left the room. He went downstairs. There was the lobby, all soft, quiet carpeting and soft, quiet furniture and soft, quiet drapes. A sheet of paper on a writing desk said *Grand Pachappa*. He was in a hotel, then. He must have wandered into it after he left the Golden Bubble.

He carefully avoided looking at two well-dressed women who sat in lobby chairs, staring off into nothing, but he felt their presence chillingly. He shivered. He made his way outside, the purple snow coming down and giving his cheeks wet, cold caresses. He angrily brushed them off, but they came down anyway. Above the snow, the sky was a sodden mass of purplish gray.

He found a restaurant that was open. A few customers sat on the stools like statues in a museum. All the coffeemakers were on the electric stove, but they were dry and clean except one that had no bottom in it any more and was quite discolored. Beneath it, the round electric coil still glowed faithfully.

He grabbed up one of the clean pots and took it to the metal rinse sink and reached for the faucet. And then his hand froze. What if the water was tainted? He had no way of finding out if it didn't carry that identifying purplish tint. He tried the faucet. It did.

The milk in the refrigerator was three weeks old, of course. Gannett ended by opening a bottle of Pepsi Cola for breakfast.

The sky stayed leaden, but even so there were many things apparent now that he hadn't seen the night before. A lack of heavy traffic on the streets would seem to indicate that what had happened—purple gas or whatever—had been very late at night; even so, traffic accidents were everywhere. There was one big sedan with its front end crushed against the First Olympic Bank. There was one cop who had died

trying to tie his right shoe—his fingers still clutched the laces. There was a doctor (his car had a caduceus emblem on the windshield) who had just stepped down to the street, his bag in his left hand and his right hand on the door, ready to slam it shut. He had a serious, purposeful look on his face that even the falling purple snow couldn't quite eradicate.

Despite the cold, sweat frosted Gannett's forehead. He made his way to a radio and television store and kicked in a glass panel of the front door. Stepping through to the clamor of the suddenly aroused night-warning bell, he went directly to a TV set and turned it on.

The big screen tube flickered after a while and a scratching hum came out of the speaker, but nothing happened. He tried all the channels. Nothing.

He tuned in a big radio console next, going carefully and slowly across the dial with a hand that shook. Even though the night-warning bell was kicking up quite a racket, he could tell after a moment or two.

Nothing . . .

The sky was getting dark as Gannett left the store. The purple snow still fell. It was then that he noticed for the first time the gay street decorations in preparation for Christmas. Big paper bells with plenty of glittering tinsel and electric lamps inside them.

On the corner of First and Virginia, he saw a big iron kettle of some Salvation Army Santa. Hanging from its metal tripod, it looked quite natural, except that it was filled with purple snow; and the Santa who was supposed to ring his little bell was holding it stiffly over his head. He and the bell were frozen silent.

There was a large department store. Inside, in the show window, was a Christmas display that would delight the kiddies. There was a big Christmas tree trimmed with every imaginable ornament.

Beneath the tree, electrically activated toy soldiers jerked robotlike through their precise military designations, their lithographed faces looking stern and very brave. There was

a clown who did uncounted somersaults; a lifelike doll who clapped her hands in glee. There was an aluminum bomber with a wingspread of three feet—it was held in the air by almost invisible wires—and its six propellers droned in perfect unison, making a brisk little wash that rustled the silk of the little doll's dress. And around the base of the tree, through valley and over mountain, into tunnel and over spiderweb trestle, was a railroad track. It should have had busy little trains on it, except that it didn't—the trains had been derailed at a whistle stop called North Pole.

Gannett's eyes twitched.

The sky grew darker; the purple snow continued to fall silently. Gannett went by the Masonic Lodge, the YMCA, and crossed the little stone bridge over the frozen Truckee River. He came to the heavy gray stone building of First Community Church.

He stopped in front of the church and stared at it. It was a solid, respectable-looking building. It was a very nice thing, indeed, to have here in Reno.

"Christmas Eve," Gannett whispered through cold lips. "This is Christmas Eve!"

He went up six purple-snow-covered stone steps. He reached the top where the stone steps ended and where the big square stone slab was, that slab where the minister stands when the weather is fair, and shakes hands with the congregation after the service.

Somewhere above, in the steeple, bells struck off the hour of eight. A timing device did that. Many churches had such timing devices to save labor. And as though that were a signal, a loudspeaker, attached way up on the spire especially for this festive season, began to growl out preparatory scratching noises, like a big metal monster clearing its throat.

Gannett pulled on the wrought brass handles of the closed oaken door. The door didn't budge. He grabbed the handles in both hands and braced his feet. He pulled hard. The door was locked.

"God," he whispered hoarsely. "God, this is me. I gotta get in, God. God, listen, *I gotta get in!*"

High above, in the steeple, the loudspeaker was finally ready with a cheerful little carol.

"*God Rest Ye Merry, Gentlemen!*" the voices of a dead choir roared out upon the silent city.

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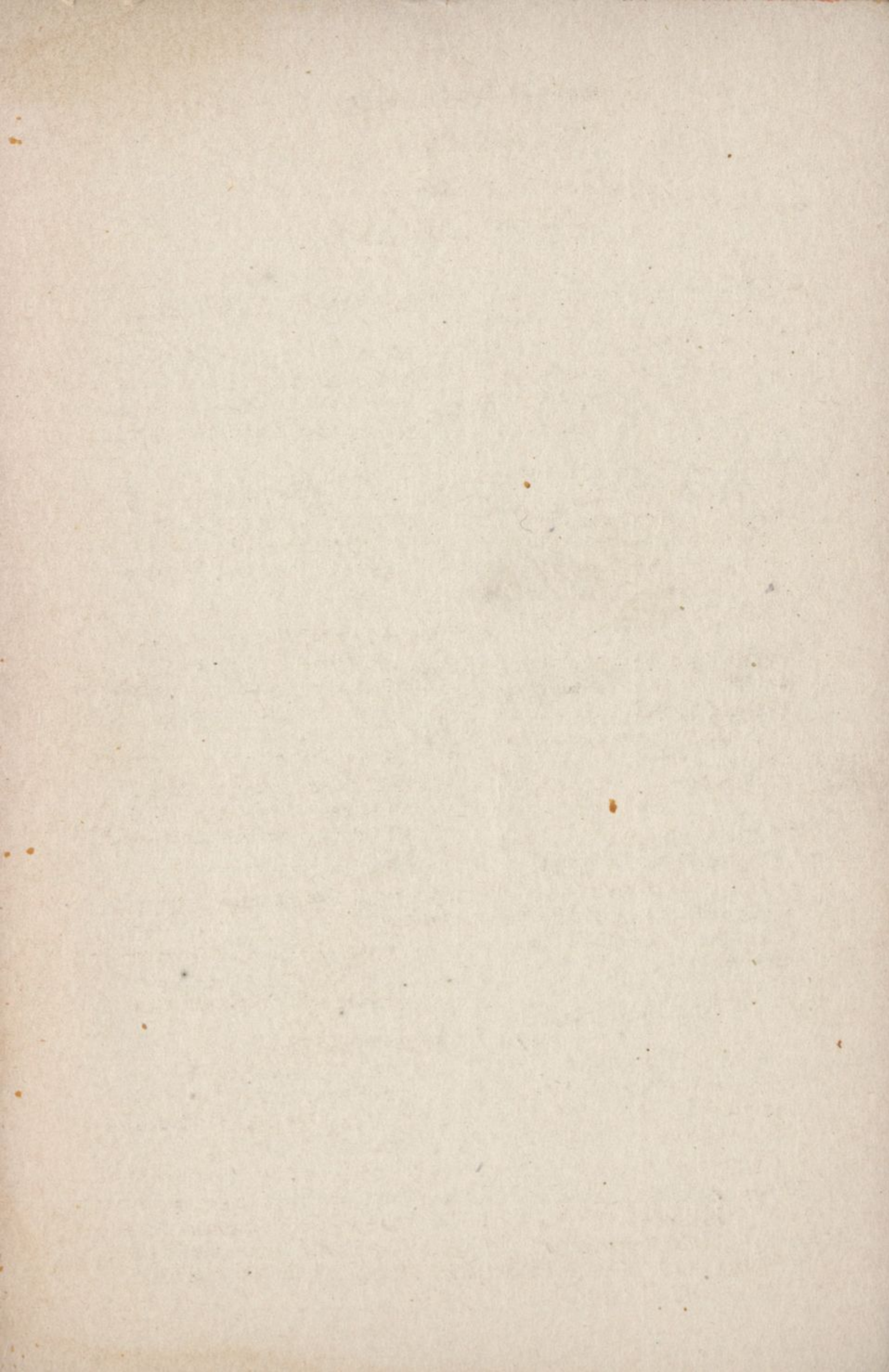
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